

AN INVESTIGATION INTO A PROPOSED SYLLABUS FOR TUBA PERFORMANCE STUDIES AT SOUTH AFRICAN UNIVERSITIES

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A thesis submitted in accordance with the partial requirements for the degree
Philosophiae Doctor (Music) in the Faculty of Humanities, Odeion School of Music at
the University of the Free State

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22 November 2021

I hereby confirm that the PhD dissertation by Mr George Foster, *An investigation into a proposed syllabus for tuba performance studies at South African Universities*, was edited to the best of my ability. This included recommendations regarding the improvement of the language and logical structure, in order to guide & best present the line of argument.



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DECLARATION

I declare that the thesis which is hereby submitted for the qualification Philosophiae Doctor (Music) at the University of the Free State, is my own independent work and has not been handed in before for a qualification at/in another University/faculty.

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George Foster

23 November 2021

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ABSTRACT

A primary function of syllabi for university music performance studies is the prescription of both compulsory and recommended module materials. However, as South African universities lack comprehensive syllabi for tuba performance studies, the aim of this study was the proposition of such a syllabus for use in the various institutions. The key research problem focused on the aspects that ought to be considered in the compilation of these syllabi. The emerging sub-questions sought to determine the extent to which lecturers use these syllabi to prescribe materials to their students; the various components, design process and limitations of the existing syllabi, and the systems/tools available for the grading of solo tuba repertoire as an integral process in syllabus compilation. In the absence of a suitable system for this purpose of grading solo repertoire for various years of university study, I designed a system based on existing systems, data from respondents, all informed by my experience as a university tuba lecturer and performer.

I performed a literature review and complemented this by conducting interviews with national and international tuba lecturers who were selected according to specific criteria. Through the integration of the literature, collected documents and the thematic analysis of the interview transcripts, I suggested a framework for the layout, and ideas for compilation of the administrative and music-orientated components of a syllabus for university tuba performance studies. By the utilisation of the syllabus compilation suggestions and framework, university tuba lecturers are hereby presented with a source for the compilation of their own syllabi. Additionally, they have at their disposal a system that can accurately and comprehensively grade various repertoire pieces that may be used as the content of repertoire lists within their syllabi, and from which various works may be chosen to fulfil the requirements of their specific modules.

Key words: university tuba performance syllabus, tuba curriculum, grading system, music syllabus, university tuba studies

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LIST OF ABBREVIATIONS AND TERMS USED IN THIS THESIS

ITEA	International Tuba and Euphonium Association
ABRSM	Associated Board of the Royals Schools of Music
TCL	Trinity College London
NTSB	The New Tuba Source Book
UNISA	University of South Africa
UFS	University of Free State

CHAPTER 1: INTRODUCTION

1.1 Background

This research study originates primarily from my own experiences as a tuba player, progressing from student to lecturer. One of my ongoing duties as a lecturer in the Odeion School of Music (University of the Free State) is the compilation and updating of syllabi for tuba performance studies modules. As no such document previously existed at our institution, it led me to the preliminary investigation into the syllabi of local and international institutions. I became convinced of the necessity for a comprehensive syllabus for tuba performance studies for use by South African institutions which offered these modules – this is because of the potentially confusing present situation, wherein various types of documents stand in for syllabi. Predictably, there exist several inconsistencies among these documents. I also discovered that some of these institutions relied heavily on the graded examination syllabi to fulfil various functions, such as the prescription of materials for university level tuba performance studies.

My experience studying at a prominent tertiary institution in the United States and the research which commenced during the preliminary investigation, demonstrated to me the difference between South African and international institutions in this regard. Several international institutions make use of syllabi designed by and for their own institution and for their 'in-house' needs. Initially, I found as many as 30 documents that included listings of solo repertoire, studies/etudes, scales, band and orchestral excerpts, texts, and pedagogical method books. These documents were sourced from the United States, the United Kingdom, Canada, and Australia.

Apart from the actual syllabi collected, I found only two sources that were directly related to the topic of syllabi for tuba performance studies, which initially convinced me that the topic is not well-documented. The first source directly related to university tuba study is Geoffrey Whitehead's *A College Level Tuba Curriculum* (Whitehead, 2003). The late Harvey Phillips, one of the significant contributors to the field of tuba pedagogy, explained in the foreword that Whitehead's book provided a comprehensive account of the "pedagogical and philosophical ideologies" (Whitehead, 2003: vi) that students encounter at Indiana University. This source discusses and prescribes a university tuba performance studies curriculum comprising a graded list of solo literature, recommended etude materials, orchestral and band excerpts.

However, it did not provide information regarding what motivated the choice of materials that were included in the graded lists, neither did it provide any insight into the grading process.

The second source is Morris and Perantoni's *Guide to the Tuba Repertoire: The New Tuba Source Book* (NTSB) (2006) . This is an annotated, graded list of all published works for tuba since 1950 in various settings. Although it cannot function as a syllabus on its own, this book is an excellent complementary source in the process of syllabus compilation.

In my opinion, a significant component of performance studies syllabi is that of the materials contained therein. As such, there are several factors that determine the selection of these materials, one of these being is the difficulty- or grade level assigned to the repertoire, especially in the case of solo works. Therefore, the grading of solo repertoire is an integral part of the process of syllabus compilation for performance studies. In many instances, this process relies on an effective tool (or rubric) to grade repertoire for specific years of university study. Whitehead (2003) , Morris and Perantoni (2006) , and others utilise these grading systems; however, I discovered that there were limitations in using them for the grading of repertoire for the purposes of this study.

Whitehead (2003: 75), for instance, provides few specifics regarding the system used, and Morris and Perantoni's (2006: xiv) system grades repertoire, in my opinion, at too broad a level. A more recent system, Cox's *ITEA Standard Literature List* (2019), uses a complicated rubric to determine if a work is a "standard" or not. The purpose of this latter document is not to grade repertoire as is required, however, it provides some information beneficial to grading repertoire¹. Although all these systems have limitations, they may certainly assist in providing level descriptors, act as sources for repertoire and technical information, and provide criteria for the development of a rubric for the grading of repertoire at specific university levels.

1.2 Research problem and objectives

The main research problem is the lack of comprehensive syllabi suitable for tuba performance studies at South African universities. The objective was to investigate existing syllabi, and to widen the scope of the investigation to include syllabi from international higher education institutions that offer tuba performance studies modules (including the United States, Canada, Australia, and other countries). Another aim of the study was to research the process of syllabus

¹ These systems are comprehensively discussed in Chapter 2.

compilation as well as the contents of existing syllabi, with the goal of providing suggestions on how a syllabus for university tuba performance studies might be compiled. Since solo repertoire is a significant component of tuba performance studies modules, and the grading thereof an integral process in syllabus compilation, the investigation into a grading system suitable to grade solo tuba repertoire for the purpose of university study is inevitable. If a suitable system is not found, I will strive to design a grading rubric based on the literature.

The main research question was formulated as follows:

What aspects need to be considered when compiling a syllabus for tuba performance studies modules at South African universities?

Emerging sub-questions included:

- How, and to what extent, do South African and international university tuba teachers utilise syllabi to prescribe materials to their students?
- What are the components, design process, and limitations of these syllabi?
- What tools/systems/rubrics are currently available for grading repertoire for specific years of university tuba study?

1.3 Methodology

I used a qualitative design, employing a descriptive (narrative) approach as described by Merriam (2009: 24), endeavouring to understand 'how' and 'why' university tuba teachers design and implement syllabi for university tuba performance studies². A descriptive framework was utilised to define and describe the phenomena (Schutt, 2018: 13) by exploring individuals' experiences (Creswell and Poth, 2016: 67)³ with the subject.

The process of data collection was undertaken using two methods. The first was a comprehensive literature study on the topic of tuba performance studies syllabi was conducted, and the systems used in grading solo repertoire, and related concepts analysed. The literature search comprised accredited journal articles, books, textbooks, documents including existing tuba syllabi (ABRSM, Trinity College London, domestic and international universities/colleges), and sources containing grading systems.

² The methodology is discussed in more detail in Chapter 4.

³ Although the proper format for in-text citations for two or more authors when using the Harvard referencing system involves using the ampersand, this is not available on the built-in MS Word referencing tool used, and therefore is written out in full for the remainder of the thesis.

The second method was the conducting of semi-structured interviews with 13 leading tuba lecturers as respondents. These interviews incorporated non-leading, open-ended questions. As the interview process took place prior to the COVID-19 pandemic, four interviews were conducted face-to-face, and all others via Skype. Semi-structured interviews allow for a looser structure, eventually defining the area to be explored (Patton, 2002: 11). Interviewing all local and international university tuba teachers was not a feasible option, and therefore stratified purposive sampling was proposed; this method selects respondents according to certain predetermined criteria, and allows for comparison, as advocated by Neuwenhuis (2014: 79). The first criterion was that all respondents should either hold current university positions as tuba lecturers, or have done so in the past, for a number of years; in addition, respondents should have experience with the design of syllabi (or part thereof) for university tuba performance studies. Based on these criteria, all tuba lecturers employed by South African universities, as well as a selection from international institutions originally representing the United States, the United Kingdom, Australia, and Canada were invited to serve as respondents.

A qualitative data analysis method identifying themes and sub-themes was used as the primary method in the analysis of the interviews. The integration of all the data collected was used to design a rubric to grade repertoire for a syllabus. As the study involved respondents, ethical clearance was necessary, and this was obtained from the General/Human Research Ethics Committee (GHREC) of the University of the Free State.

1.4 Layout of the dissertation

The introduction of this thesis provides the reader with the background to the study, as well as a concise restatement of the research problem and objectives (including the definition of the research question and sub-questions) and the value of the research.

Due to the comprehensiveness of the literature reviewed, it was decided to divide the literature review into two chapters. Chapter 2 contextualises the study by defining 'curriculum' and 'syllabus' according to the literature. Thereafter, the collected syllabi are discussed, and the literature regarding the syllabus compilation process reviewed. In the final section, an account of the systems available to grade solo tuba repertoire is provided. Chapter 3 reviews the literature on the aspects of the well-rounded tuba player. Each aspect is described, and where possible, the extent to which the aspects should be mastered is discussed.

Chapter 4 discusses the methodology employed in the study and the process of analysis. The process of how the results of the study were validated is also discussed, as is the ethical considerations followed to protect the rights of the participants and the delineation of my role in the research process. In Chapter 5, the discussion centres around the outcomes of the research comprising the results of the biographical questionnaires, the analysis of participant responses to the interview questions, and the document analysis.

The final chapter (Chapter 6) includes a discussion regarding the manner in which the study answers the research questions, explains the integration of the study with the five performance recitals, provides suggestions for the proposed syllabus, and discusses the grading system I designed for the sole purposes of grading solo repertoire for inclusion in tuba performance studies syllabi. The final section, I discuss the limitations, provide ideas for further research, and conclude the study.

1.5 Value of the research

The suggested grading system and example of a framework on which to base university tuba performance studies syllabi could be of significant value to the staff members involved in the compilation thereof. It is envisaged that the data may provide suggestions and information regarding the necessary components and factors for inclusion in the design of syllabi. Furthermore, the study could provide suggestions of essential materials for tuba performance studies, indicate how they may be presented, and provide advice regarding the process of choosing materials for inclusion in syllabi. Compilers of syllabi may also find that the materials contained in the existing documents might serve as a reference source for their own work.

As the study involves international documents and respondents, users could benefit from information that is current and meets international standards. The alignment of local universities with international institutions could contribute to the narrowing of the gap between the standards of their respective graduates to a certain extent. In turn, this may lead to smoother transitions between institutions (in the case of transferring students) or encourage more students to consider studying abroad. The principles of the process of syllabus compilation in this study are not limited to that of the tuba, but easily transferred to those for other instruments.

The suggested new, comprehensive grading system may help users to grade repertoire for university tuba performance studies modules. This system could be used in grading many

works for inclusion in syllabi, and individual works, especially in the case of determining the difficulty level of a newly-composed or ungraded work. It is also possible that a tuba instructor examines the completed grading score sheet of a work, judges certain characteristics favourably, and then obtains these materials (or prescribes them for students). Additionally, designers could use the method used to compile the system and the system itself as a framework.

In the case of both the proposed syllabus and grading system, the international tuba specialists that agreed to participate as respondents could bring a unique perspective to the study, as they are immersed within the domain of tuba performance studies. They may provide valuable insight into many aspects of the craft, including tuba-specific techniques, instrument capabilities (strengths and weaknesses), unique challenges, materials (or the lack thereof), levels and standards. These respondents would undoubtedly also possess great insight into the careers currently available to tuba players, as well as the basic competencies and training methods and materials required to qualify for these positions; this type of information is potentially of immense benefit.

CHAPTER 2: LITERATURE REVIEW

The literature review is divided into two chapters: the first concerns syllabus compilation, and the second is a discussion of the various aspects of the well-rounded tuba player. In this chapter, I will provide the reader with a review of literature regarding syllabus compilation. Firstly, the various definitions and descriptions of both curriculum and syllabus will be outlined, and a definition established within the context of this study. Thereafter, I will discuss syllabi (or similar documents) that are currently used for university-level tuba performance studies, followed by a review of literature regarding the syllabus compilation process. As the current research concerns the design and implementation of a grading system for the classification of repertoire for specific years of tertiary-level courses, I will include a review of the existing grading systems and discuss the design of the proposed grading system.

2.1 Curriculum and syllabus definitions and descriptions

'Curriculum' and 'syllabus' are two terms that are not mutually exclusive, with different meanings depending on the context in which they appear.

2.1.1 Curriculum

Novak's (1960: 358-365) *98 Curriculum Definitions* demonstrates that in 1960, there were already nearly a hundred definitions of the term 'curriculum'. Sixty years later, the debate surrounding the definition of the word continues (Ornstein and Hunkins, 2018: 28). As a broad concept, curriculum may refer to the "...whole universe of philosophies, purposes, designs and implementations of programs, an integrated series of teaching-learning experiences, whose ultimate aim is to open paths for learners to a particular state of knowledge." (Nadrag and Soare, 2012: 46). According to Lunenberg (2011: 1-5), in the context of the North American higher education system, the term has five definitions. Firstly, it concerns the content/subject matter of a course, or refers to the formal course of study, presented by teachers to learners. Linked to subject matter, the second definition of the term 'curriculum' refers to the learner experiences, or the cognitive processes students employ in learning subject matter. Curriculum can also refer to certain goals and objectives for a particular subject and may denote a plan of study with a threefold purpose: "to produce a curriculum for an identifiable population, to

implement the curriculum in a specific school, and to appraise the effectiveness of the curriculum developed” (Lunenberg, 2011: 4). Finally, ‘curriculum’ may refer to the nonstandard or more philosophical approaches (aesthetic, feminist, ethical, imaginative, or spiritual approaches). Furthermore, Omstein and Hunkins (2018: 26-28) provide four definitions of the term in the same context. Firstly, it is a progressive plan of achieving goals. Secondly, it deals with learner experiences, including those outside of the classroom. Thirdly, it is a field of study with its own definitions, knowledge, domains, research, theory, principles, and specialists. Lastly, it embodies the subject matter, or content concerning grade levels. The term ‘syllabus’, by contrast, is far less equivocal.

2.1.2 Syllabus

As with ‘curriculum’, the definitions of the term ‘syllabus’ are dependent on context. The term may refer to “... the specific order of contents, a list of titles, objectives, ideas – all in logical order, a step-by-step way to the final target. Syllabus is a subset of curriculum... syllabus is contained in the curriculum... Syllabi make a curriculum” (Nadrag and Soare, 2012: 46). In the course of the literature search it became apparent that the syllabus most written about is the university course syllabus.

2.1.2.1 The university syllabus

The University of South Florida (2021: 7) defines a ‘syllabus’ as “a document distributed to students enrolled in a course that outlines the material a course will cover, instructor expectations, assignments, due dates, instructor contact information, and relevant university policies”. These syllabi include general course information (course name, venues), course purpose (description, goals/objectives, required texts), calendars (time schedule, test, and due dates), and assessment information (grading/marking policy) (Johnson, 2006: 139-144).

Chapter 1: According to Parkes and Harris (2002: 55), a syllabus serves a threefold purpose. Firstly, as a contract between the various parties involved (student, lecturer, and institution), it provides examination- and policy information (marking, weighting of assessments, penalties for the late submission of assignments, academic freedom, ‘make-up’ assessments, accommodation of disability). Secondly, it functions as a permanent record, providing important course information including (but not limited to) a course description, objectives, title, dates, required books/materials, and assessment policies (Parkes and Harris, 2002: 57). Thirdly, as

a learning tool, a syllabus may include study strategies, an outline of the significance of the course, planning and self-management, suggestions for improved student performance, the prescribed notional hours in addition to lectures, staff availability, and university resources (Parkes and Harris, 2002: 57). Bearing in mind both the definition of the term 'syllabus' and the description of the university syllabus, it is deemed that a review of the existing syllabi (and other documents) for tuba performance studies both locally and internationally is not only desirable, but inevitable.

2.1.2.2 South African university syllabi for tuba performance studies

During the preliminary research phase, I investigated what syllabi, if any, other South African Universities were using in their tuba performance studies modules. This involved the examination of university publications (such as handbooks and online course materials), and the undertaking of an informal inquiry with lecturers from the six universities that offer tuba music studies in South Africa⁴. Although all six universities utilise a syllabus (or similar document), I could only gain access to four of these. These documents all contained administrative information, but somewhat limited pedagogical information (such as the required scales, repertoire, and technical goals/requirements). The type of information was also limited to assessment/module requirements. Only one of the documents resembled the graded examination syllabi (discussed in 2.1.2.3) - a graded list of repertoire, method books and study collections - but this document is incomplete⁵. The preliminary investigation showed that the documents currently used in South African organisations are incomplete, and that there is inconsistency in the type of document used as well as the pedagogical information contained therein.

2.1.2.3 Graded examination syllabi

The syllabi of the graded music examination boards contain all the necessary information (administrative and musical) pertaining to their examinations. The three most common music examination bodies in South Africa are the Associated Board of the Royal Schools of Music (ABRSM), Trinity College London (TCL), and the University of South Africa (UNISA). These examinations (grades 1-8) cater for the beginner through to the advanced player, with TCL and

4 This includes the University of Cape Town, the Nelson Mandela University, North West University, the University of Pretoria, the University of Stellenbosch, and the University of Witwatersrand

5 I have also been asked to assist with the recommendations for this syllabus, which may be provided through this thesis.

the ABRSM offering performance diplomas (post-grade 8 level) examinations⁶. Trinity College London offers three diplomas: the ATCL (Associate of Trinity College London), LTCL (Licentiate of Trinity College London) and FTCL (Fellow of Trinity College London) diplomas (Trinity College London, 2018: 3). The ABRSM offers the DipABRSM (Diploma of the Associated Board of the Royal Schools of Music), LRSM (Licentiate of the Royal Schools of Music) and the FRSM (Fellowship of the Royal Schools of Music) (The Associated Board of the Royal Schools of Music, 2019: 3).

In addition to the administrative information, these syllabi usually include the following:

- A graded repertoire list⁷: candidates are generally required to present 1-2 works from each group/list (Group/List A or B).
- Studies/etude lists: candidates choose 1 study from a list (normally Group/List C)
- Technical material list: generally, a list of the required scales and arpeggios for a specific grade. In line with their aims to offer more freedom of choice to play to candidate's strengths, TCL offer alternatives to the standard scales and arpeggios (Trinity College London, 2018: 4). For grades 1-5, candidates have the option of playing scale-like exercises instead of scales, while candidates in higher grades may perform orchestral or brass band excerpts instead of scales (Trinity College London, 2018: 7).
- Other supporting test information: these vary across syllabi, but include aural tests, improvisation, and sight-reading.

These graded examinations play an important role in the South African musical context. They can be recognised as a subject in the National Senior Certificate⁸ (Western Cape Education Department, 2006), and are used as benchmarks (both for entry and progression) in the programmes of specialised music studies at some universities (University of Stellenbosch, 2019; University of Cape Town, 2018: 330; Nelson Mandela Metropolitan University, 2018; North West University, 2019). The next logical step was to look at available international syllabi.

2.1.2.4 International syllabi

In order to arrive at a review of syllabi that may be considered representative, I envisioned including those used in North America, Europe, the United Kingdom, Australia, and New

⁶ UNISA currently only offers a performance assessment after grade 8, and not a diploma.

⁷ A repertoire list is a list of repertoire for a specific instrument or level. These lists may form part of a syllabus, or as documents on their own.

⁸ The National Senior Certificate is South Africa's school-leaving qualification (Grade 12).

Zealand, as the tertiary institutions in these places are considered leaders in the field of tuba studies. Originally, over 80 documents⁹ were collected, but the number of documents analysed¹⁰ was reduced to 66 as there was duplication in the syllabus content. A further nine documents were excluded from this discussion since they were included among the documents from the South African university syllabi and the graded examination syllabi. The final list of countries represented include South Africa, Germany, the United States of America, Canada, Austria, New Zealand, Australia, Argentina, as well as the United Kingdom. The documents collected comprise institutional documents, solo repertoire lists, graded examination syllabi, and other documents (course outlines and module overviews). The summarised contents of the documents collected are provided in Table 1. From the documents collected, we may observe that all the documents include pedagogical material (technique and repertoire study) rather than administrative information. The specific items included under technique and repertoire are provided in Table 1 below.

Table 1: Summarised analysis of international syllabi

Contents	n= 57	%
1. Administrative information	41	72
2. Pedagogy	57	100
3. Technique (technical goals, scale requirements, scales list, quick studies, scales-based exercises, sight reading, tunes)	50	88
4. Repertoire studies (repertoire requirements, repertoire list chamber music, study- and etude requirements, list of study/etude books, orchestral/bands excerpts studies, excerpts list)	50	88
5. Method books	33	58
6. Texts	35	61

2.1.2.5 Syllabi vs. Repertoire lists

We may deduce a distinct difference between a syllabus and a repertoire list from the collected documents. The repertoire list is simply a list of compositions for a particular instrument, and this might be assigned a difficulty level. This list may constitute an important part of a syllabus, as with the graded examinations syllabi (Addendum 1) an independent document, for example, a literature syllabus (as with the syllabus presented by Little and Crouch (2003)). It could form an integral part of a university syllabus, a recommended literature section of a book, for example, the *Recommended Literature for Tuba*, in *A Complete Guide to Brass* (Whitener,

⁹ The documents were not all called 'syllabus' but served the same function.

¹⁰ A full analysis and discussion is provided in 4.7.1 Syllabus analysis/Institutional document analysis

2008: 107-111), or a standalone document as in the case of competitions or the U.S. public school solo and ensemble lists. An example of a graded repertoire list within a book is provided in Addendum 2.

One of the aims of the study is to provide an example of a syllabus for university tuba performance studies, which requires syllabus compilation. In the next section, literature on this subject will be reviewed.

2.2 Syllabus compilation

Syllabus compilation, syllabus construction, and syllabus design are terms that are used interchangeably in the literature that refers to the same process – that of developing a syllabus for a particular course (Richards, 2001: 2). Carl (2017: 202) explains that the concept does not refer exclusively to the development of a new syllabus, but also applies to making revisions or changes to existing syllabi. This discussion includes the different components of a syllabus, the syllabus compilation process, and factors that influence syllabus compilation.

2.2.1 Different components of a syllabus

There is inconsistency in the literature regarding the amount and type of components that ought to be included in a general university syllabus. The authors Cohen, Mills and O'Brien (2014) are comprehensive in their approach, recommending eighteen components. The approaches by Woolcock (2006) and Gillis (2003: 28) are far briefer, each containing only five components. A comparison of these are provided below in Table 2: Comparison of syllabus contents.

Table 2: Comparison of syllabus contents.

	Cohen, Mills and O'Brien (2008)	Woolcock (2006)	Gillis (2003)
1.	Table of contents	Course description	Clear overview of the course
2.	Instructor information	Introduction, aims and objectives	Goals and Objectives
3.	Student information	Assessment overview	Criteria and Evaluation
4.	Letters to students or teaching philosophy statement	Lecture schedule	Materials needed for the course
5.	Purpose of the course	Required texts and reading materials	Outside activities

6.	Course description
7.	Course objectives
8.	Course readings
9.	Resources
10.	Course calendar
11.	Course requirements
12.	Policies and expectations
13.	Attendance, late papers, missed test/class policies, behaviours
14.	Academic honesty,
15.	Disability information
16.	Evaluation
17.	Grading
18.	'How to succeed in this course'-tools for study and learning

A viable explanation for the discrepancy between brief and expanded versions of syllabi is provided by Coble, Picard, and Riviere (2014). They argue that brief versions, like those exemplified by Woolcock (2006) and Gillis (2003), contain the “backbone” of all syllabi, and that these can be expanded to include more information. Their five basic components differ from those mentioned previously and include:

- Basic information (instructor details, course title, locations)
- Materials (books, readings, required supplies)
- Requirements (assessment information, reports)
- Policies (attendance, grading, academic honesty)
- Schedule (topical calendar, examination/assignment dates)

The discrepancy is exacerbated since many institutions govern what components should be included. Gannon (2018), in his article *How to Create a Syllabus* explains that some institutions govern the structure of a syllabus (by providing templates) including the course calendar, course goals and certain course policies (including attendance, academic honesty, diversity, and grading). Since the number and type of syllabus components vary, it is impossible to provide a description of all the components here. I am therefore limiting the discussion to some of the components that are relevant in the context of university performance studies as practiced in studios that offer individual tuition.

2.2.1.1 Course overview

According to Gillis (2003: 29), the course overview should be brief, “2-3 sentences”, and present the main attributes or “hallmarks” of the course. Sources show that the overview plays a threefold role in the syllabus. Firstly, it should provide a general course description. Cowen, Mills and O’Brien (2008: 51) explain that a strong course description has many benefits:

A strong course description early in the syllabus can generate student interest by providing a stimulating overview of the course, including its content, value, and the philosophical assumptions behind it. You can increase students’ enthusiasm and motivation by emphasizing the relevance of the course. You will also want the description to reflect your values and attitudes.

Secondly, the overview should outline and emphasise the purpose, relevance, and value of the course, suggest why students would enjoy the content, what can be expected from the course, introduce the subject matter, and details relevance of the content (Cohen, Millis and O’ Brien, 2008; Gross Davis, 2009).

Thirdly, the overview should explain how the course aligns with other courses in the programme and the university mission, and it can motivate students further by showing them how the course will increase their chance of success both in their immediate academic careers and well as their professional futures (Woolcock, 2006: 10).

In the context of performance studies, Gillis (2003: 2) provides a good example of an overview in the context of the saxophone studio:

The saxophone studio is a semester course of a multi-sequence design to develop and heighten each student’s musical understandings and technical skills pertaining to Western music. Through musical performance in the private lesson setting, one hour per week for 20 weeks, students over the course of several semesters will study approximately 90% original literature from 1900 A.D. to present, as well as approximately 10% transcriptions from 1600 to 1900 A.D.

2.2.1.2 Goals and objectives

Clear goals and objectives are essential components in syllabus compilation - they assist in the planning process, provide direction and purpose, support fundamental course principles, and encourage student development (Gillis, 2003: 27). Although the formulation of goals and objectives is relatively simple, Gillis (2003: 27) advises that this process should be comprehensive as it forms the foundation upon which the entire course is built. Woolcock (2006: 13), stating that all course components should be derived from stated goals and

objectives, shares Gillis' outlook, and provides sound advice regarding compilation. His arguments may be summarised thus:

- Establish the planned graduate competencies by beginning with the end in mind, always bearing in mind the question – the envisaged competencies graduates of the course should have.
- Relevant parties are “better off” when both goals and objectives are clear.
- The implementation of qualitative and quantitative goals and objectives will provide more holistic expectations.

The terms ‘goals’ and ‘objectives’ are used interchangeably in some syllabi, which is erroneous; however, Gillis (2003: 28) and Woolcock (2006: 12) provide a clear delineation of the two. According to Gillis, ‘goals’ (or ‘aims’) refer to a module’s broad scope and non-measurable outcomes (Gillis, 2003: 27); Woolcock refers to ‘goals’ as the broad statements of the general abilities expected of students passing a module, articulated in the module outcomes (Woolcock, 2006: 12). In the context of tuba performance studies, an example of a general technical goal may be stated in the following manner: ‘Students should demonstrate satisfactory technical improvement.’

‘Objectives’ are related to goals but are quantifiable and content-based (Gillis, 2003: 27). They represent the concrete measures by which the goals are realised (Woolcock, 2006: 12). An example of the technical objectives for a tuba syllabus may be stated in the following manner: ‘By the end of the semester, each student should be able to:

- perform all major and minor (natural, harmonic, or melodic) scales and arpeggios, within a two-octave range, either legato or staccato, at any dynamic (p-mp-mf-f), at a tempo of 120 beats per minute (bpm).
- Single-tongue semiquavers at a speed of between 120-132bpm.

Gillis (2003: 27) states that it is very common that two or more objectives may be used to realise one goal - exemplified in the examples provided above. He also provides good suggestions regarding goals and objectives to consider when compiling a syllabus:

- Goals and objectives should be listed separately, and not under one heading as they sometimes appear.
- Objectives should be in observable terms and achievable within the specified time.
- Descriptive, active verbs should be used in delineating objectives.

2.2.1.3 Assessment and evaluation

Although these two terms are sometimes used interchangeably, they have different meanings and should be considered as complementary to one another (Behr, 2010: 7). The term 'assessment' is an examination of how the quality of a particular performance or outcome can be improved in future by the provision of feedback regarding knowledge, skills, and attitude (Behr, 2010: 7). The term may also refer to the less important exercises that assist lecturers in the tracking of a student's progress, and thus identify areas that require more attention (University of Ontario Institute of Technology, 2021). Woolcock (2006: 19) advocates for the employment of various types of assessments and considers this practise as both imperative for the attainment of the prescribed objectives, as well as accommodating of a diversity of students' learning styles.

By contrast, 'evaluation' refers to the process of determining the level of quality of a particular performance or outcome, without regard for the manner in which this was achieved (Behr, 2010: 7). It is a reference to the "higher-stakes, conclusive 'judgments' of coursework which are used to determine a student's grade in the course" (University of Ontario Institute of Technology, 2021). Gillis (2003: 29) states that goals and objectives are meaningless without a measure of desired outcomes, and that evaluation can measure teaching effectiveness, and serve as motivation for students to practise, focus or study more intently. He also regards 'evaluation' as "feedback mechanisms on the progress and achievement level of students' musical understandings and goals (Gillis, 2003: 29).

2.2.1.4 Activities

Although 'activities' is not a standard component of the general university syllabus, Gillis (2003: 29) provides some advice that is relevant in the context of this study. Firstly, he reminds us that all the activities should be motivated by the expected outcomes. Additionally, since some music-related activities (e.g., ensemble activities and performances) take a considerable amount of time, he recommends prudent planning to allow for "sufficient episodes of quality rehearsal, instruction, listening, and evaluation, as well as other possible activities, such as student presentations/projects and conducting". Gillis states that since performance studies incorporate both practical and academic aspects (which are mutually beneficial), he proposes that these be integrated into the course. He further suggests the introduction of both performance and non-performance activities that incorporate varying strategies and materials

that will keep students involved in other ways than merely practicing. Finally, Gillis advises that this section should detail all activities including tests, concerts, recitals, examinations, festivals, clinics, and tours.

2.2.1.4.1 Texts, readings, and materials

According to Boye (2015: 2), the component of the study guide which deals with these three aspects should include a list which clearly states whether a particular text, reading or article is required or recommended (supplementary); this list ought also to detail how each can be acquired (bookshop, library section or website link). Additionally, she advises that a list of materials for the course (art supplies, “clickers”, lab equipment) also be provided. Gillis (2003: 29) recommends that the list includes repertoire (and the cost of the score of each piece); he adds that materials be listed in the appropriate reference style.

2.2.2 The syllabus compilation process

Although syllabi are widely used, there is a shortage of sources that detail the actual process of syllabus compilation. I managed to find two sources - *Constructing a Syllabus* by Woolcock (2006), and *Planning Your Learning-Centered Syllabus: An Overview* from Cohen, Miller, and O'Brien's book *The Course Syllabus: A Learning-Centered Approach* (2008: 13-21). Both sources present a different approach to syllabus compilation and will therefore be treated separately.

Woolcock's (2006) approach involves five simple steps, of which only four are relevant to this study. His approach employs regular self and peer evaluation. In the first step, “beginning at the end” (2006: 13), he advises compilers to determine the most significant course outcomes graduates should possess. These outcomes should then be stated as general aims (goals), and thereafter, a formal statement of objectives (how these aims will be achieved) should be compiled. Since students learn in different ways, he encourages utilising the AVK learning model¹¹ in preparing the course's aims and objectives. Referring to courses in the humanities disciplines, Woolcock recommends that learning takes place in many different environments. Regarding the wording of syllabus objectives, the author also recommends specific action

¹¹ The AVK learning styles that is based on Neil Fleming's research. The basic premise is that individuals receive and impart information in all learning styles, but are dominant in one of them: auditory (A) - involving hearing; kinaesthetic (K) - Kinaesthetic (K) – the act of doing; and visual (V) – visual (Chinyi Helena and Nidhi, 2017: 17)

verbs, in line with the AKV learning styles. This represents the “first draft” of the aims and objectives (or “building blocks”) and should be adjusted accordingly, after self-evaluation and consultation with colleagues.

Step 2 involves “Preparing the text of the course” (Woolcock, 2006: 16, 26) involves deciding on course content, the order of the various units, and which course materials to use. Regarding content, Woolcock’s strategy involves dividing the course into five major, progressive sections (“chapters”) and naming them appropriately - this represents the basic content framework. He then suggests subdividing these five sections into units that roughly correspond to the number of classes in the course calendar, while bearing in mind that covering certain topics can span more than one lecture. Woolcock advises that the notional hours allotted to each topic should align with what is stated in the objectives. He further argues that constructing a flow chart can provide a graphic representation of how well course topics are connected and may assist in logically ordering the components of the course. In addition to providing an indication of how each topic relates to the others in a coherent whole, a flow chart may also highlight some connections that are not obvious to some learners (especially ‘visual’ learners). When deciding on materials, Woolcock advises that this should be done last, guided by the course content and sequence, as well as the progression required.

The third step, “Assessment and evaluation of course objectives” (Woolcock, 2006: 18, 28) involves deciding on the best method of measuring students’ attainment of the objectives. This measure informs each assessment’s timing, content, and procedure; the author then suggests that each objective should have a corresponding evaluation mechanism. Each assessment should then be listed with the required objective, with a weighting for each assigned based on its significance according to the objectives. Woolcock indicates that this will provide students with an indication of how much time and effort they should dedicate to the assessment, suggesting that assessments should take place “early and often” (Woolcock, 2006: 18) so that students quickly assign high priority to the course; assessments due later in the semester could be submitted after the due date, as students may find themselves overwhelmed by other activities, leaving little time to devote to these assessments.

The final step, “Administration and presentation”, addresses the provision of administrative information and the compilation of the final document (Woolcock, 2006: 20). All contents of the administrative section should attempt to foresee and answer any anticipated questions from students and represent the “contract” between the aforementioned stakeholders (2.1.2.1 The

university syllabus). This section not only lists institutional information but contains the course description. Since the description exercises a significant impact on whether a student will enrol for the course or not, the wording should be “accurate and precise” in order to attract students, and only 8-10 lines long. The specific steps outlined by Woolcock begin with completing the administrative items, followed by the preparation of a draft that brings all the elements together in a unique and aesthetically pleasing manner. Thereafter, he advises self-evaluation and allows peers to provide feedback. The final step, “Preparing a syllabus for the College Curriculum Council”, is not applicable and therefore not discussed here.

Cohen, Millis, and O'Brien's (2008) provide a five-step approach. The first step involves the development of a “well-grounded rationale for your course” (Cohen, Millis and O' Brien, 2008: 15). The authors argue that the course rationale and course design are inseparable concepts, and that each impacts the other. They also emphasise the fact that a lecturer's philosophy regarding the subject matter drives the syllabus contents. To avoid any potential awkwardness, and in order to positively influence learning via careful course construction, Cohen et al. suggest that an instructor carefully examine the syllabus for any unintentional biases to make the course “more intellectually and culturally responsive”.

Their second step requires teachers to “Decide on desired outcomes and assessment measures” (Cohen, Millis and O' Brien, 2008: 16). Their perspective is that course planning should consider process, content, and goals. In compiling the subject goals, the authors advise that in addition to discipline-specific training and knowledge, students should learn skills that will help them function effectively in society. The specific goals mentioned include understanding how to access and effectively use resources, being able to work both independently and as part of a team, finding solutions to complex problems, effectively communicating through appropriate means (including performance), and recognising and respecting cultural differences. Another very important goal, Cohen et. al. mentions that students should learn to initiate, understand, assess, and assume responsibility for their own learning.

The third step requires teachers to “Define and delimit the course content” (Cohen, Millis and O' Brien, 2008: 18), and this involves deciding on the essential content for the course, and this should include content that you as a teacher value the most. To accomplish this, they recommend laying out the essential learning outcomes of the course, and then “pruning away”

any information that is not easily retained. The authors advise engaging in active learning, arguing that in normal conceptual learning, information is poorly learnt and easily forgotten.

In describing their fourth step, “Structure your student’s active involvement in learning”, Cohen et al. (2008: 18) suggest that the decision on which topics to include in the content relies on the types of activities and assessments available. He explains that these activities or assessments could be either content or process orientated. The authors suggest including activities that involve individual and group learning that stimulate sustained and intense work. These activities should facilitate students’ ability to master the specific techniques and knowledge required by the discipline (Ibid.).

The authors’ last step involves the identification and compilation of resources (Cohen, Millis and O’ Brien, 2008: 19). They advise that teachers should include a rich selection of resources that cater for both individual work and teamwork, and at the same time facilitate “creative intellectual activity” (Ibid.). Interestingly, Cohen et al. also encourage challenging students in the discovery and discussion of opposing viewpoints through activities such as debates, and in the utilisation of materials that rely on personal or technological interpretation.

Although these two approaches to syllabus compilation are quite different, there are two principles held by the authors of both sources. The first is a suggestion that instructors deciding on learning outcomes should take a retrospective approach, envisioning the skills and knowledge that graduates of the course should possess. This would inform the other processes of the syllabus compilation, including goals and objectives, content, materials, and assessment procedures. The second is a recommendation that instructors incorporate novel and innovative learning styles in addition to the standard practices.

2.2.3 Factors that influence syllabus design

It is vital that any instructor designing a syllabus thoroughly consider the variables that might influence the process. According to Cohen, Mills and O’Brien (2008: 39), these variables include students’ needs, the type of course being offered, and the rationale underlying the course. Due to the distinctive nature of each instructor, student, group of students, each of these further influences the syllabus design process (Cohen, Millis and O’ Brien, 2008: 21).

There exists a surplus of information that describes the purpose and contents of the general university syllabus; however, there is a shortage of published or peer-reviewed literature on the

syllabus compilation process. Furthermore, literature on the topic of syllabus compilation for university music performance studies (including university tuba performance studies), is nearly non-existent, with the exception of isolated cases such as Gillis' article *Constructing Effective Syllabi for the Studio and Ensemble* (2003). I was unable to find any sources that dealt with compilation of the practical components of university tuba performance studies syllabi.

Since graded examination syllabi were mentioned by some individuals during the preliminary investigation, I contacted the graded examination boards in order to gain insight into their respective processes of syllabus compilation. Responses were limited to the ABRSM and Trinity College London; the original emails documenting the establishment of contact are included in Addendum 3 and Addendum 4.

2.2.3.1 Associated Board of the Royal Schools of Music (ABRSM)

According to Mr. Nick Munday (2016), the Syllabus Administrator for the Associated Board of the Royal Schools of Music, the ABRSM syllabus compilation process requires two selectors, a moderator, and an in-house team of specialists. The selectors include one instrument specialist, the other an experienced teacher (who is quite often also an ABRSM examiner). These selectors then peruse a vast selection of music obtained from publishers and propose new pieces according to a set of (confidential) parameters; these include key, length, technical elements, balance of pieces across lists, balance of publishers, and the affordability of scores. To ensure accuracy of grading and equality with other instruments, a moderator and the in-house team undertake an extensive review of the selector's lists, which is the final step in the process.

2.2.3.2 Trinity College London

Trinity College London (TCL) employs a similar approach to that of the ABRSM. Andrew Hatt, the Qualifications Development Manager of Music for Trinity College London (Hatt, 2020), explained that the start of the process involves three market-related activities. Firstly, meetings with shareholders take place to discuss the plan for the new syllabus. Thereafter, surveys are conducted with teachers in order to determine their experience with the current syllabus and provide any suggestions for the new syllabus. The final step in the process is an analysis of data from the surveys and consideration of the works recommended by the teachers.

2.3 Grading systems

Since the content of any practical music syllabus relies on repertoire as its main component, it is vital that research into determining what materials ought to be included for specific years of study be undertaken. During my research into this aspect of the study, I found numerous repertoire recommendations in the form of repertoire lists; however, very few of these documents explain the process by which the list of repertoire was chosen, or how the authors determined the difficulty level of each work. It is crucial that in order to propose repertoire for a university syllabus, there must exist a system/tool capable of grading/classifying repertoire into difficulty levels. The logical next step was to determine which grading systems (if any) were available that could be utilised in for this study.

2.3.1 Description of different grading systems

Several grading systems were found, including systems for band, orchestra, strings, and brass. I managed to find two different grading systems for tuba repertoire; these were the *Guide to the Tuba Repertoire* (Morris and Perantoni, 2006) and the *ITEA Official Standard Literature List* (ITEA, 2019).

2.3.1.1 Guide to the Tuba Repertoire

The *Guide to the Tuba Repertoire* (Morris and Perantoni, 2006), otherwise known as the *New Tuba Source Book* (NTSB), and the updated version of *The Tuba Source Book* (Morris and Goldstein, 1996), is probably the most comprehensive contribution to tuba literature. The book contains an annotated listing (over one thousand entries) of all published repertoire for tuba solo, tuba ensemble, methods and studies, orchestral studies, and even incorporates a discography. Of particular importance to the current research project is the grading system used throughout the book.

This grading system is perhaps the most widely used tuba repertoire resource currently available. It serves as the basic framework of *For the University Student* (Perantoni, 1996), *A College Level Tuba Curriculum* (Whitehead, 2003), and the current *Difficulty Ratings for ITEA Journal Reviews* (ITEA, 2019). The system takes the form of a five-tier level designation, with brief explanations of the aspects of the repertoire (criteria) that determine the difficulty of a work

(Table 3). The information provided on each work includes a concise annotation of the difficulty level of the work according to the criteria and descriptions.

Table 3: Grading system from the NTSB grading system (Morris and Perantoni, 2006: xiv).

Level		Criteria and descriptions
1	Beginner	<ul style="list-style-type: none"> • Limited range, approximately • One octave: B^b 1–B(d). • One year of instruction. • Limited rhythmic/technical requirements. • No note values shorter than eighth notes, • No syncopated rhythms. Music of a tonal nature.
2	Intermediate	<ul style="list-style-type: none"> • Two/Three years of instruction. • Range approximately A1– e (f). • Rhythmic/Technical requirements involve simple sixteenth note patterns. • Simple, limited syncopated patterns.
3	High School, secondary school, pre-college	<ul style="list-style-type: none"> • Range approximately F1–b (c'). • Moderate tessitura. • More rhythmic complexity. • Extended syncopations, sixteenth note • Patterns, triplets, etc. • Moderate amount of multiple tonguing.
4	University/college	<ul style="list-style-type: none"> • Range approximately (B^b 2) C1–f (g'). • Higher advanced tessitura. • Increased rhythmic complexity/multimetric. • Angular melodic lines. Dissonant harmonies/ • Contemporary harmonies. • Endurance factors. • Introduction to avant-garde techniques (flutter tongue, multiphonics, etc.). • Multiple tonguing. • Dynamic control and extremes.
5	Professional	<ul style="list-style-type: none"> • Extended high tessitura. • Rhythmic/Technical complexity of highest order. • Angular lines/large skips in melody. • Advanced twentieth century techniques. • Extreme dynamic contrasts.

There are slight deviations between the system used in the NTSB and the ITEA New Materials section, and these include:

- Updated range terminology to new format – instead of 'B₂' (Figure 1), the ITEA uses 'BBB' (Figure 2).
- Extensions of the extreme low and high ranges (Figure 2).

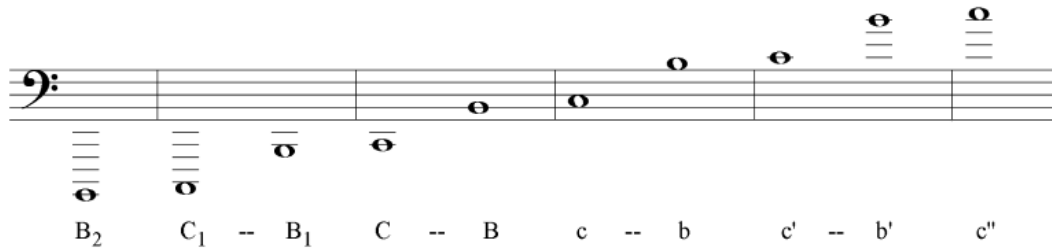


Figure 1: Pitch notation guide from the NTSB (Morris and Perantoni, 2006: xv).

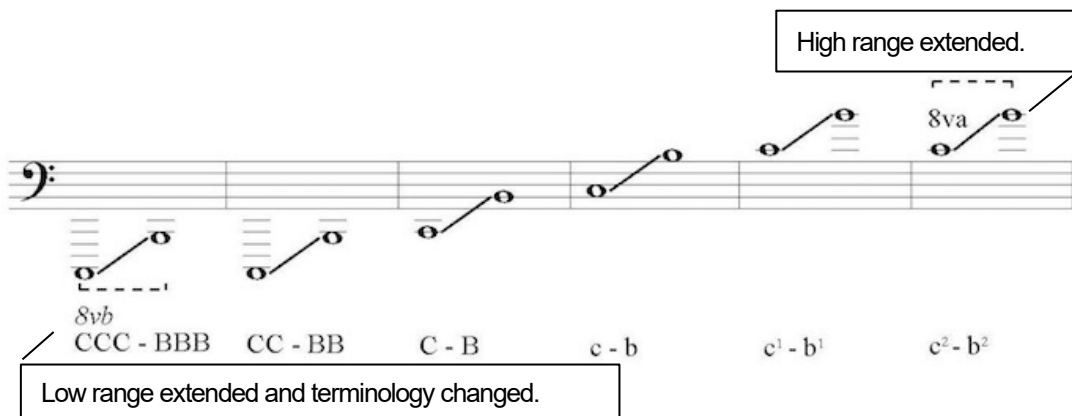


Figure 2: Pitch Notation Guide from ITEA Journal Review Section (ITEA, 2019: 10).

Whitehead (2003) and Perantoni (1996) utilise an amended version of the level designations from the NTSB; these are compared in Table 4.

Table 4: Level descriptors used by Perantoni and Morris (2006: xiv), Perantoni (1996: 319), and Whitehead (2003: 75)

Level	Guide to the Tuba Repertoire (Morris and Perantoni, 2006: xiv)	For the University Student (Perantoni, 1996: 319)	A College Level Tuba Curriculum (Whitehead, 2003: 75)
1	Beginner	Pre-college	Pre-college and initial college studies
2	Intermediate	College sophomore	College sophomore
3	High school	College junior	College junior
4	University	College senior – graduate	College senior – graduate level student
5	Professional	DMA, professional	DMA, DM, Professional

The NTSB grading system for solo tuba repertoire at all levels is a monumental achievement. However, there are certain limitations in applying this system to my study:

- The grading system covers for all levels of tuba performance (beginner – advanced); since our target population is university students, the system (and the included criteria and descriptions) would have to be applicable to each year of study.
- Certain criteria are not applicable to university students – for instance, ‘years of playing’. There is a need for a system with more specialised criteria that takes into consideration the skills of both the university student and the experienced player

Despite the inability to use this entire system to suit our needs, it can still serve as a useful framework for my grading system

2.3.1.2 ITEA Official standard literature list

The *ITEA Official Standard Literature List* (ITEA, 2019) is a well-formulated document with the aim of listing standard works for the tuba and euphonium. Of particular interest to this research is the method used to determine how a work becomes ‘standard’. Firstly, the work must subscribe to the ‘absolute’ and ‘additional’ requirements (Table 5). Thereafter, each work is assigned a score (out of 100) according to the rating system (Table 6), a rubric of predetermined and weighted criteria.

Table 5: Absolute and additional requirements from the *ITEA Official Standard Literature List* (ITEA, 2019: 4).

Absolute requirements	
1.	Does the music enhance and/or promote the advancement of the tuba or euphonium?
2.	Does the music promote the highest level of artistry for the tuba or euphonium?
3.	Does the music inspire further study or interest in the euphonium or tuba?
Additional requirements	
1.	Is the music originally written for the tuba or euphonium?
2.	Does the music have strong pedagogical value?
3.	Has the music been professionally recorded?
4.	Has the music received numerous public performances?
5.	Does the music appear on numerous professional repertoire lists?
6.	Does the music appear on numerous national, state, or regional “Solo and Ensemble” required or recommended performance lists?

Table 6: ITEA Standard Literature List Rating System (ITEA, 2019: 5-11).

	Criteria	Weighting	Description of criteria
1.	Range	40	Highest and lowest note determined within a set “basic” range. Each half step within the range gets one point. As range extends, works get more difficult, with high range being the most difficult, therefore counting more.

2.	Dexterity	30	Intervals: each interval is assigned a score. Score most difficult or influential interval, plus additional points for dexterity.
3.	Rhythm and tempo	20	Two rhythms that characterised the piece are added together. Additional points awarded for tempo (slow-medium-fast ¹²).
4.	Miscellaneous: extended techniques, key difficulty, key changes, time changes, phrase lengths, clef changes, Chromaticism, mute required, multiple (excessive) dynamics, excessive endurance, ornamentation.	10	Select as many as possible with cap at 10.
5.	Difficulty of piano part ¹³ .	0	Easy – medium – hard.

The system incorporates an intricate scoring system. The four broad criteria seem limited at first glance, but the descriptors found within them are comprehensive. Although the system is certainly well-suited to its purpose, it cannot be used to rate the difficulty of repertoire for tuba students at university level, due to certain constraints such as different end goals. In addition, the quantitative points system is complex, requiring a comprehensive analysis of different aspects of the work. These factors make adherence to the system a somewhat complicated and time-consuming exercise for the tuba teacher. If the final score represents the extent to which a work is deemed a 'standard', it is not connected to any university level required for this study. However, the extensive criteria and scoring method can certainly serve as useful guides in the setting up of the grading system that will be used in this study.

2.3.1.3 Other grading systems for brass

During my investigation, I discovered five more grading systems used for instruments of the brass family: the graded examination boards (ABRSM, TCL and UNISA), *The Creation of a Skills-Based Grading System for Solo Trumpet Repertoire* (Alhorn, 2016), and *A grading catalogue of selected works for solo trombone and piano* (Mead, 2016).

¹² If the tempo is fast it is awarded the most points and is more difficult.

¹³ The piano part difficulty is not included in the score and weighting.

2.3.1.3.1 Graded examination boards

The graded music examination boards each employ grading systems suited to their individual purposes. Precise and detailed information about the system used and the inherent criteria are confidential; however, I did manage to obtain some assistance from representatives from the ABRSM and TCL boards, who provided me with examples of their criteria used (Table 7).

Table 7: Examples of criteria used by the ABRSM and TCL

ABRSM	Trinity
Key	Key
Length of work	Duration
Technical elements	Ranges
Balance of pieces across lists	Techniques
Balance of publishers	Time signatures
Affordability of music	

2.3.1.3.2 The creation of a skills-based grading system for solo trumpet repertoire

Alhorn (2016) proposes a bi-level skills-based grading system for trumpet repertoire. On the first level, a difficulty rating is assigned to each work on a scale of 1-3, where 1 denotes a repertoire piece for a beginner, or “first (solo) public performance” (Alhorn, 2016: 2), and 3 denotes a work for the advanced high school student or undergraduate music student. The second level rates each work according to six criteria on the scale of 1-5 (Table 8).

Table 8 Criteria from Alhorn’s grading system (2016: 2-10)

1.	Range
2.	Rhythm and meter
3.	Articulation
4.	Flexibility
5.	Endurance
6.	Phrasing

Alhorn’s system will not be applicable to our purposes for two reasons. Firstly, it is specific to the trumpet and not the tuba, and secondly, it covers all levels from beginner to advanced, as with the *Guide to Tuba Repertoire*. However, his system utilises an exemplary and simple scoring table wherein each criterion is rated from 1-5 (1 denotes an absolute beginner; 5 denotes a virtuoso). Nevertheless, this system is limited in some respects. The advantage of a two-tier grading system is that not only will teachers be immediately able to determine the difficulty level for a particular work on a simple 1-3 level scale, but also select repertoire containing certain characteristics and match them with the needs of the student. For instance,

if a student is at grade 3 level, but struggles with range, a teacher can identify a grade 3 level piece with a suitable range to assist the student in his progress.

2.3.1.3.3 A grading catalogue of selected works for solo trombone and piano

Mead (2016), in his study *A Graded Catalogue of Selected Works for Solo Trombone and Piano*, proposes a grading system to be used in determining the approximate difficulty level of works for trombone as well as for piano. The grading system uses a weighted percentage formula to determine the difficulty level for each work according to four weighted criteria (Table 9). To calculate the score of each criterion for each work, the criterion is matched with the highest scoring corresponding indicator. The level score is expressed as a fraction (numerator = level score from criteria; denominator = highest possible score value) and is multiplied by the criteria weighting. This equals the weighting score for the criteria. The scores from each of the criteria are added together and the total represents the difficulty rating of a work expressed as a total out of 100, or a percentage.

Table 9: Criteria and weightings in Mead's (2016: 11) system.

Range	35
Rhythm	15
Flexibility	30
Extended techniques	20

As an example, a work for trombone has a range of D1-C4. The range calculation will be as follows:

$$\frac{\text{Range score level}}{\text{max score level}} \times \frac{\text{criteria weighting}}{1}$$

$$\frac{5}{8} \times \frac{35}{1} = 21.875 \text{ (22 – range total)}$$

Table 10: Range score level with corresponding range (Mead, 2016: 10).

Range	
Score level	Range indicator
1	Ab1 – C3
2	F1 – E3
3	E1 – G3
4	E1 – Bb3
5	D1 – C4 d below staff to C above high Bb
6	C – D4
7	Bb – F4
8	F – Bb4

The system is relatively simple and accurate, although it has a few limitations. Since the grading system is geared for use with trombone and piano, we seek a more thorough set of criteria for

the purposes of this study. The criteria are also very limited, and do not consider aspects such as articulation, dynamics, and length. Although the system rates difficulty according to a percentage, the percentage is not linked to a specific year or grade level.

2.3.2 Discussion of proposed grading system

In syllabus compilation for performance studies, grading repertoire (solo) is an integral part of the process. These grading systems, or rubrics, should be capable of grading repertoire as accurately and comprehensively as possible and have a suitable scoring system to recommend a year/level for the various repertoire pieces. Aside from the recommended year/level provided, other factors should be considered when choosing works for inclusion in the repertoire list.

Through researching whether existing grading systems could be used for the purposes of this study, it was determined that none of the systems in their original form could serve our purposes, and one had to be designed. The existing systems¹⁴, integrated with the literature, information extracted from the aspects of the well-rounded tuba player (see Chapter 3 and Addendum 42), suggestions provided by respondents (see Addendum 6)¹⁵, and my own ideas as an experienced tuba performer and teacher, provided enough information to design this system which will be discussed below.

The proposed grading system incorporates the following from the existing systems:

1. The NTSB Levels III-V descriptions and criteria (Morris and Perantoni, 2006: xiv) were used as a framework and point of departure for the grading system.
2. A simple, mathematical system was devised using Meads' (2016) system as inspiration. The resulting system uses both a quantitative and qualitative model.
3. The ITEA Pitch Notation Guide (Figure 2) from the ITEA Journal Review Section of the current ITEA Journal (ITEA, 2019) is used as reference for pitches referred to in the grading system and throughout the thesis.

14 The sources include the Guide to the Tuba Repertoire (2006), the ITEA Official Standard Literature List **Invalid source specified.**, A Grading Catalogue of Selected Works for Solo Trombone and Piano (Mead, 2016), and the external examinations boards (ABRSM and Trinity). Some of the criterion descriptors were amended, while some descriptions remain in their original form. For instance, 'Range' descriptors remain unchanged.

15 Respondent interviews provided important perspectives on the criteria and descriptors, and these are of tremendous value considering the responses come from seasoned professional tubists and educators. Please see Addendum 43 for detail.

4. Some of the criteria and descriptors are borrowed from the systems above, while others were extracted from the Aspects of the Well-Rounded Tuba Player (Chapter 3 and Addendum 42), and based on my personal experience, as approved by the research supervisors.
5. In some cases, the criteria are streamlined and grouped together (for instance, harmonic language comprises both scales and intervals).
6. Some criteria are excluded since they are not applicable to the university level context.

Additional criteria and descriptors were extracted (where possible) from the Aspects of the Well-Rounded Tuba Player (see Chapter 3 and Addendum 42), and all the criteria applicable to the grading rubric can be found in Addendum 5.

The simplicity of the scoring system was inspired by Mead (2016), while the dual scoring mechanism, consisting of an individual score per criteria, and a total score linked to a specific level, was inspired by Alhorn (2016). The descriptions from each of the criteria were drawn and amended from the various sources, respondent interviews, and my own ideas as tuba player and teacher.

The scoring system provides a numerical score for each work, and this score will correspond with specific year levels of university study (see Table 11). These levels are the years of study available in the South African context.

Table 11: Score ranges for grading system

	Year/s of study	Score range
Undergraduate	1 st year	15-19
	2 nd year	20-24
	3 rd year	25-29
	4 th year	30-34
Postgraduate	Honours	35-38
	Masters 1 st year	39-42
	Masters 2/Doctoral	43-48

To score each criterion, the user selects a criterion descriptor linked to a corresponding score (0-3) which best describes criteria found in the work¹⁶. The accumulated score from all criteria corresponds to an approximate university year level (Table 12). The levels were adjusted from those provided by Perantoni (1996), Whitehead (2003), and Morris and Perantoni (2006) because their levels do not align with those used in South African universities. The minimum score is 13, and maximum is 48.

¹⁶ Use the paragraphs corresponding to the respective criteria in the literature review section of the thesis for more detailed information.

The user can utilise the system in two ways: (1) they can determine the recommended year level for a specific work¹⁷, or (2) seek the specific value and assign the repertoire based on those criteria. For instance, if a teacher would like to assign a work that has a certain range for a certain level/year of student, and the work has previously been graded using this system, the teacher can look at the specific criteria and find the most appropriate work.

Table 12: Recommended score range according to year of study

Undergraduate/Postgraduate	Score range	Years of study	Score range
Undergraduate	15 - 34	1	15 – 19
		2	20 – 24
		3	25 – 29
		4	30 – 34
Postgraduate	35 - 51	Honours	35-38
		Honours 2/Master's 1	39-42
		Master's 2/Doctoral	43-48

As examples of how to utilise the grading system, I have selected a few works from my PhD recitals and graded them. The grading score sheet template and the score sheet for each of these works are included in Addendum 8 and Addenda 9-25 respectively.

2.4 Conclusion

In South African universities, there is currently no complete and standardised tuba performance studies syllabus. The preliminary investigation showed that various documents are used, but their pedagogical contents are inconsistent. To a certain extent, grading examination syllabi can be used for benchmarking, and as sources for repertoire and technical development, should the required standards for both align.

Although there are many sources that state the purpose and explain the different components of the general university syllabus, few explain the process of compilation in detail. In the context of music performance studies, the only source discovered was the article by Gillis (2003), wherein he provides good guidelines on how to draw up the components from the general syllabus and adapt them for music performance studies. No literature was discovered that deals with the compilation of the practical portion of the performance studies syllabus relevant to this study (repertoire, technique, excerpt study and chamber music).

¹⁷ This would happen in the case of a newly composed work, or a work that has not previously been graded using my system.

An integral part of a performance studies syllabus is a system that grades repertoire for the purposes of this study. There are only a handful of grading systems available for tuba; however, none of the existing systems can grade repertoire for the purposes of this study. Therefore, it is necessary that a new system be designed. The proposed system will use the existing systems as frameworks, which will be integrated with the suggestions from respondents in the interviews.

If we consider that the general intention of university study is to prepare students for professional careers, and blend this with their pre-university training, there are certain goals that all musicians should work towards to meet the minimum requirements for their chosen professional area of expertise. There are limited job opportunities available for tuba players, and nowadays, there is a need for a more generalised training to increase their employability. The goal, then is to train tuba students as well-rounded musicians – to achieve this, there are certain aspects of their education that need to be developed.

CHAPTER 3: ASPECTS OF THE WELL-ROUNDED TUBA PLAYER

In this chapter, I provide a discussion of aspects I deem necessary for the achievement of well-rounded status as a tuba player¹⁸. The purpose behind including these aspects are twofold and of particular relevance to the study. Firstly, the objective was to survey the literature and determine what information is available regarding the characteristics of good tuba players (or the well-rounded tuba player). This would afford readers with possibilities of the various aspects that should be developed in performance studies modules, and in turn, provide suggestions of what to include in syllabi. Secondly, it was also envisioned that the available literature would plot each aspect's development stages and recommend at what year or level these should be attained. The aspects along with their stages of development per level could serve as the basis of the criteria, descriptors and indicators for a comprehensive grading system. To clarify information pertaining to some of the aspects, I provide examples from the standard repertoire and works performed at my performance recitals.

3.1 Sound and tone

Sound is the basic element of all music, regardless of instrument. The renowned brass pedagogue and retired tuba virtuoso Roger Bobo states that “sound is not enough; players of all instruments must develop a sensitivity to the subtle magic that turns sound into a beautiful tone” (Bobo, 2003: 6). In brass playing, tone is “is arguably the most important component of our expressive voice” (Amis, 2006: 5), and is therefore discussed first.

From the literature that deals with this topic, the ideal tone for the well-rounded tuba player is described as having certain qualities, or “tone descriptors” (Jones, 2016: 30) - the tone should be clear (Porter, 2004; Phillips and Winkle, 1992: 421) or pure - “free of unwanted distortion or disruption” (Jones, 2016: 30), and centered¹⁹ (Davis and Reichenbach, 2004: 2; Phillips, 2012: 421). Although there are further tone descriptors in the literature, many of them are vague – for

18 These 14 aspects by no means represent all the aspects to achieve well-rounded status, rather, they represent those aspects that frequently appear in the literature and are considered important by researchers and authors.

19 When a tone, brought about by the buzz from the air and embouchure, resonates to the required frequency through the instrument, with a full complement of overtones (rich in overtones), it is said to be centered (Adams, 2019).

instance, Whitehead (2003: 48) refers to a “characteristic tone”, while Davis and Reichenbach (2004: 2) state that the tone should be rich, focused, smooth, round, and warm. These descriptors may even contradict one another, which is often a source of confusion to the aspirant tubist. Porter (2004) provides invaluable guidance:

In order to be a well-rounded tubist, we need to accept the fact that there are two distinct sound types for tuba. Students/performers should be able to hear the difference and produce the two sound types.

Porter goes on to explain that the two sound types in question are the solo tone and the large ensemble tone. The solo tone, used primarily in solo performance, is compact, clear, and amplifies the higher harmonics, which results in a crisp, overtone-rich tone. Clarity of articulation, especially in fast passages, is particularly prized. This tone also works very well in the small ensemble/chamber music context, and in larger ensembles where a more compact sound is required. The main limitation of the solo tone is that it does not blend well within larger ensembles.

The large ensemble tone is what Porter (2004) terms “woofier”, and is defined as an omnidirectional, overtone-rich, and beautiful tone that provides a powerful bass line in larger ensembles. This tone has less clarity of articulation than the solo tone, and faster passages are more difficult to hear. It is the desired tone for orchestra and wind bands, where the main role of the tuba is to blend with the other bass instruments of the orchestra, and to provide a fundamental grounding to the brass section.

3.2 Embouchure

A definition of the embouchure for brass players is given by Woldendorp et. al. (2016: 218):

the process needed to adjust the amount, pressure and direction of the airflow (generated by breath support) as it travels through the mouth cavity between the lips, by the position and/or movements of the tongue, teeth, jaws, cheeks, and lips, to provide tone on a wind instrument.

The embouchure is also described as the main point of contact between player and instrument, the source of vibration/buzz which is amplified through the tuba (Erickson, 2017); it also describes the lips, tongue, neighbouring facial muscles, and the state and position they assume in tone production (Erickson, 2017; Cummings, 2003; Whitehead, 2003: 48).

Second only to breath support and control, the establishment and maintenance of a proper embouchure is an important consideration for all brass players (Phillips and Winkle, 1992: 28;

Bailey et al., 2008: 111). Moreover, it is an essential aspect of good tone production, enhanced by the conceptualisation of this tone in the mind's ear. Furthermore, the development of a solid embouchure is a cornerstone of good technique (Bailey et al., 2008: 111) and a major factor enabling progress on a brass instrument (Erickson, 2017). Beside the establishment of a correct and efficient tuba embouchure, the tuba player needs to maintain and exercise the embouchure in order to perform at an optimal level (Bobo, 2003: 3).

3.2.1 The tuba embouchure

The subject of the tuba embouchure is much debated among pedagogues, due to the fact that the embouchures of tuba players vary considerably (Jacobs and Young, 2000: 101). Some authors believe that the basic brass embouchure is essentially the same for all brass instruments (Phillips and Winkle, 1992: 25). Whitehead (2003: 48) argues that the generic brass embouchure is not suitable for the tuba since it would not produce a characteristic tone. Because the tuba has the biggest mouthpiece of all brass instruments, it follows that the tuba embouchure would be considerably larger than that of all the others (Tilbury, 2012). Phillips and Winkle (1992: 25) advise that the tuba embouchure should feel natural and comfortable, with firm and controlled tension in all directions. Although there is no perfect embouchure (Little, 2003), the working parts of the embouchure would generally adhere to certain characteristics, as explained in the following sections (3.2.1.1-3.2.1.5).

3.2.1.1 Teeth, jaw, and chin

The upper and lower sets of teeth should be separated (Little, 2003) a finger distance apart (Bailey et al., 2008: 110), but aligned (Phillips and Winkle, 1992: 28; Bachelder and Hunt, 2002: 20). It is important to note that this distance between the two rows of teeth varies dependant on the register but are much farther apart than on any brass instrument (Tilbury, 2012). Phillips and Winkle (1992: 28) explains that in the middle range, the upper and lower teeth are somewhat separated, whereas in the lower register, they separate progressively with the drop of the lower jaw and chin. Tilbury (2012) supports this argument, explaining that the lower the notes played on tuba, the larger the gap between the two rows, and this wider disposition is conducive to the production of the required embouchure.

Generally, the chin should always be "flat" (Bailey et al., 2008: 110), "pointed downwards" (Cummings, 2003), and "slightly forward" (Phillips and Winkle, 1992: 28). The jaw should be in

a relaxed position (Cummings, 2003), slightly extended, flexible and free to move (Little, 2003: 2; Bailey et al., 2008: 110; Bachelder and Hunt, 2002: 20). Little (2003: 2) and Phillips and Winkle (1992: 34) advise against excessive jaw movement or chewing (moving the jaw with every articulation). Instead, the jaw should remain almost motionless during articulation (Little, 2003: 2).

3.2.1.2 Tongue and throat

The tongue within the tuba embouchure should always be in a relaxed state (Cummings, 2003), positioned relatively low in the mouth so as to not restrict airflow or impede the shape of the oral cavity, as this could result in a pinched sound (Phillips and Winkle, 1992: 34). The tongue should also accommodate any adjustments that result from changing registers, an increase or decrease in volume, and in the pursuit of articulations and clarity of tone (Phillips and Winkle, 1992: 33). The throat should always be open and relaxed throughout the player's available range (Cummings, 2003; Phillips and Winkle, 1992: 25).

3.2.1.3 Corners

The majority of authors advise that the corners of the mouth should be firm when forming the tuba embouchure (Rideout and Warny, 2008: 1; Erickson, 2017; Phillips and Winkle, 1992: 25; Little, 2003: 2; Cummings, 2003: 1; Perantoni, 2012: 3). Other instructions include "tucked" (Erickson, 2017), and "anchored in place" (Phillips and Winkle, 1992: 27). This disposition of the corners of the mouth should be retained regardless of range (Phillips and Winkle, 1992: 27).

3.2.1.4 Lips

The lips should be in the most natural position or shape (Cummings, 2003: 2); that is, slightly touching, but not pinched (Little, 2003: 2). They should be either puckered (Cummings, 2003: 2), or puckered minimally (Perantoni, 2012: 3), with slightly more puckering in the lower register (Little, 2003: 2). Furthermore, the lips should not be pulled back into a smile or have any leaks, as this would prevent the lips from vibrating freely, and cause a lack of control and flexibility, resulting in a weakened tone (Cummings, 2003: 1). In addition to being considerably larger

than any other brass instrument (Tilbury, 2012), the aperture²⁰ of the tuba embouchure should remain “open and relaxed allowing for the free flow of air” (Erickson, 2017).

3.2.1.5 Mouthpiece placement

The proper horizontal and vertical placement of the mouthpiece on the lips is of great importance (Phillips and Winkle, 1992: 25), second only to embouchure formation (Cummings, 2003: 1). Positioning the mouthpiece appropriately can aid in proper embouchure formation and avoid the manifestation of potential bad habits (Phillips and Winkle, 1992: 25). Most tuba players and teachers adhere to a placement that is majority top over bottom lip, with the 2/3 top and 1/3 bottom combination being the most common (Cummings, 2003: 1; Jones, 2016: 16; Phillips and Winkle, 1992: 26). It is supposed that this position allows unrestricted lip vibration and contributes to better tone quality (Ely and Van Duren, 2009: 52). Phillips and Winkle (1992: 26) remark that an embouchure that has majority lower lip in the mouthpiece seldom produces superior results. Other authors profess that the best position is a 50/50 vertical position (Little, 2003: 2; Bailey et al., 2008: 111; Perantoni, 2012: 3; Rideout and Warny, 2008: 1). However, this latter style of placement is advised more at the elementary stages of embouchure formation as it guarantees a “modest degree of success” (Ely and Van Duren, 2009: 52).

A universal mouthpiece position does not exist, neither are any of the above recommended placements ideal for every embouchure type – the positions will differ from player to player (Ely and Van Duren, 2009: 52) influenced by the characteristics of the teeth and facial region (Little, 2003: 2). These characteristics include the lip shape, lip length, lip position, teeth formation, size and shape of the mouth, player size, and the balanced/unbalanced strength of musculature on either side of the mouth (Phillips and Winkle, 1992: 26). The horizontal position is generally always centered (Little, 2003: 2; Cummings, 2003: 1; Bailey et al., 2008: 111). The proper positioning of the mouthpiece should be guided by the placement that produces the best results, thus allowing for optimal vibration of lips throughout the pitch range (Erickson, 2017). This entails a natural placement over the aperture (opening of lips) (Phillips and Winkle, 1992: 26), and should naturally accommodate the different parts of the embouchure (Jones, 2016: 15).

²⁰ Aperture – “the place in the centre of the embouchure where the lips vibrate to generate sound on a brass instrument” (Koehler, 2015: 10).

3.3 Breathing

Breathing is the most fundamental aspect of wind instrument performance (Phillips and Winkle, 1992: 24; Funderburk, 2009). Proper breathing habits positively influence the technical aspects of tuba performance, including the production of a beautiful tone (Perantoni, 2012: 3; Kirk, 2006: 55) and enhance flexibility along with crisp articulation (Kirk, 2006: 55). One vital habit for cultivation and maintenance is that of adequate breath supply, as this affords the performer the ability to sustain a phrase (Bachelder and Hunt, 2002: 15). Developing good habits of breath control is very important, since control of the speed and volume of air allows the player to negotiate the different ranges of the instrument – for instance, in the higher range, the air moves faster, whereas lower notes require slower moving air (Vinning, 2009: 19). Good breath control may also equip the tubist with the necessary facility for instrumental virtuosity and artistic freedom (Walker, 2017: 71), contribute positively to performance and musical expression (Perantoni, 2012), and enable the performer to master their instrument (Curnow, 2006: 19-20). While breathing itself can be a very complicated process, the study of breathing should remain simple (Bobo, 2003: 4; Funderburk, 2009), focusing on the end goal – taking a full breath (Funderburk, 2009). Once the player has perfected the art of drawing the optimal breath in the ideal manner in practice, this can be applied to the performance of music.

3.3.1 Musical breathing

The primary concern in musical breathing is being able to take breaths in places that disturb or interrupt the music least. Funderburk's article *Where to Breathe* (2003) is probably the most comprehensive published source on musical breathing for the tubist. He believes that breath placements are integral to effective musical expression and advises that the breath placement should form part of the performance. Additionally, he states that choice of breath placement should always be musically motivated, and that deciding on where to breathe should form an integral part of the repertoire preparation process. Funderburk suggests that the ideal places for breathing include sequences, rests, phrased endings, and following dotted/tied notes. As an absolute last resort, he recommends omitting certain notes. To aid musical breathing, there are a few techniques from the literature that tubists can employ to deal with the challenges

presented within the repertoire. These include sub-phrasing, the rubato²¹ breath, and partial exhalation.

In extended passages, the musician can sub-phrase, which involves dividing the phrase into smaller units and taking short breaths to replenish the air supply temporarily (Perantoni, 2012: 3). The rubato breath is very helpful when artists perform transcriptions of works not originally written for wind instruments, since these pieces are void of obvious places to breathe. It involves slightly altering the tempo before and after the breath and it gives a natural 'breath' to the music (Sauer, 2004: 1). The third solution, partial exhalation, is a common trend among many tubists, and is endorsed by Muter (2013), Bachelder and Hunt (2002), and Bobo (2003). Instead of depleting all the air in the lungs during performance, a certain portion of the air supply is retained. The recommendation is to utilise only the top two thirds of the breath (Bobo, 2003: 4; Bachelder and Hunt, 2002: 19), since this portion of the breath is "more stable and easier to control" (Bobo, 2003: 4). Using the last third of the breath would require contraction of the abdominal and intercostal muscles (Bachelder and Hunt, 2002: 19), and this could result in tension – "the brass player's enemy" (Whitener, 2008: 143). This last portion of air contains stale air throughout the windpipes and using this negatively affects tone (Muter, 2013: 13). Understanding the different breath types can assist the tuba player in his/her career.

3.3.2 Types of breaths

Tuba players cannot play phrases as long as those of other brass instrumentalists and have to breathe more often (Perantoni, 2012: 3). It is therefore necessary that tubists develop different types of breaths to deal with the challenges presented in the repertoire. These types include the long breath, pickup breath, short/quick breaths (hitch, sniff), and stagger breathing.

3.3.2.1 Long breath

The long breath involves increasing the "duration of the breath without reference to the beat of the music" (Whitener, 2008: 145). The breath is taken in for approximately 2.5 seconds (an entire bar for faster speeds) without reference to the beat or tempo of the music (Whitener, 2008: 145). This method guarantees a more relaxed, full breath every time, which is better for overall performance (Whitener, 2008: 145). Walker (2017: 88) adds that this type of breath

²¹ *Rubato* – with some freedom of time (Taylor, 2012: xx); giving the performer some rhythmic freedom (Taylor, 2012: 78).

builds capacity and can control the quantity of air used in any given phrase throughout an entire performance.

3.3.2.2 Pickup breath

The pickup breath, also called the synchronised or upbeat breath, refers to a breath taken during the anacrusis of a musical phrase. This type of breath the processes involved in starting notes on time (including coordination of the air, tongue, lip vibration and embouchure formation), promotes momentum, facilitates good attack, and aids in fuller inhalation (Whitener, 2008: 144).

3.3.2.3 Short/quick breath

Short breaths are sometimes required to draw enough air to sustain a passage until the performer arrives at a passage where a full breath can be taken. These short breaths, called 'hitch' breaths, can be taken through the mouth (corners or side/s of mouthpiece) or through the nose, called a 'sniff' (Phillips and Winkle, 1992: 25). Whether a tubist takes a hitch or sniff breath depends on the musical context. The hitch breath is recommended in passages in the higher registers, since the player can retain the embouchure shape during the breath, therefore limiting inaccurate entries, for example splits²².

The final few bars of the *Sonata for Tuba and Piano* (Trygve Madsen, 1980), one of the pieces performed in recital 5²³, is one such example. The final restatement of the main theme appears at the end of the work (Figure 3). Instead of the normal breath, a sniff breath was employed at the arrows indicated, allowing the embouchure to stay intact while breathing, thus reducing chances of inaccurate entries.



Figure 3 Hitch breath recommendation in third movement from *Sonata for tuba and piano* (Trygve Madsen, 1980: 9).

²² Split/crack note: these refer to the “undesirable partials accidentally produced when players fail to produce the intended fundamental tone” (Ely and Van Duren, 2009: 45)

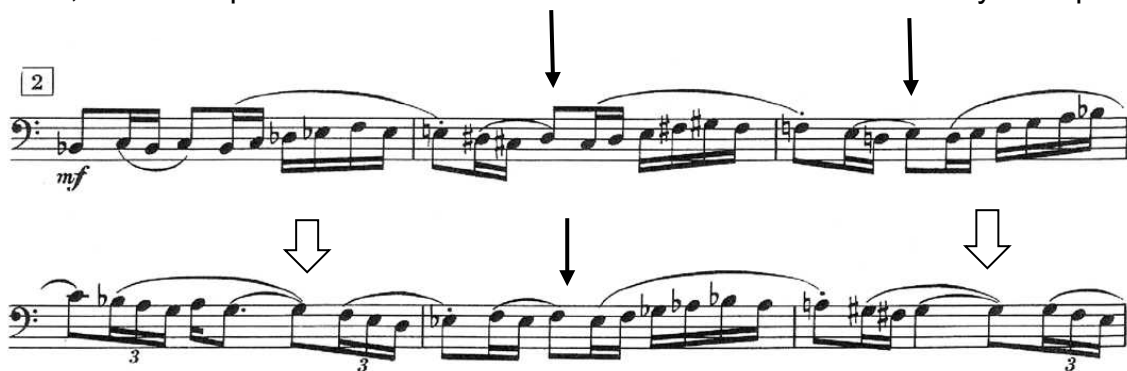
²³ Recital 5: 13 April 2019

The first movement contains several long sections with no obvious breathing places. Figure 4 is a thirty-one-bar example of such a section; I employed a number of different species of breath in this passage; these are listed in Table 13²⁴.

Table 13: Breathing techniques utilised in first movement of *Sonata for tuba and piano* (Trygve Madsen, 1980: 2-3).

Rehearsal number	Breath placement/technique description
2 – 3	Consistent hitch breaths taken at small arrows creating a pattern
3 – 4	Hitches and sniffs were taken randomly
4 – 5	Hitches were taken before the ascending 16th note sequence

The patterns created by hitch breaths occurring at the same place made the passage easier to perform, and breath placements were less obtrusive and informed the musicality of the phrase.



24 Larger arrows, smaller sniff/hitch breaths by thinner, darker arrows, indicate large breaths

Tuba 3

3 Poco più mosso

4 Moderato

Figure 4 Extract from *Sonata for Tuba and Piano* (Trygve Madsen, 1980: 2-3)

3.3.2.4 Stagger breath

Much of the tuba player's performing career is spent playing in ensembles. To avoid section players breathing simultaneously, creating a 'hole' in the music, and in order to sustain the musical line, stagger breathing is recommended (Perantoni, 2012: 3; Funderburk, 2003: 2). Each player breathes at a random point within a bar, according to a predetermined order (player 1 = breathes first, two = second.), or is assigned a specific breath spot (Funderburk, 2003: 2), often marked on the individual's part. Two examples where stagger breathing may be effectively employed in the *Suite in E^b for Military Band* (Holst, 1909) are provided in Figure 5. In the first bracketed passage, the low brass section plays the *Chaconne* theme. If all players were to breathe at the same time, the line would not be sustained and there would be gaps in the musical line. The same in the second boxed example, only the staggered breath is limited to the euphonium and tubas.

The image displays two systems of musical notation for a military band. The first system includes staves for 1-2 Trbns., 3 Trb., Euph., and Basses. The second system includes staves for 3-4 Eb Hns., 1-2 Trbns., 3 Trb., Euph., and Basses. The notation features various note values, rests, and dynamic markings such as 'mf' and 'f'. There are also some performance instructions like 'as' and 'soli' written above the staves.

Figure 5 Example of section to stagger breathe from *First Suite for Military Band in E^b* (Holst, 1909: 15-16)

3.3.2.5 Circular Breathing

Another method of dealing with breath issues is circular breathing. Phillips and Winkle (1992: 25) recommend that the technique should be learned by all brass players. Walker (2017: 74) supports this and recommends circular breathing to provide sufficient air to sustain a musical passage. Although the technique is frequently used in the higher wind instruments, it is rarely a requirement in the tuba repertoire because of the significantly larger amount of air required in tuba performance (Hynds, 2019: 128). Essentially, circular breathing involves expelling pressurised air through the embouchure using the cheeks and tongue, whilst inhaling air through the nose (Bobo, 2003: 55). While circular breathing will allow tubists to play for an extended period and not interrupt the music, there are a few drawbacks. Bobo (2003: 56) states that it can be noisy or distracting during performance, and by eliminating the breathing spots, there is a potential danger that the music will not ‘breathe’ (Bobo, 2006). Furthermore, Adler-McKean (2020: 78) points out that the technique also involves elevating the tongue, which can cause “momentary timbre modification”.

3.4 Posture and balance

Good posture is vital to the formation of proper and productive breathing habits (Stevens, 2018); it is responsible for the functionality of the breathing mechanism (Bachelder and Hunt, 2002: 14), and is vital in delivering ideal breath support (Walker, 2017: 4). Good posture is also a prerequisite for the mastering of perfect breathing technique and is one of the first steps in achieving musical perfection in performance (Cummings, 2016: 4). The ideal posture may be described as being upright (not rigid), relaxed, and without tension (Whitener, 2008: 143; Bachelder and Hunt, 2002: 14). Another requirement of good posture is balance.

Although Whitener (2008: 143) advises that the body should be balanced, he does not provide any further explanation. Vinning (2009: 1) discusses that balance refers to the state the body reaches when the skeletal structure (including the lumbar spine, assisted by gravity) naturally supports the body, instead of relying on surrounding musculature. In this balanced state, the body is free to move in any direction, and the resulting muscular freedom allows for easier and better breathing and performance. Allowing the head to properly balance on the Atlanto-occipital joint²⁵ without muscular involvement is an integral process in achieving that balance. For brass playing this is important, since any deviation from the balanced state of the head, will require the neck muscles to support the head, creating tension (Vinning, 2009: 3).

Traditionally, tuba players remain seated during performance, except for playing in marching bands, and in some chamber music settings. With the advent of tuba stands, the option of standing while playing, especially in chamber music, has become increasingly popular²⁶. The teachings of Arnold Jacobs were revolutionary for brass pedagogy, and his ideals are still practised by pedagogues today. One of his arguments was that “the ability to take air in was greatest in the standing position” (Nelson, 2017: 35); therefore, Jacobs encouraged brass players to sit as if standing, with the torso tall (not rigid) and the head as close to the ceiling as possible (Nelson, 2017: 35). This posture is recommended while seated in order to aid the breathing process (Perantoni, 2012: 1; Bachelder and Hunt, 2002: 14).

²⁵ The Atlanto - occipital joint is where the skull is poised atop the spine, allowing they head to nod (Vinning, 2009: 3)

²⁶ Based on personal observations

3.5 Articulation and tonguing

Articulation refers to the manner notes are tongued or slurred; it also refers to the organisation thereof, guided by the style of music and the printed score (Ely and Van Duren, 2009: 14). Bobo (2003: 7) concurs with these definitions, and states that “Articulation is the consonance of the musical language”. Tuba players should have at their disposal a wide variety of articulation from the “smoothest legato to the hardest staccato” (Bobo, 2003: 7) to deal with the demands of diverse repertoire. Since articulation is harder to hear in the lower instruments, the articulations should be clear and precise (Phillips, 2012: 421) and even exaggerated (Bobo, 2003: 7; Whitehead, 2003: 58). Articulation may be grouped into three basic types: “slurring between notes, tonguing at the beginning of each note, and beginning a pitch without tongue” (Bailey et al., 2008: 14). Other articulation types (see Addendum 39) are variants and combinations of the three basic types. The first two types, slurring and tonguing will be discussed below under their respective headings, and the third type, “beginning a pitch without the tongue” (Bailey et al., 2008: 14), will be discussed under the heading “attacks”, since it is identical to the breath attack.

3.5.1 Slurring

Slurring refers to the smooth movement between two or more notes (Bevan, 2010: 141), and is considered “the most valuable tool for building your flexibility” (Muter, 2013: 35). There are two basic slur types: the harmonic lip slur and the valve slur (Whitener, 2008: 157). Harmonic slurs refer to the connection of partials belonging to the same harmonic series achieved by altering the embouchure without manipulating any part of the instrument (Ely and Van Duren, 2009: 390); the valve slur connects two or more notes by depressing the valves (Ely and Van Duren, 2009: 89, 348). In both the harmonic and valve slurs, the first note of the notated slur is always tongued, with the rest of the notes slurred (Jacobs and Young, 2000: 11). The primary objective for achieving success with the slur is accomplishing smoothness of the connections between the slurred notes; failing this, the resulting interruption in the sound, airstream or vibration of the lips will diminish the slur quality (Whitehead, 2003: 153).

3.5.2 Tonguing

Tonguing refers to the various ways in which a brass player articulates notes dependant on the desired result. Learning to control the tongue is vital in tonguing effectively across a wide variety of musical styles (Ely and Van Duren, 2009: 145). Furthermore, tonguing creates a clear and controlled beginning to each note (Whitener, 2008: 154) – also known as the ‘attack’. After the attack, a note shape also includes a middle and end (release) (Whitener, 2008: 156).

3.5.2.1 Attacks

The basic attack for brass instrument performance is produced by the tongue striking behind the front teeth at the junction of the teeth and the gum line (Ely and Van Duren, 2009: 14). The type of attack is characterised by the various degrees of hardness or softness of consonant used. For high brass instruments in general, the use of the consonant ‘t’ (Bevan, 2010: 9), as in ‘toh’ (Gray, 2002: 1) is recommended, but this is not suitable for the tuba. Perantoni (2012: 4) states that using this attack on tuba positions the tongue too high in the mouth, which will result in a nasal sound. Instead, lower brasses should use the consonant ‘d’ (Whitener, 2008: 154) as in ‘doh’ (Gray, 2002: 1).

Sometimes the music demands a harder attack, and this can be achieved by using consonants produced closer to the front of the mouth (Jones, 2016: 59; Byrnes, 2007). One such attack that occurs at the very front of the mouth, is produced by sounding the consonant ‘th’. Although Jones (2016: 59) advises against using this attack, since it is the hardest and most percussive of all consonants, both Perantoni (2012: 4) and Bobo (2006: 4) endorse it. Perantoni (2012: 4) states that this attack, resulting in the syllable ‘thoe’, where the tongue strikes the top lip between the teeth, combined with a continuous airstream while having already formed the embouchure, is especially useful in generating a good attack and a more efficient buzz in the lower register of the tuba. Bobo (2006: 4) states that it is often used to “ensure response”. To produce softer attacks, the hard consonants may be replaced by the softer ‘d’ or ‘n’, (Byrnes, 2007; Bailey et al., 2008: 14; Whitener, 2008: 154).

One attack frequently associated with tuba teachers and players is the breath attack. In this attack, the consonant ‘t’ is replaced by ‘h’, ‘p’, ‘pu’, and the breath is used to set the lips into vibration (Whitener, 2008: 154). These types of breath attacks should only be used during

practice or warmup routines as they assist with airflow in warmups (Whitener, 2008: 154), improve response of the lips in sound production, and aid flexibility (Jones, 2016: 67)..

3.5.2.2 Middles

The intensity of the middle of a note can remain the same as the attack, or swell or lessen in dynamic intensity (Whitener, 2008: 156). The vowel sound held in the middle of the note is also important since it affects the size of the oral cavity (Jones, 2016: 60) and therefore the tone. For example, whereas 'ee' can assist in high register and softer dynamics in higher brasses (Jones, 2016: 60; Bailey et al., 2008: 14), the long 'o' is advised for tuba playing as it allows for better inhalation and exhalation, lowers the jaw, and improves low register tone and intonation (Gray, 2002: 1).

3.5.2.3 Releases

A release refers to the method in which the brass player ends a note; it can be either sudden, even or tapered, depending on the desired effect (Whitener, 2008: 156). Releases can be achieved by breath or with the tongue, with the breath release being more appropriate (Ely and Van Duren, 2009: 15; Muter, 2013: 48). Perantoni (2012: 4). advises players to simply stop blowing or using the syllable 'h' at the end of the note to create a round finish. Some notes may require a harsher end or 'tongue cut-off'; using the 't' syllable at the note's end will create a harsh, immediate ending (Ely and Van Duren, 2009: 15). This is used mainly in jazz (Ely and Van Duren, 2009: 15) and by professionals in staccato passages (Whitener, 2008: 155).

Whitener (2008: 156) recommends that the basic note shape is symmetrical – the attack, middle and end are equal in intensity and volume. From this basic shape all other shapes should evolve, according to the demands of the music. He explains that French music should contain a "clear, bell-like attack ...followed by an easing of dynamic level of the middle of the note.", while German shapes involve a "...broader, less pronounced attack produced by using a softer consonant that should continue into the rounder note shape common to singers" (2008: 156).

3.5.3 Tonguing faster passages

Single tonguing refers to tonguing notes with the same repeated syllable (Bailey et al., 2008: 15). The shorter the notes, the softer the basic syllable - 'toeh-toeh-toeh' becomes 'toeh-doe-

doe-doe' (Perantoni, 2012: 4). Each brass player has a limit as to how fast he/she can single tongue. A study by Bertsch and Hoole (2014) tested the maximum single tongue speed of various brass players by measuring how fast they could play semiquavers according to a crotchet metronome marking. The findings showed that the average brass player was able to tongue semiquavers in the range of 120 beats per minute (bpm) for a crotchet/quarter note (Bertsch and Hoole, 2014: 6). One of the main goals of the well-rounded tuba player is to increase the speed and efficiency of the single tongue technique, since rapid single tonguing is required in many advanced solo and ensemble repertoire pieces (Ely and Van Duren, 2009: 108). Figure 6 provides an example of a passage that requires rapid single tonguing from Lebedev's *Concerto in One Movement* (1947), a standard work for tuba recommended at the Grade 8 level (Trinity College London, 2018: 131). A tuba player should strive to tongue comfortably at a minimum speed of 120 beats per minute (bpm) (in semiquavers, crotchet beat), since the recommended range for single tongue speed for high school level player is 120-144bpm, and 160-168bpm for professionals (Ely and Van Duren, 2009: 109). Where the demands of the repertoire exceed the maximum single tongue speed possible, the performer should implement multiple tonguing.



Figure 6: Extract from *Concerto in One Movement* (Lebedev, 1947: 2) showing rapid single tongue passages²⁷

3.5.4 Multiple tonguing

Multiple tonguing should be employed when the note values are too short (or when the passage is too fast) for single tongue articulation (Jacobs and Young, 2000: 11; Bobo, 2003: 5). The multiple tonguing technique introduces a second consonant 'k' or 'g' (as in 'tu-ku' or 'tu-gu')

²⁷ The tempo for the passage in question is *Allegro non troppo*, which would denote a speed close to 120bpm, according to most modern metronomes.

produced at the back of the mouth, and this technique can articulate notes faster than single tonguing (Bevan, 2010: 109). Both the ‘t’ and ‘k’ consonants in ‘tu-ku’ can be replaced by ‘d’ and ‘g’ respectively to produce gentler attacks ‘du-gu’. Multiple tonguing is a standard brass playing technique (Ely and Van Duren, 2009: 107), and according to Bailey et al. (2008: 115) should be introduced at the intermediate level, or once the student is able to demonstrate single tongue playing with constant airflow and a stable sound (Jones, 2016: 64). Nevertheless, mastery of the multiple tongue technique is generally only achieved at the advanced level, and therefore it is considered an advanced technique (Muter, 2013: 46-48). It is wise to overlap the speeds of multiple tonguing with those of single tonguing (Bachelder and Hunt, 2002: 31). A personal recommendation of the overlap is given in Table 14.

Table 14: Personal recommendations of tonguing speeds and overlaps.²⁸

Tonguing technique	Max/min Tempo (beats per minutes)
Single tonguing	Average minimum = 120 bpm
Double tonguing	Overlap with single tongue From about ♩ = 110 bpm for semiquavers
Triple tonguing	From ♩ = 80 bpm.

Double tonguing is employed when the rhythmic pattern divides into groups of two, four and eight, whereas triple tonguing suits subdivision groups of three, six and nine. The double tongue syllables include ‘tu-ku’ or ‘da-ga’, where the first consonant is produced in the front of the mouth, and the second one closer to the back of the mouth. Triple tongue alternates the syllables used in double tongue to produce ‘du-du-ku’ or ‘du-ku-du’. Other syllables are merely variations of the same technique, and therefore performers should use whichever method best suits them (Ely and Van Duren, 2009: 106).

3.6 Extended Techniques

Extended techniques (also called avant-garde-, twentieth century-, or contemporary techniques), are sounds created by a brass performer that are not encompassed by conventional methods of tone production (Casey, 2017: 1). *The Contemporary Tuba* (Cummings, 2004) is one of the first catalogues of extended techniques for tuba. Three important recent sources on the topic are dissertations by Kennedy (2016), Casey (2017) and Hynds (2019). These sources provide ample information about the current extended

²⁸ These are personal recommendations I utilise in my playing and teaching.

techniques for tuba, their effects, methods for their production, how they are notated, drawing on examples from the repertoire. The well-rounded tuba player should be aware of the myriad extended techniques and production methods in order to both deal with the requirements of the standard repertoire, and to equip themselves with the knowledge to teach them. The extended techniques discussed here are examples of those regularly used in the tuba repertoire, and include multiphonics, the glissando, flutter tongue, wind sounds, pitch bends and sympathetic vibrations.

3.6.1 Multiphonics

Multiphonics involves singing one note whilst playing; the technique is a feature of many standard works (Hynds, 2019: 130). Although unison singing and playing is achievable for some voice types (bass/baritone), Hugil (2005) states that the intervals that work best are thirds and fifths sung above the played note. Hynds (2019: 130) adds that the most effective, stable, and harmonically rich combinations include perfect intervals and major/minor chordal tones (major or minor thirds), whereas more dissonance can be achieved by using adjacent intervals. The harmonic series of both pitches creates a resultant tone or chord. Depending on their intervallic relationship and their respective harmonic series, up to four pitches can be heard (Bevan, 2010: 109). These pitches can be either differential, where the pitches created are a result of the differences of the overtones of the original two pitches, or summative, where the resulting pitches are a combination of the original two pitches (Bevan, 2010: 109).

There are various opinions regarding the stage at which this technique should be introduced. Ely and Van Deuren (2009: 106) suggest that the technique is more suited to advanced players, whilst Hynds (2019: 132) recommends the intermediate to professional level. Bevan (2010: 109) is of the opinion that the mastery of advanced technique is not a requirement for the ability to produce multiphonics. Bailey (2008: 121) further recommends that “the effect should not be approached until the student is performing the level of literature that demands it”. Logically, multiphonics should only be introduced once the basic techniques have been mastered. An example of multiphonics I performed in recital is included in Figure 7.

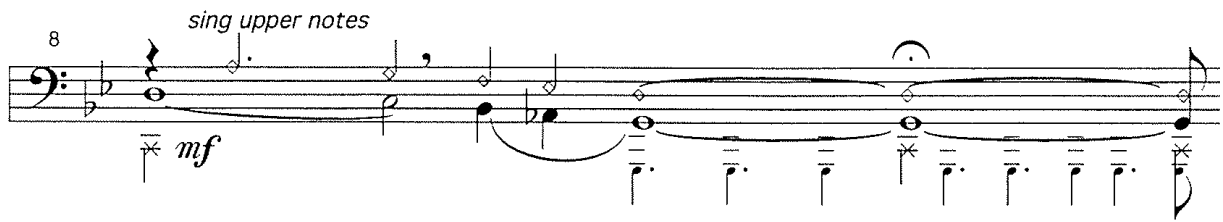


Figure 7: Multiphonics in *Aboriginal Voices* (Corwell, 1994)

An extension of the technique can be produced by altering the vowel sound, or mouth shape, while performing multiphonics as in *Fnugg* by Oystein Baadsvik (2003).

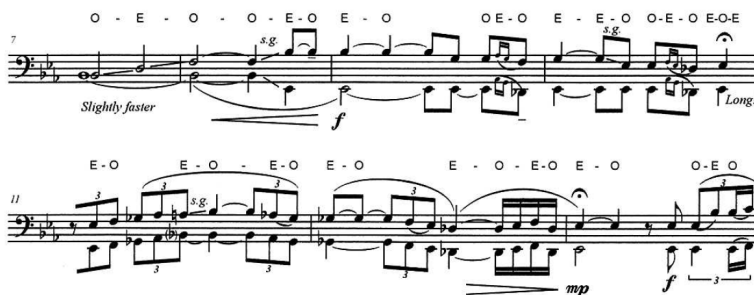


Figure 8: Alternation of vowel sound in *Fnugg* (Baadsvik, 2003: 1).

3.6.2 The Glissando

The glissando is another common extended technique required of brass players (Whitener, 2008: 161). Although not idiomatic to the tuba (Casey, 2017: 1), many works include glissando passages. Hill (1996: 43) identifies nineteen different types of glissandos for the French horn. Except for the hand glissando, which involves using the hand inside the bell of the French horn as a muting device, all the other types are theoretically possible on the tuba. The types discussed here are limited to the half-valve glissando and the valved/harmonic glissando or 'rip'. The basic technique involves slurring from one note to another, attempting to slide through the harmonics. Starting or ending pitches may be either defined or undefined, and the glissando can be achieved at any speed. This technique is recommended for intermediate to professional level players (Hynds, 2019: 184).

3.6.3 Half-valve glissando

Composers will sometimes specify a half-valved glissando. Hill (1996: 45), Kennedy (2016: 38) and Hynds (2019: 132) agree that the half-valve type is the smoothest of the various glissando types. It is achieved by depressing the valves halfway while slurring either downwards or

upwards (Whitener, 2008: 161), or a combination thereof, depending on the instruction in the music. An example of the half-valve glissando can be found in another staple from the tuba repertoire, *Encounters 2* by William Kraft (2009) (Figure 9).



Figure 9: Half-valve glissando in *Encounters 2* (Kraft, 2009: 2)

3.6.4 Valved/harmonic glissando, or ‘rip’

This technique is achieved by slurring up or down while holding down a combination of valves (or no valves at all) (Kennedy, 2016: 36). It is essentially a legato arpeggio from one note to another, played at high speed (Adler-McKean, 2020: 109). The resultant pitches produced are limited to the corresponding ‘bugle’²⁹, and the more valves that are depressed, the more pitches are available (Kennedy, 2016: 38-39). An example of the valved glissando appears in Figure 10. Since Kraft does not specify which pitch of tuba to use, the resulting pitches will depend on the pitch of tuba used for performance.

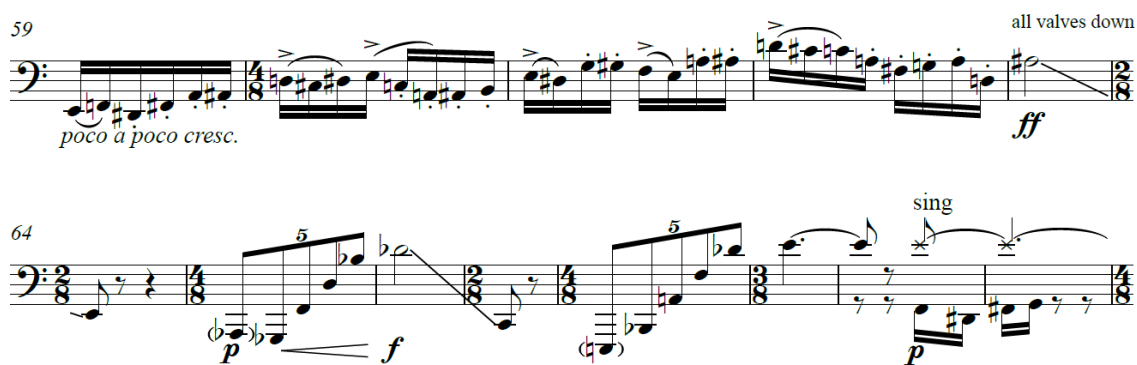


Figure 10: Valved glissando in *Encounters 2* (Kraft, 2009: 2)

3.6.5 Flutter tongue

Along with multiphonics, flutter tonguing is one of the more common of the extended techniques (Whitener, 2008: 161; Hynds, 2019: 158). Since many contemporary solos require flutter tongue technique (Bachelder and Hunt, 2002: 31), Jones (2016: 66) advocates that the

²⁹ This implies that the pitches in the glissando are limited to the harmonic series of the length of piping corresponding to the valve combinations used

technique should be regularly included in the daily practice routine. The technique involves producing the rolling syllable “R” while playing a note/passage and the effect is quite “grotesque”, especially if muted (Bevan, 2010: 56). The ‘growl’ is very often substituted for flutter tonguing, especially in cases where the player cannot produce the rolling ‘R’, but Kennedy (2016: 25) counsels against this, as the two techniques produce two different sounds. An example of flutter tongue is given in Figure 10, taken from *Aboriginal Voices* (Corwell, 1994), which I performed in recital 5³⁰.

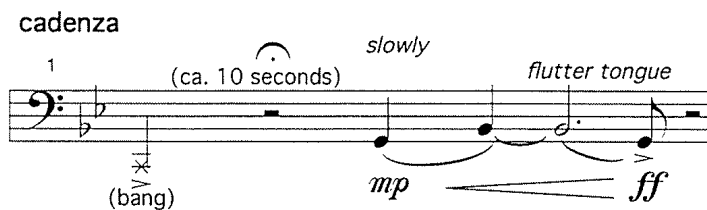


Figure 11: Example of flutter tongue in *Aboriginal Voices* (Corwell, 1994: 1)

3.6.6 Wind sounds

Wind/breath sounds are suitable even for beginner students (Hynds, 2019: 127). The most common method involves blowing noisily through the instrument, however, Casey (2017: 4) provides one example from *Mirum* (Kagel, 1965), where the tubist is required to inhale instead. Different timbres can be produced by manipulating pitch, rhythm (Cummings, 2004: 5), the shape of the oral cavity, vowels, and consonants, (Kennedy, 2016: 16-17), and the speed and volume of the air (Hynds, 2019: 126). An example of winds sounds is given in Figure 12, as performed in recital 5³⁰.

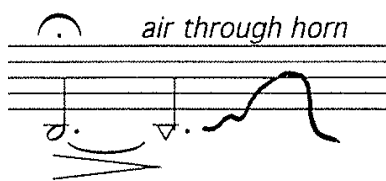


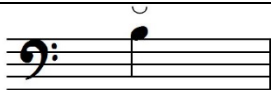



Figure 12: Example of wind sounds in *Aboriginal Voices* (Corwell, 1994: 1)

30 Recital 5: 13 April 2019

3.6.7 Pitch bends

While pitch bends are discussed separately here, the technique is integral to the proper execution of other techniques including vibrato, glissando and tone centering (see 3.1 Sound and tone). As part of the brass player's daily practice routine, pitch bends are used to improve dexterity, intonation, flexibility, embouchure strength, and to expand range (Shook, 2015: 5). The tubist should have an essential knowledge of the basic execution and notation of pitch bends and fall-offs to deal with the demands in the repertoire. Pitch bends refer to a variety of articulations including the bend, doit, short fall, and scoop (Table 15) (Saskatchewan Ministry of Education, 2012: 41).

Table 15: Basic pitch bends³¹

Notated	Description	Performance instruction
	Bend	Start on pitch, bend down, and return to pitch
	Doit	Start on pitch, bend up, slide upward, 1-5 steps
	Short fall	Start on pitch, bend, or slide down as much as a third
	Scoop	Start below pitch, bend down, and return to pitch

According to Hynds (2019: 153), the technique of pitch bending carries an intermediate difficulty level. An example of pitch bends in the tuba literature is in *Aboriginal Voices* (Corwell, 1994).



Figure 13: Pitch bends in *Aboriginal Voices* (Corwell, 1994: 1)

³¹ The descriptions and performance instructions are taken from *Jazz Theory* (Saskatchewan Ministry of Education, 2012)

3.6.8 Sympathetic vibrations

Sympathetic vibrations are achieved by playing towards or into an object which resonates in response to the sound (Kristine, 2009: 109). Examples of such objects include pianos, buckets of water, or effects boxes (Cherry, 2009). As tuba players generally sit while performing, pointing the bell into the piano is not feasible. However, provided the lid of a grand piano is open with the sustain pedal depressed and the tubist plays loudly enough, the strings of the piano can be made to vibrate, causing a somewhat surreal texture. An example of this may be found in the third movement of Hindemith's *Sonata for Bass Tuba and Piano* (1957: 16-17). Since the effect does not require any specific technique on the part of the tuba player, it is easily executed and playable at any level, provided the player can play all the notes in the passage.



Figure 14: Sympathetic vibrations in third movement of *Sonata for Bass Tuba and Piano* (Hindemith, 1957: 16-17)

3.7 Endurance

Endurance is the ability of the brass player to play for extended amounts of time without fatigue or a blemished tone, maintaining accuracy and dynamic control (Koehler, 2015: 57). The goal of the well-rounded tuba player is to build enough endurance to cope with the demand of “professional” situations (Phillips and Winkle, 1992: 77), with reserves to go even further (Kleinhammer, 1999: 28). Endurance cannot be discussed without mentioning stamina and fatigue. Stamina is the ability of the player to sustain the correct breathing, blowing technique, embouchure position, sufficient relaxation, and to allow the body to function for as long as

necessary (Mead, 2008). The development of stamina is vital, and directly related to the physical technique of good brass playing (Koehler, 2015: 57). Fatigue is the physical tiredness a brass player experiences during performance; it often manifests in an inability to sustain a pitch, in the reduced quality of high notes, a lack of flexibility, inefficient lip vibration, excessive mouthpiece pressure, and difficulty in producing tone (Mead, 2008). It is essential that brass players are aware of 'residual fatigue', a term coined by Whitener (2008: 159). This refers to the recurring fatigue a brass player experiences after overexertion, without allowing for sufficient rest. In this situation the embouchure does not recuperate, causing fatigue during the next practising/playing session. Other aspects that can influence endurance, but are not discussed here, include the embouchure, mouthpiece pressure, breath control, mouthpiece types and dimensions, intonation, dynamics and range, posture, relaxation, and nerves.

3.8 Finger dexterity and lip flexibility

Finger dexterity refers to the brass player's technical skill in manipulation of the valves to match the timing and speed of the music being performed (Bobo, 2003: 5). It is an often-neglected technique in brass performance (Sanborn, 2008). The stroke³² of the tuba valve is the "largest, widest and heaviest" of all the brass instruments (Porter, 2005). The well-rounded tuba player's goal is that the valve stroke should always be as fast as possible, fully depressed, and firm, regardless of the speed of the notes (Sanborn, 2008; Bevan, 2010: 53; Cummings, 2019). The motion of the valves being actuated should also be well-coordinated with the breathing, articulations, and embouchure, in order to avoid missed or poor-sounding notes of indeterminate pitch (Bevan, 2000: 53; Netzer, 2016: 22; Sanborn, 2008). This aspect of playing is particularly important, since insufficient finger dexterity can diminish accuracy of playing³³ (Bobo, 2003: 5), resulting in a general lack of clarity (Bobo, 2012). One method of developing a solid technique in this area is to make the individual fingers work as independently as possible, as this allows players to use any fingering patterns on their instrument with ease (Kennedy, 2016: 49).

Lip flexibility is the brass player's ability to move quickly from one note or partial to another (Bobo, 2003: 35). The better a player's flexibility, the easier they will be able to perform faster

32 The valve stroke refers to the downwards and upwards vertical motions activated by depressing the valves by the player's fingers (personal definition)

33 In the lower register of the tuba, clarity is generally an issue because of the difficulty in hearing lower pitches (Bobo, 2012)

passages, especially those traversing larger intervals (Ely and Van Duren, 2009: 312). In explaining the importance of flexibility in the brass embouchure, Bobo (2003: 35) says that the player possessing an embouchure without flexibility is like a weightlifter, whereas the player with a flexible embouchure is more akin to a ballet dancer. Moreover, flexibility is also vital as a constituent of “maximum tonal expressivity” and “a key ingredient of vibrancy in tone” (Jones, 2016: 50). Jones (2016: 50) goes on to explain that flexibility guarantees the utmost lip control during performance, reducing the negative effects that could hinder the flow of sound. The well-rounded tuba player must attain maximum flexibility throughout all the ranges (Phillips and Winkle, 1992: 37), be able to perform lip flexibilities with great ease (Pilafian and Sheridan, 2008: 66), and move between notes with ease, speed, without hesitation, all the while maintaining a consistent volume and tone (Jones, 2016: 50).

One technique that may be considered an extreme form of lip flexibility is the lip trill, which is produced by rapidly moving (or slurring) between two notes or partials, enabled by subtle changes in the embouchure (Hynds, 2019: 149). Phillips (2012: 428) explains that the lip trill is simply a widening of the jaw vibrato, whereas other authors regard the technique as an extension of the lips slur/flexibility in the higher range (Ely and Van Duren, 2009: 254; Bobo, 2003: 47). Snell (2005: 96) points out that the proper terminology should be the ‘tongue trill’, as it is the “to-and-fro” movements of the tongue that cause rapid changes in air tension, resulting in changes of pitch. The lip trill can only be played in the higher register of the instrument, or where the partials are close together (Hynds, 2019: 149; Bailey et al., 2008: 120); they are limited to two pitches that have the same valve combination (Ely and Van Duren, 2009: 249). Although the speed of the lip trill can vary, faster lip trills are generally more effective and more idiomatic (Hynds, 2019: 149). They are not as common on the tuba as, for instance, the trombone or French horn, but as Bobo (2003: 47) remarks, “when you need them, you need them”. One example of a lip trill in the standard tuba literature appears in *Effie Joins a Carnival* (Figure 15) from *Suite No. 1 “Effie”* by Alec Wilder (1963). The instruction “Lip trill preferred” appears at the bottom of the page (Wilder, 1968: 5).



Figure 15: Lip trill in *Effie Joins the Carnival* from *Suite No. 1 “Effie”* (Wilder, 1968: 5)

Some authors advise that the lip trill is an advanced/professional level technique (Hynds, 2019: 149; Bailey et al., 2008: 120) and that it should only be considered once good slurs/flexibility

have been mastered (Bailey et al., 2008: 120; Snell, 2005: 96). Since these trills are only possible in the higher register, another guideline is to only approach the lip trill once the performer can play comfortably in the higher register (Bobo, 2003: 47; Bailey et al., 2008: 120).

3.9 Range

Range refers to the overall compass a player can produce on an instrument from the lowest to the highest note (Koehler, 2015: 137; Ely and Van Duren, 2009: 466). More colloquially, range may also refer to a series of notes in close proximity to each other (a tone to a third); for example, adjacent notes above the bass clef staff are considered to be in the high range for the tuba. The following section will consist of a discussion on the ranges of the tuba, as well as the related pivot system.

3.9.1 Standard Ranges

The tuba has the potential to produce the widest range of all brass instruments (Jacobs and Young, 2000: 11). Although the standard range for tuba is around four to five octaves (Adler, 2002: 350; Baadsvik, 2006; Bevan, 2000: 276), with the addition of the high and low range extremities, this range can expand to encompass as many as six octaves (Porter, 2004). The ITEA (ITEA, 2019: 10) provides us with adequate difficulty ratings for tuba range (Table 16), and this is used for the remainder of the study. I have only included the levels three, four and five since the other levels (Beginner and Intermediate) are outside the purview of this study.

Table 16: Difficulty ratings for ITEA Journal reviews (ITEA, 2019: 10)

Level	Description	Range
III	High school, secondary school, pre-college	Approximately FF – b ³⁴
IV	College/university	(BBB) CC – f ¹
V	Professional	(CCC) DDD – b ¹ (c ² +)

The range designations from Table 16 are provided on the musical staff in Figure 16.

³⁴ Refer to the pitch notation guide (Figure 3.15) for exact pitches

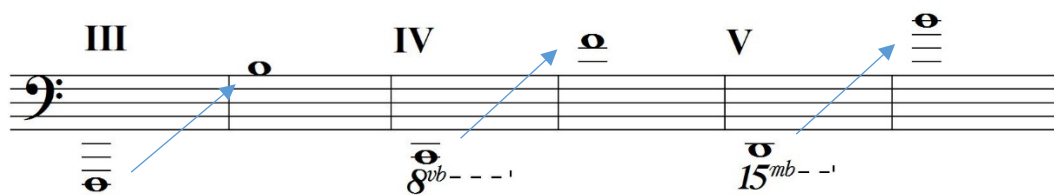


Figure 16: Representation of ITEA ranges on the music staff (personal figure)

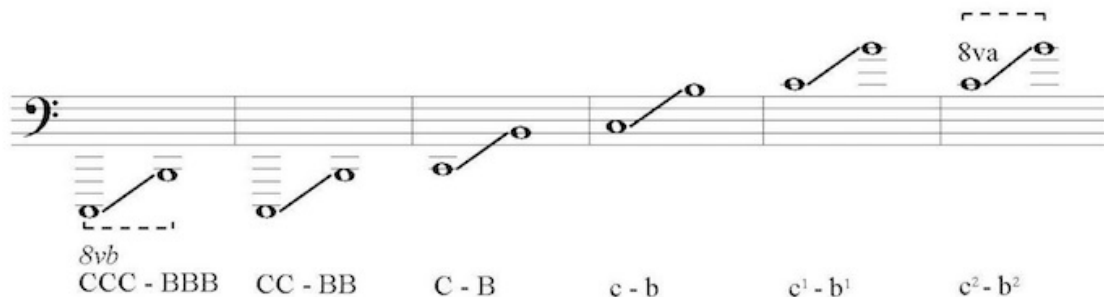


Figure 17: Pitch notation guide (ITEA, 2019: 10)

3.9.2 Different ranges of the tuba

Although much of the literature refers to the different ranges of the tuba (middle, high, low, pedal), Hynds (2019: 106-107) is one of the few that provides an extensive explanation of the pitches that make up these different ranges for each key of tuba (Figure 18).

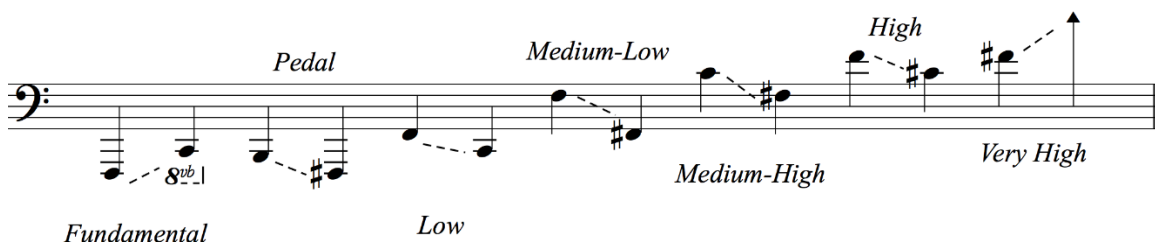


Figure 18 Effective range for the F tuba (Hynds, 2019: 105)

For the purposes of this study, I will refer to only four ranges (high, middle, low, and pedal), in line with the general trend, and this will apply to every key of tuba. Table 17 represents the ranges, and the harmonic series of the F tuba is provided as reference in Figure 19.

Table 17: Approximate registers/ranges for tuba (refer to Figure 19)

High	6 th partial and higher
Middle	2 nd – 6 th partial
Low	1 st -2 nd partial (fundamental) and lower

Pedal	Tritone above the fundamental pitch and lower
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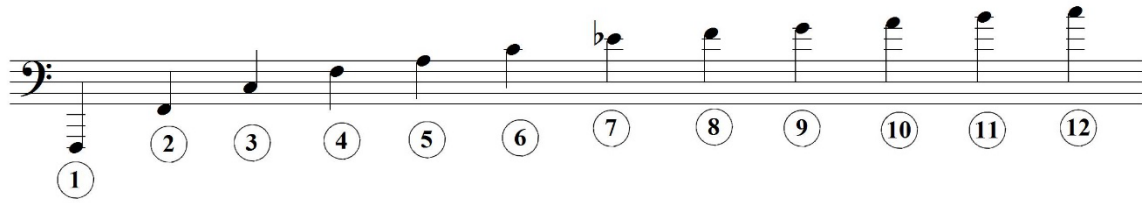


Figure 19: Harmonic series of the F tuba

As an example, these registers are given for the bass tuba in F in Figure 20.

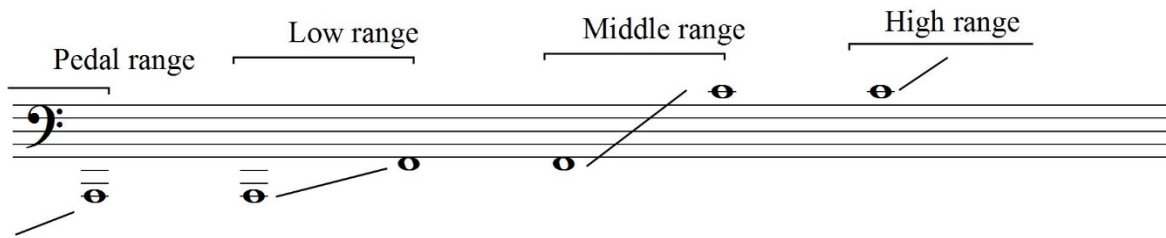


Figure 20 Approximate pitches within ranges for F tuba

3.9.2.1 High range

The high range of the tuba spans from approximately the sixth partial with the highest note attainable dependent on the player (Adler-McKean, 2020: 60). For high school/pre-college/incoming university students, the highest note playable is generally b^b (refer to Figure 17); for the college/university level player it is f^1 , and for the professional player, around c^2 (ITEA, 2019: 10). Many solo compositions utilise the upper-middle and higher range of the tuba owing to its very lyrical, agile, rounded, and smooth tone quality (Adler, 2002: 351). An example from my recital of 16 December 2016 (Figure 21) demonstrates the upper-middle range in Wilhelm's *Concertino* (1999).



Figure 21: Extract from 2nd movement of Wilhelm's *Concertino* (Wilhelm, 1999: 5)

3.9.2.2 Middle range

The middle range extends from approximately the second to the sixth partial, and since most repertoire exploits it, this range should be very secure. It is also used as a model for the development of the other ranges. Knox, in an interview with Brubeck (2015) states that low and high registers are essentially extensions of the middle register.

3.9.2.3 Low range

The low range of the tuba spans approximately the first and second partials and is used predominantly in large ensemble repertoire. It requires a consistent tone quality, and should sound as full, rich, and lyrical as the middle and high registers (Greene, 2010). The tone in this range is deep and heavy (Adler, 2002: 351), and most effective when played by the contrabass tuba, doubled an octave higher by the bass trombone. In this role, the tuba provides a fundamental grounding to the brass section. This produces quite a special tone, a good example of which appears in bars 478 – 490 of the *Scherzo* of Mahler's Fifth Symphony (Mahler, 1901: 144-146).

The image shows a musical score extract for Posaunen (Trumpets) and Tuba from Mahler's Fifth Symphony, Scherzo, bars 462-490. The score is written in 1/3 time and features three systems. The first system shows the Posaunen and Tuba parts with a key signature of two flats and a common time signature. The second system includes dynamic markings such as *ff*, *f*, and *cresc.* and includes first, second, and third endings. The third system continues the musical notation for both instruments.

Figure 22 Extract from the *Scherzo* (bars 462-490) of Mahler's Fifth Symphony (Mahler, 1901: 143-146)

3.9.2.4 Pedal range

The pedal range refers to notes at the extreme lower end of the tuba range where the fourth, fifth and sixth valves are utilised (Jacobs and Young, 2000: 11). It comprises the fundamental pitch (including surrounding notes) and extends lower (Bevan, 2010: 116; Morris and Perantoni, 2006: xiv). Composers frequently write in the pedal ranges of all lower brass

instruments, and this range should be readily producible to match the different repertoire requirements (Bevan, 2010: 116). For example, the Ellerby *Concerto for Tuba* (1988), which appears on both the TCL Grade 8 (Trinity College London, 2018: 239) and ATCL syllabi (Trinity College London, 2019: 1), was one of the works I performed in recital 3³⁵. It requires the performance of two pedal notes in the optional cadenza (Figure 23).



Figure 23 Extract from the cadenza of Ellerby's *Tuba Concerto* (1988: 10) showing pedal tones

The competencies for range include developing “to the maximum all three registers: low, high and cash³⁶” Phillips (2012: 419); tubists should be able to perform all available notes throughout the range with “clarity and accuracy”. A mechanism that can assist with the blending of the different ranges is the pivot mechanism.

3.9.3 The pivot mechanism

The pivot system refers to any adjustment of the instrument, embouchure, or body, initiated by the brass player during performance to facilitate smoothness, flexibility, and consistency of sound throughout the range (Phillips, 2012: 418-419). For the well-rounded tuba player, pivoting minimally is very important since it avoids overextending or forcing in the extremities of

35 The *Tuba concerto* (Ellerby, 1988) was performed in recital 3 on 8 August 2018

36 Phillips (2012: 429) refers to the middle range as the “cash register” since most of the tuba players’ income is generated through performing in this register

range (Phillips, 2012: 418). The pivot is achieved through manipulation of the four pivot points³⁷ – the instrument, jaw, head, and mouthpiece.

The first pivot point involves physically moving the instrument relative to the contact point of the lips. The forward-facing brass instruments (such as the trumpet and trombone) pivot by pointing the bell of the instrument up or down (Bevan, 2010: 120; Ely and Van Duren, 2009: 116). Since the tuba rests on the player's lap, upward and downward movement is restricted. Instead, the player moves the bell of the tuba towards the body in the higher range, and away from the body in the lower range (Phillips, 2012: 419-420). The mandible, or lower jaw, provides the second pivot point. It can be either extended forward (protrusion) for playing in the very low range or pulled inwards (retraction) to play in the higher range (Bevan, 2010: 120; Brubeck, 2015). The player's forehead may also be regarded as a pivot point, involving a slight upward and downward movement (Ely and Van Duren, 2009: 116). The final pivot point for consideration is the position of the lips within the mouthpiece. Some brass players recommend anchoring the bottom lip (or placing added mouthpiece pressure on it) for improved high register production (Ericson, 2012). For assistance with low range sound production, Phillips (2012: 420) suggests having the upper rim of the mouthpiece, or the embouchure contact point, imitate a hinge; when placing the upper lip against the mouthpiece, the lower jaw can then descend slightly, increasing the amount of lower lip inside the mouthpiece as the space between the teeth opens progressively.

Proper execution of the pivot system while playing results in accurate pitch placement in the extreme ranges (Ely and Van Duren, 2009: 116), smoother movement between the harmonics (Jones, 2016: 51), more consistent sound throughout the ranges, and minimal mouthpiece pressure or extraneous movement during performance (Phillips, 2012: 418). In works that include wide, rapid intervallic leaps such as Penderecki's *Capriccio for Solo Tuba* (Penderecki, 1980), the performer who does not implement the pivot system, or implement it very well, can experience difficulty in successfully executing such a passage, as the embouchure would have to rapidly change for each different range (see Figure 24).

³⁷ It should be noted that although these are listed separately, the movement of each part affects the others



Figure 24: extract from Penderecki's *Capriccio* showing wide intervallic leaps (Penderecki, 1980: 1)

3.10 Intonation

Intonation is defined as a musician's ability to play in tune (Muter, 2013: 15) – except in the case of singers, this implies that control a player has over his/her instrument. A goal for the well-rounded tuba player is the ability to play accurately and in tune throughout the entire range of the instrument (Phillips and Winkle, 1992: 77), and to have “good pitch” (Colwell and Hewitt, 2015: 352).

3.10.1 Intonation tendencies of partials of brass instruments

A prerequisite skill to be able to play a brass instrument in tune is the knowledge of the tendencies of the harmonic series (Bronk, 2010: 15; Jones, 2016: 33-34; Phillips and Winkle, 1992: 47; Jacobs, 2013; Muter, 2013: 19; Whitehead, 2003: 61). Tubas generally have the same tendencies as other valved brass instruments (Phillips and Winkle, 1992: 49; Bachelder and Hunt, 2002: 148), but these intonation problems are augmented by the instrument's size (Phillips and Winkle, 1992: 52; Bevan, 2000: 191; Bachelder and Hunt, 2002: 148). One factor that all brass instruments have in common is that they all have tonal partials that are naturally out of tune (Everett, 2016; Jones, 2016: 34; Jacobs, 2013; Whitehead, 2003: 61; Bachelder and Hunt, 2002: 5). The tendencies of these partials are given in Table 18, and apply to each harmonic series the instrument is able to produce.

Table 18: Intonation tendencies of partials of harmonic series of brass instruments (Phillips and Winkle, 1992: 47; Bachelder and Hunt, 2002: 5)

Partial	Tendency
3, 6, 9, 12	Slightly sharp
7	Very flat
1 (fundamental), 2, 4, 8	In tune
5, 10	Flat

These tendencies aside, brass players should be cognisant of the natural pitch rise that occurs when more valves are added when descending into the lower register (Jones, 2016: 35;

Bachelder and Hunt, 2002: 5). Tubas can experience a rise in pitch of up to six percent (Phillips and Winkle, 1992: 48). It is this “acoustic error” (Bevan, 2000: 191) of three-valved historical lower brass that led to the inquiry into mechanisms to improve intonation, resulting in the automatic compensating system (3.10.3.2.1 Automatic compensating system), and the addition of more valves (3.10.3.2.3 Valve systems). The natural tendencies for a three-valve brass instrument are given in Table 19, and the tendencies for B^b euphonium and tuba in Figure 25.

Table 19: Valve combination tendencies of three-valve brass instruments (Phillips and Winkle, 1992: 48).

Valve combinations	Tendency
1-2	Slightly sharp
2-3	Moderately flat
1-3	Very sharp
1-2-3	Extremely sharp

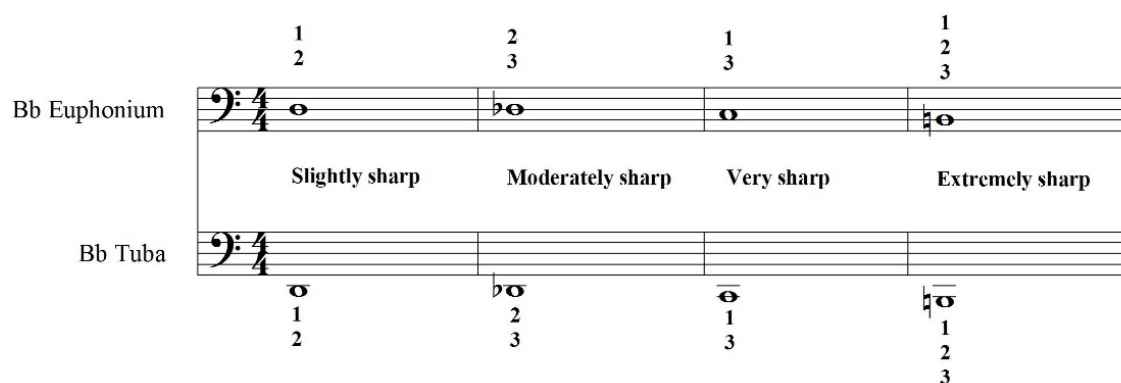


Figure 25 Intonation tendencies of Bb euphonium and Tuba (own figure).

3.10.2 Intonation systems

The two intonation systems relevant to brass instruments are just intonation and equal temperament, since brass players regularly play in both systems (Jones, 2016: 34). The goal for the well-rounded tuba player is to be aware of the systems, and to consider the discrepancies between them (Phillips and Winkle, 1992: 47). Whereas just intonation is the system normally used in ensemble performance (Bachelder and Hunt, 2002: 5), it is not possible when brass players are accompanied by an instrument that utilises equal temperament such as the piano (Bronk, 2010: 17). In just intonation, the intervals are pure (beatless), and no matter the intervallic relationship of chord notes (consonant or dissonant) within the ensemble, the chords will retain their “harmonious effect” (Williams, 2014: 4). The intervals in equal temperament are altered slightly; this is caused by the division of the octave

into 12 equal semitones, resulting in audible beats in the sound (Williams, 2014: 3). Just intonation is thus the preferred system within ensembles since it renders chords beatless, is more resonant, provides greater consonance, and has waveless dissonance with more variety (Bronk, 2010: 16). The brass player would need to make certain adjustments in pitch from equal temperament – these adjustments are provided in Figure 26.

Adjustments from Equal Temperament to Just Intonation

MAJOR KEYS:								
Scale Degree	1	2	3	4	5	6	7	8
Adjustment	0	+3.9	-13.7	-2.0	+2.0	-15.6	-11.7	0
	Bb	C	D	Eb	F	G	A	Bb
MINOR KEYS:								
Scale Degree	1	2	3	4	5	6	7	8
Adjustment	0	+3.9	+15.6	-2.0	+2.0	+13.7	+17.6	0
	Bb	C	Db	Eb	F	Gb	Ab	Bb

Figure 26: Adjustments from Equal Temperament to Just Intonation (Bronk, 2010: 16)

3.10.3 Methods of adjusting intonation

There are two basic methods of adjusting intonation on brass instruments: embouchure manipulation and mechanical adjustment of the instrument or equipment.

3.10.3.1 Embouchure adjustment (pitch bending)

Pitch bending, lip bending, or ‘lipping’ refers to the adjustment of notes (up and down) at the lips (Kennedy, 2016: 34). It is normally used in brass performance to make minor adjustments in tuning and is also considered an extended technique for tuba (Kennedy, 2004: 34). Although the method of bending pitch is the same as discussed in 3.6.7 (Pitch bends), its use is different – in this context, it is used as a mechanism for the player to adjust intonation, where as an extended technique, it is used for effect. Pitch bending is also an integral requirement for jaw vibrato (Bevan, 2010: 169) and tone centering (Adams, 2019). There are two opposing views on using pitch bending as the primary method of adjusting pitch during performance on brass instruments. Phillips and Winkle (1992), and Whitehead (2003) advocate for it, while it is strongly opposed by Jones (2016), Whitener (2008), and Funderburk (2009) for many reasons. Some of the reasons cited are that the practice could have a detrimental effect on tone and endurance, and that it could result in excessive mouthpiece pressure, changes in the basic embouchure shape, and excessive pivoting (Jones, 2016: 37)

3.10.3.2 Mechanical adjustment

Jones (Jones, 2016: 38) and Whitener (2003: 103) advocate that the main method of adjusting pitch should be the mechanical adjustment of the instrument. These mechanical adjustments include the automatic compensating system, instrument manipulation, valve systems and alternate fingering.

3.10.3.2.1 Automatic compensating system

David Blaikley's 1874 compensating system is regarded as the most successful of many attempts to combat unwanted sharpness resulting from the addition of valves, particularly in lower brass instruments (Bevan, 2000: 199). This system is available on many British-made tubas and euphoniums (Bevan, 2000: 198; Whitehead, 2003: 62). McKeon (2013) explains that the system overcomes the pitch elevation, by automatically engaging smaller sections of tubing (knuckles³⁸) on the back of the valve section, when depressing any combination containing the third (on three-valve systems) or fourth valve (on four-valve systems). These sections of piping are longer than the non-compensating derivatives; they have the effect of lowering the pitch, thus bringing the instrument back in tune with itself. Although this system is considered "convenient" (Phillips and Winkle, 1992: 49) and has "solved the problem" to an extent (Whitehead, 2003: 62), there are some limitations. Whitehead (2003: 62) claims that using the system diminishes tone in the lower register, while Phillips and Winkle (1992: 49) point out that the system is not available on all models of tubas and are of the opinion that there are other more accurate methods of adjustment.

3.10.3.2.2 Instrument manipulation

One method that manufacturers use to alleviate the tuba's tendency to sharpness is to manufacture valve piping longer than that required (Jones, 2016: 36; Bachelder and Hunt, 2002: 5). In this way, the longer piping creates a compromise, or what Jones (2016: 36) refers to as the "compromise system" – the longer slides mean that slides can be manually adjusted according to the required length. Slide pulling with the left hand is another viable method of manually adjusting valve slides during performance in left-facing tubas (Bevan, 2000: 281). Furthermore, some manufacturers even go as far as repositioning the first valve slide in such a way that it is easily accessible during performance (Jacobs, 2013; Bachelder and Hunt, 2002: 145), and shorten the first valve slides on tubas to make them easier to move (Whitener, 2008:

38 Whitener (2008: 91) and Werden **Invalid source specified**. correctly refer to the knuckles as compensating loops

103). Some performers choose to manipulate the main tuning slide (Bachelder and Hunt, 2002: 5), but due to the inequality of pitch changes required on different notes, this method is not very accurate (Jacobs, 2013). Some tubas are fitted with triggers or rods/extensions on the main tuning slide, allowing left-handed manipulation during performance (Phillips and Winkle, 1992: 52).

3.10.3.2.3 Valve systems

Another method employed to help solve intonation problems is the addition of more valves, a method especially effective on the lower brass instruments (Bachelder and Hunt, 2002: 118). The fourth valve, which is common nowadays to most euphoniums and tubas, is pitched a perfect fourth below the second partial (Funderburk, 2009), and because it is more in tune (Bevan, 2010: 98), replaces the sharp 1-3 combination on most low brass instruments (Figure 27).

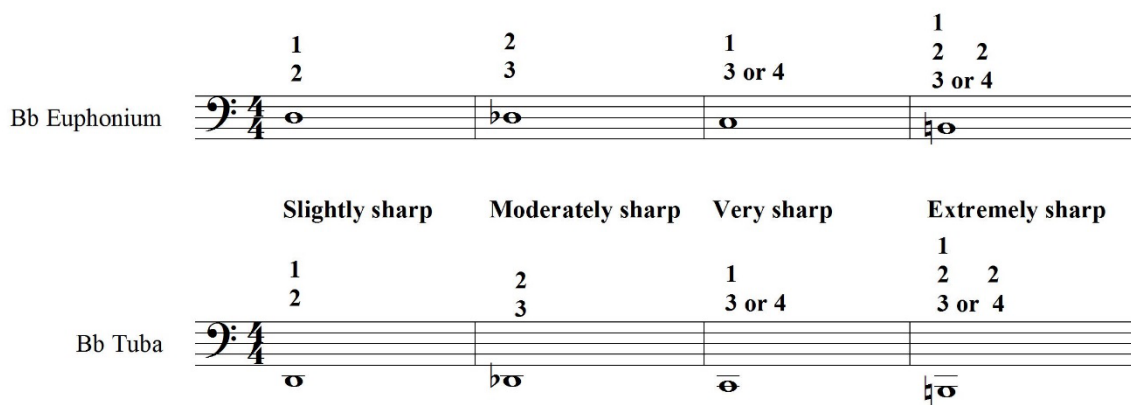


Figure 27: Alternate fourth valve fingerings and intonation tendencies (personal figure)

Some tuba models are manufactured with five or six valves, and certain authors believe that these valves are added only to improve intonation on non-compensating tubas (Bevan, 2000: 202; Whitehead, 2003: 62), rather than extending the range (Bevan, 2000: 202). The fifth valve could be tuned to lower the pitch by a flat whole tone, allowing lower notes to be played with better intonation (Funderburk, 2009). The sixth valve is usually tuned a flat semitone below the 2nd partial (Bachelder and Hunt, 2002: 118); in addition to improving intonation, it extends the range to include the FFF on the F tuba (Figure 28).

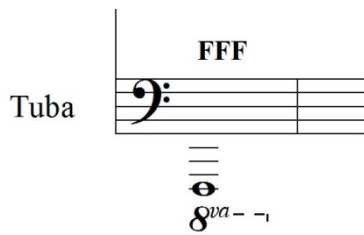


Figure 28 Range extension to FFF by addition of the sixth valve on the F tuba (personal figure)

3.10.3.2.4 Alternate fingering

The addition of valves makes possible more valve combinations for certain notes; use of these extra combinations is known as alternate fingerings. Replacing the standard out-of-tune valve combinations with alternate fingerings presents another method of adjusting intonation that improves note accuracy and sound production for all tubists (Phillips and Winkle, 1992: 58). One disadvantage to using alternative fingering is that these combinations can negatively affect tone (Kennedy, 2016: 49). Whitehead (2003: 62) suggests another solution to the rising pitch problem in the lower register tones is for the tubist to play the valve combination that corresponds to one semitone below the required note; this method, however, renders some notes unplayable.

There are of course other, less desirable methods of adjusting intonation. Jones (2016: 37), mentions inserting mutes, valve covers, changing mouthpieces, increasing/decreasing air speed, adjusting lip compression, increasing mouthpiece pressure on the embouchure, changing the angle of mouthpiece on the embouchure (pivot), and blowing more vigorously with more volume. Additionally, there are also other factors that can influence intonation.

3.10.4 Factors that influence intonation

The major factors that affect intonation include the aural skills of the player, temperature, fatigue, dynamics, and equipment.

3.10.4.1 Aural skills

Many authors believe that the possession of highly-developed aural skills is a prerequisite for playing with good intonation (Jones, 2016: 33; Phillips and Winkle, 1992: 58; Bobo, 2003: 6), and that this aspect of training is a skill that all professional musicians and teachers must have

mastered (Hiatt and Cross, 2006: 46). Bronk (2010: 15) advises that learning to ‘audiate’³⁹ will teach musicians to anticipate the placement of the next note with good intonation. Brass players should also have the aural capability to hear the intervallic differences in ensemble situations, and the mechanical facility to match pitch for better ensemble intonation (Bobo, 2003: 6; Jacobs, 2013)

3.10.4.2 Temperature

Temperature changes present a problem for brass instruments; good players are aware of this and make allowances for it during a performance (Bachelder and Hunt, 2002: 5). Generally, warmer temperatures cause a rise in pitch, whereas colder temperatures result in lower pitch (Muter, 2013: 17; Phillips and Winkle, 1992: 60; Bachelder and Hunt, 2002: 5). In warmer temperatures, the air molecules become more active, causing the frequency of pitch to rise (Bachelder and Hunt, 2002: 5). Conversely, in colder temperatures, the air vibrates at a slower rate, resulting in a lowering of pitch (Werden, 2008). Since fluctuations in intonation are more noticeable in larger instruments such as the tuba (Whitener, 2008: 101; Bevan, 2000: 191), the effect is magnified – for every 10 degrees of temperature change, the tuba intonation varies around 10-13 cents⁴⁰ (Bachelder and Hunt, 2002: 5).

3.10.4.3 Player fatigue

Jones (2016: 41) argues that fatigue experienced during playing can also influence intonation. He explains that fatigue in brass performance results in two responses: either the player plays louder or forces the sound production, which results in increased pressure. Initially, both reactions would cause a rise in pitch, but as the player continues playing, the embouchure muscles weaken, causing the maintenance of pitch to become nearly impossible. These factors will ultimately result in the lowering of pitch (flatness).

3.10.4.4 Dynamic levels

Bevan (2010: 43), Jones (2016: 41) and Ely and Van Duuren (2009) agree that the dynamic level played at exercises an effect on intonation. Playing at louder dynamics, or a gradual increase in the dynamic level, may result in sharpness (Bevan, 2010: 43; Ely and Van Duren,

³⁹ Audiation is a term coined by Gordon and involves the hearing or comprehension of music for which the sound is no longer there or may have never been present **Invalid source specified.**

⁴⁰ Cents is the unit of measuring intervals

2009: 48). This can be corrected by adjusting the airstream and jaw position (Ely and Van Duren, 2009: 48). At lower dynamic levels, the pitch can rise or fall depending on the player (Jones, 2016: 41).

3.10.4.5 Equipment

The choice of equipment and the condition of the instrument has an effect on intonation (Jones, 2016: 39; Muter, 2013: 18; Bachelder and Hunt, 2002: 148). Larger mouthpieces are able to bend pitch to a greater degree than smaller ones, while smaller mouthpieces are limited in pitch bending capabilities. However, the latter exercise a smaller effect on intonation than do the former (Jones, 2016: 39). The condition (presence of dents, cleanliness, and moveable/working slides) of the instrument has an influence on the tubist's ability to play in tune (Muter, 2013: 18; Bachelder and Hunt, 2002: 148). According to Colwell and Hewitt (2015), dents affect intonation (Colwell and Hewitt, 2015: 222), and the closer the dent is to the sound source (for instance, a leadpipe/mouthpiece), the greater the effect on intonation (Barr, 2014). Build-up of dirt inside brass instruments not only affects the intonation but can also affect the mechanisms needed to adjust pitch (Muter, 2013: 18).

Other factors that influence intonation include whether or not the player is sufficiently warmed up (Werden, 2008; Jones, 2016: 41) or has adequate breath support (Phillips and Winkle, 1992: 49; Jones, 2016: 33).

3.11 Vibrato

Vibrato may be described as the intentional slight and regular fluctuations or pulsations of pitch and volume (Nelson, 2017: 63; Bevan, 2010: 169) brought about by lip and jaw movement (Kassler, 2019; Jones, 2016: 53) during performance on a brass instrument. Vibrato is also the most mysterious tool for tonal expression (Jones, 2016: 126), and one that requires great precision of control to execute (Kassler, 2019; Jones, 2016: 53).

3.11.1 Usage of vibrato

There are differences of opinion in the literature regarding the usage of vibrato on tuba in solo and ensemble repertoire. Although vibrato is more commonly used by singers, string- and certain woodwind players (Werden, 2015), Bachelder and Hunt (2002: 34) advise that brass

players should use vibrato in lyrical and solo repertoire as well. Some authors, however, feel that vibrato is unsuitable for tubists (Kassler, 2019), as it detracts from the purity and beauty of tone, and adds nothing to the timbre (Whitener, 2008: 160). Although vibrato on tuba was discouraged in the past, recent trends show that many tubists make use of it (Gourlay, 2006: 34), and many teachers recommend it (Kassler, 2019).

There is a consensus that vibrato should be a standard constituent of lyrical and solo repertoire (Gourlay, 2006: 34; Bailey et al., 2008: 120; Bachelder and Hunt, 2002: 34); however, the vast majority of authors advise against using vibrato in larger ensembles⁴¹. The choice should be motivated by considering the role of the passage/part (Bailey et al., 2008: 120), the context (Werden, 2015), and the expressive content (Whitener, 2008: 161). If the role of the tuba is that of a soloist, or if he/she plays a lengthy solo with large ensemble accompaniment, vibrato is advised (Jones, 2016: 153). By contrast, the use of vibrato in smaller solos in a band/orchestra work is discouraged (Jones, 2016: 153). Gourlay (2006: 35), Kassler (2019), Jones (2016: 153) and Bailey et. al. (2008: 120) advise against using vibrato when the tuba fulfils an accompaniment role. This is because vibrato at the bottom of a chord will result in instability within the ensemble and the chord (Gourlay, 2006: 34), since the rate of vibrato on tuba is usually slower compared to other instruments (Kassler, 2019). The adverse effects include sound and pitch distortion (Jones, 2016: 153), and problems with intonation (Bailey et al., 2008: 161). The only ensemble where vibrato for tuba is advised is in the British brass band tradition (Gourlay, 2006: 35).

3.11.2 Different types of vibrato

There are three basic types of vibrato playable on brass instruments – jaw vibrato, diaphragm vibrato⁴², and manipulation of the instrument. Since manipulation of the instrument is not a viable option on tuba, only jaw and diaphragm vibrato will be discussed below.

3.11.2.1 Jaw vibrato

Jaw vibrato is the most common and the preferred method of vibrato for brass players (Bachelder and Hunt, 2002: 34; Ely and Van Duren, 2009: 151). Performers, teachers, and pedagogues also consider jaw vibrato as the principal type for lower brass (Whitener, 2008:

⁴¹ Larger ensembles here refer to wind bands and symphony orchestras

⁴² Also known as 'air vibrato'.

161), and the most practical on the tuba (Bobo, 2003: 59). This type affects pitch more than intensity, whereas the diaphragmatic type affects intensity and not pitch (Ely and Van Duren, 2009: 151). Jaw vibrato is considered the most suitable for the tuba for many reasons. It has the potential of producing the “widest variety of speed, width, tone colour, and pitch levels” (Kennedy, 2016: 41). This method is the easiest of all to control, prevents excess embouchure pressure (Bachelder and Hunt, 2002: 34), and if executed properly, can assist in relaxing the jaw (Bevan, 2010: 170) needed for brass playing. Since the technique requires bending of pitch, it also assists with tuning (Gourlay, 2006: 36). Due to the large size of the mouthpiece, the tubist can move the jaw considerably, thus creating greater pitch fluctuation; therefore, this technique suits the tuba very well (Kennedy, 2016: 41).

3.11.2.2 Diaphragm vibrato

Diaphragm vibrato is essentially the manipulation of the airstream, air column, or air pressure creating oscillations in the sound (Bobo, 2003: 59; Werden, 2015; Kennedy, 2016: 42). There are differing opinions on the usage of diaphragm vibrato in brass instruments. Since the embouchure is uncompromised during execution, it is considered “superior” and the “most natural sounding” (Bailey et al., 2008: 120). Phillips and Winkle (1992: 21), however, advise against the use of diaphragm vibrato as it involves the manipulation of the airstream, which accounts for 90% of tone production.

3.12 Dynamic levels

Dynamic levels are essentially the loud and soft gradations of music (Kamien, 2011: 6), and refer to the indications in the musical score that instruct the performers at which volume they are to play for a given note or passage (Lawrence, 2006: 60). There is consensus in the literature that dynamics are relative (Lawrence, 2006; Sauer, 2006; Taylor, 2012; Bevan, 2010; Kamien, 2011: 6), meaning that they are not exact indications of volume (Taylor, 2012: 78), but merely guidelines for the performer (Lawrence, 2006: 60). Dynamics are influenced by many factors, among them inflection, instrument range, venue size, style period, composer, ensemble type, the context of the passage within the work, and the dynamics within the score.

3.12.1 Inflection

Just as speech inflection stresses certain words and syllables, or uses various nuances within a sentence, a melody can have the same variety of musical nuances of inflections within a musical phrase (Nowak and Nowak, 2004: 55). The process of musical inflection, where certain notes are emphasised, “spices up the musicality” (Swoboda, 2006: 109). An example of using inflection was present in my recital performance of the *Romanza* from the Vaughan Williams *Concerto* (1954) on 8 August 2017. I deemed the circled notes (Figure 29) as those that required emphasis, not only because they are the highest notes in the phrases, but also because they are harmonic suspensions. While the score merely indicates a dynamic level of *piano* in this passage, the musical inflection (and the approach and resolution thereof) suggested to me that the passage should be performed in the manner as transcribed in Figure 29. My addition of crescendos and decrescendos was my interpretation (and embodiment) of the musical direction of the phrase and aided in the inflection of the accented notes. Thus in performance the resultant dynamics were not played as strictly indicated on the score but altered with inflection to stress the musical message.

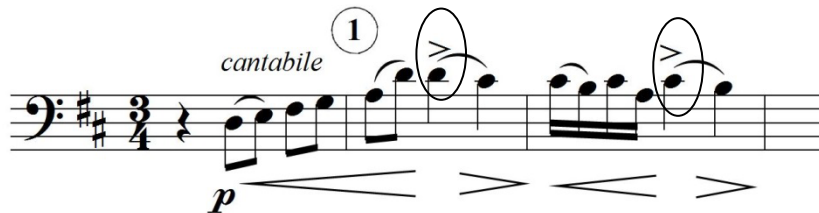


Figure 29: Performance suggestion with inflections in *Romanza* from *Concerto for Bass Tuba* (Vaughan Williams, 1954: 4)

3.12.2 Instrument range/tessitura

The range (or tessitura) of the musical passage in relation to the instrument can also affect the dynamic. Werden (2008) uses an example of a solo line in the middle register of the euphonium that he had to play slightly louder in order to be audible. In the context of the symphony orchestra, a passage written in the lower range of the tuba would need to be played louder to project, compared to one played in the middle-upper register, which projects much easier. This is mainly due to the frequency characteristics of the instrument - according to Adler (2002: 351),

the tonal response in the lower register is “sluggish” and “weaker in sound”, whereas the middle-high register is easily heard and “quite agile”.

3.12.3 Venue size

Musicians perform in a variety of venues both indoors (concert halls and churches, for instance) and outside in the open air (open-air stages and stadiums). Not only do the different locations and sizes of venues have varying acoustic properties, but the venue size has a significant effect on the interpretation of dynamics (Zartman, 2010: 4). Sauer (2006: 100) and Lawrence (2006: 61) advise that dynamics should always be adjusted according to the size and type of the performance space. A study by the Acoustical Society of America (Zartman, 2010: 4), claims that as much as 20dB is lost in a large cathedral such as Notre Dame in Paris compared to a smaller venue. A certain dynamic level played in a smaller venue will sound very different to the same dynamic level played in a large venue. Furthermore, playing at a low dynamic level in a large venue may be almost inaudible, whereas a high dynamic level in the same venue would sound much louder than it would in a smaller venue (Zartman, 2010: 4).

3.12.4 Style period

The historical period in which a work was composed is also a factor that influences the interpretation of the dynamics of a piece (Lawrence, 2006: 60-61; Taylor, 2012: 78; Sauer, 2006). For instance, during the Baroque era, terraced dynamics⁴³ was a standard practice (Kamien, 2011: 105); by contrast, in the Classical era, gradual changes in dynamic level were considered an “electrifying novelty” (Kamien, 2011: 157).

3.12.5 Composer

The same dynamic indication in a work by one composer might be unsuitable for another composer, even if the two were contemporaries. Sauer (2006: 100) compares the effect of the same dynamic level between two different styles of Romantic-era composers. He explains that a *fortissimo* in the symphonic works of Richard Strauss, Gustav Mahler, and Piotr Tchaikovsky, would be loud, and the passage may include accents to create more aggression; by contrast,

43 Terraced dynamics – in the Baroque era dynamics shifts were sudden, as if stepping from one level to another (Kamien, 2011: 105)

the same dynamic level in Schubert's works would require a softer sound, volume, and attack (Sauer, 2006: 100). In cases like this, the dynamic markings should not be taken literally - the musician needs to rely on his/her musical intuition and aural skills to interpret the dynamics appropriately (Lawrence, 2006: 62).

3.12.6 Ensemble type and role of passage within ensemble

Phillips (2012: 421) advises that the tubist should "play at the right dynamic to balance and blend well with your colleagues". The written dynamic for work in a brass quintet would be much softer when playing in a wind band, for instance, where there are many more players. Tubists should consider the role of the tuba part in the context of the ensemble and adjust their dynamics accordingly. Phillips (2012: 429) explains this point perfectly, using an example from the *Vorspiel* to Wagner's opera *Die Meistersinger von Nurnberg* - the most prescribed audition excerpt in the repertoire (Moore, 2012). Phillips (2012: 429) opines that the common error is to consider the section Figure: 30 a tuba 'solo' however, he clarifies that the passage is a melody in unison with bassoons and double basses (Wagner, 1867: 26). The role of the tuba is to provide definition and articulation to the passage that is not attainable with the other instruments, and the player would need to adjust the dynamics to blend with the other melody carriers (Phillips, 2012: 430).

Figure: 30: Extract from tuba part of *Vorspiel* to the *Meistersinger von Nurnberg* (Wagner, 1870: 2)

3.12.7 Dynamics within the score

Dynamics should be calculated in relation to the other dynamic markings in the musical score (Taylor, 2012: 78; Kamien, 2011: 6). For example, the tuba part for Tchaikovsky's *Sixth Symphony* (1893) contains nine different dynamic markings ranging from 'ppppp' (Figure 31) to 'ffff' (Figure 32). Since there are so many different gradations of dynamics in the part, the player would have to work hard to make the different degrees of dynamics work within the context and size of the symphony orchestra. The same dynamic level played will be quite different in a work where there are only three basic dynamics ('p', 'mf', and 'f').



Figure 31 'ppppp' in tuba part - fourth movement from Tchaikovsky 6th symphony (Tchaikovsky, 1893: 7)







Figure 32: 'ffff' in tuba part - third movement of Tchaikovsky 6th Symphony (Tchaikovsky, 1893: 6)

3.13 Rhythm and tempo

Rhythm is an integral element of all music and one of the important criteria in a grading system. The difficulty level of rhythms is generally ordered as ranging from simple to complex. Simple may be defined as consisting of basic note values, rhythms, and patterns. Complex, would constitute those of an increasingly advanced nature, including jazz elements, extended syncopations, note patterns, hemiolas, and metrical displacement devices such as duplets and triplets. Table 20 represents some examples, ranging from basic to more complex rhythmic elements.

Table 20: Basic to complex rhythmic elements

Basic rhythm elements		
Basic note durations	Semibreves, minims, crotchets, quavers, semiquavers, rests, dotted rhythms, combinations	
Rhythmic patterns	Combinations and repeated note values from 'Basic note durations' above	
Simple meter	Simple duple, simple triple, simple quadruple etc.	$\begin{matrix} 4 & 2 & 3 \\ 4 & 4 & 4 \end{matrix}$
Compound meter	Compound duple, compound triple compound quadruple etc.	$\begin{matrix} 6 & 9 & 12 \\ 6 & 8 & 8 \end{matrix}$
Complex rhythmic elements		
Multimetric	Music that has frequent changes of meter (Randel, 2003: 534).	Figure 37 is an example of multimeter in the <i>Sonata for Tuba and Piano</i> (Glass, 1979) played in recital 5 ⁴⁴
Irregular, or odd time signatures	Time signatures that are not divisible by 2 or 3 (simple and compound)	$\begin{matrix} 5 & 5 & 7 & 10 \\ 4 & 8 & 8 & 4 \end{matrix}$
Polymeter	When two different meters are played at the same time, in different voices (Ammer, 2004: 319)	Figure 38 ⁴⁵ shows the usage of polymeter in the <i>Sonata for Tuba and Piano</i> (Hindemith, 1957), performed in recital 1 ⁴⁵
Polyrhythms (cross rhythms)	Several different rhythms performed simultaneously (Kennedy, 2004: 570)	 <p>Figure 33: Polyrhythm: 4 against 3</p>
Hemiola	Time values in the relationship 3:2	<p>In $\frac{3}{4}$, 3 minims over two bars</p>  <p>Figure 34: Hemiola</p>
Duplet	Beat is divided into a group of two equal notes in compound time (Taylor, 2012: 38)	 <p>Figure 35: Duplet</p>
Other note values	Breves, demi-semiquavers, hemi-demi-semiquavers	 <p>Figure 36: Breve, demisemiquavers, hemidemisemiquavers</p>
Ratios instead of note values	Note values or patterns are shown as ratios instead of note values 3:2 instead of triplets for instance	Figure 39 provides an example of these ratios from <i>Capriccio for tuba and marimba</i> (Penn, 1992) as performed in recital 5 ⁴⁶

44 Recital 5: 13 April 2019

45 The *Sonata for Tuba and Piano* (Hindemith, 1957) was performed at Recital 1 of 9 December 2016

46 Recital 5: 13 April 2019



Figure 37: Multimetric opening of *Sonatina for Tuba and Piano* (Glass, 1979: 1)⁴⁷



Figure 38: Extract from *Sonata for Bass Tuba and Piano* (Hindemith, 1957: 2) showing polymeter – different time signatures between two parts



Figure 39: Extract from *Capriccio for Tuba and Marimba* (Penn, 1992: 3) showing ratios instead of note values






3.13.1 Syncopation

In its most basic form, syncopation refers to the occurrence of the accents or stresses of music that occur different to what is expected (Kamien, 2011: 31), or accents placed on notes that do not normally require an accent, and go against the normal order of strong and weak beats established by the time signature (Taylor, 2012: 44). They are present in both the classical and jazz idioms, and when occurring in the jazz idiom, they are essentially anticipations of a note

⁴⁷ The *Sonatina for Tuba and Piano* (Glass, 1979) was performed at Recital 5 of 13 April 2019

(Fox, 2002: 41). The *Rhythm Bible* (Fox, 2002: 42-87) mentions four different types of anticipations (easy - difficult), and these are represented in Table 21.

Table 21: Different types of syncopation from *The Rhythm Bible* (Fox, 2002: 42-87)

Type	Example
1 st beat anticipation	
2 nd beat anticipation	
3 rd beat anticipation	
4 th beat anticipation	
Double, triple, quadruple	

3.13.2 Jazz styles

Although not often present in tuba literature, jazz styles can appear in modern works, and the well-rounded player should know how to perform and teach the basic jazz styles. Examples of some of these styles include New Orleans (Dixieland), swing, bebop, cool, free jazz, jazz rock, ragtime, and blues (Kamien, 2011: 355, 357). Of all the styles, swing is probably the most prevalent, and appears regularly in the tuba repertoire (both solo and ensemble, but more ensemble). When performing quavers in the swing style, they are played in groups of two, with the first note played longer than the second (Fox, 2002: 10). One of the works from the standard tuba literature that requires swing is Alec Wilder's *Sonata for Tuba and Piano* (1963) as performed at recital 4⁴⁸.

48 Recital 4: 8 February 2018



Figure 40: Extract from second movement of *Sonata for Tuba and Piano* by Alec Wilder (1963: 8)

According to Stevens (2018), demonstrating rhythmic integrity - the ability to play the correct notes at the correct time - is one of the primary aspects of music that performers should strive to improve. Other virtues include developing the ability to hear and comprehend rhythm (Jones, 2016: 74), the internalisation of pulse and rhythm (Marcellus, 2006: 63), and the ability to keep a strong and steady pulse (Harris and Crozier, 2006: 39).

3.13.3 Pulse

Pulse is the division of time into regular units (Harris and Crozier, 2006). It is used synonymously with 'beat' and refers to the evenly spaced organisation of beats that result from the "... cognitive and kinaesthetic response to the organisation of the music..." (London, 2019). The importance of pulse is further substantiated when considering that the duration of notes and rests in music are always interpreted in relation to the pulse of a particular piece or passage (Bevan, 2010: 134). Ongoing pulse is necessary in achieving a secure sense of rhythm (Harris and Crozier, 2006: 39), and is crucial to the establishment of tempo in music (London, 2019).

3.13.4 Tempo

Tempo refers to the speed of a piece, movement, or section of music and is indicated either by a metronome marking, a musical term, or by written instruction in the sheet music (London, 2019; Harris and Crozier, 2006: 44; Taylor, 2012: 75). A more encompassing definition is that tempo refers to the "perception of motion within rhythmic groups and across entire phrases", and it is generally entwined with pulse (London, 2019). Composers normally indicate tempos, and these should be adhered to, since successful performance is partly dependent on the observation of the indicated tempo (Thurman, 2006: 117). In rare instances, where there are no tempo directions, Thurman (2006: 117) advises using a metronome to establish a tempo that best suits the music, not a tempo decided according to player ability. Some musicians, however, are of the opinion that every piece of music has its own "natural tempo" (Harris and Crozier, 2006: 44).

Although abrupt or gradual changes in tempo are normally indicated in the music by terms like *accelerando*, and *ritardando*, many advanced level performers will often exercise rhythmic freedom with or without the composer's instruction, to aid in musical expression (London, 2019). When these instructions appear in the music, they include terms like *ad libitum* ('at the performer's discretion'), *senza misura* ('without measure'), or *rubato* ('with some freedom of time') (Taylor, 2012: 78). In some cases performers add these devices to the music to make the performances more musical (Ely and Van Duren, 2009: 35); some phrase endings work well with a *ritardando*, and an *accelerando* can create a sense of urgency; however, these should be used carefully as they are not always applicable (Thurman, 2006: 117).

There are a few aspects that affect the tempo of a piece, or the consistency thereof. Sometimes, there is a tendency for the tempo to accelerate when the musical line ascends and decelerate when it descends (Marcellus, 2006: 63). The rhythmic content of a work also directly affects the tempo of a piece. Thurman (2006: 117) uses the example of the dotted quaver – semiquaver rhythm combination. The combination can either be interpreted as 'galloping' or 'majestic', and at the fastest playable tempo, the piece/phrase should still have these characteristics (Thurman, 2006: 117).

The issue of breathing for every wind player is also an important factor in the tempo of a work. The performer's comprehension of tempo and phrasing dictate the placement of breaths in brass performance, and these breath placements influence the performer's ability to form a musical phrase (Thurman, 2006: 117).

3.14 Ornamentation

Ornamentation refers to the embellishments of melody, and their tasteful application considered part of a performer's skill (Taylor, 2012: 87). Ornaments have the potential to make performances sound more mature, professional, and interesting (Vizzutti and Jacobs, 2007: 92). It is necessary that the well-rounded tuba player gains a clear understanding of the various types of ornaments (Jacobs and Young, 2000: 92), and the 'rules' associated with them (Riner, 2006), in an effort to develop the skill necessary in performing historical works and to cope with the demands of contemporary literature (Alessi and Bowman, 2002: 100). The basic types of ornamentation include the trill, tremolo, mordent, grace notes, the gruppetto, and the portamento.

3.14.1 The trill

A trill is the swift alternation of two pitches a tone or a semitone apart, produced by alternating valve combinations on a brass instrument⁴⁹ (Taylor, 2012: 90; Kennedy, 2016: 46; Hynds, 2019: 171). Although mastery of this ornament is considered part of standard tuba pedagogy (Kennedy, 2016: 48), it does not often appear in the repertoire (Jacobs and Young, 2000: 92). Trills can be performed at various speeds, and the performer can make them sound either smooth or disruptive (Hynds, 2019: 172); however, they should match the context of the music (Bowman, 2014). There is some inconsistency in the classification of difficulty levels of trills recorded in the work of Hynds (2019) and Jacobs and Young (2000). Hynds (2019: 173) provides a difficulty rating for the trill as ‘beginner – advanced’, while Jacobs and Young (2000: 92) consider it as “one of the most difficult ornaments to perform”. This is further compounded by the difficulty/awkwardness of fingering combinations (Bevan, 2010; Hynds, 2019: 172), and key of tuba used (Kennedy, 2016: 49). Several problems that present in the satisfactory performance of trills can be solved by the use of alternative fingerings⁵⁰ (Vizzutti and Jacobs, 2007: 95; Alessi and Bowman, 2002: 125).

3.14.2 Tremolo

The term ‘tremolo’ may imply either the rapid reiteration of a single note or the fast alternation of two neighbouring notes⁵¹ (Fellows, 2019; Taylor, 2012: xxii). Although this ornament is usually associated with the repertoire for keyboards, strings, and percussion (Taylor, 2011: 220; Taylor, 2012), it also appears frequently in the tuba repertoire. One example may be found in the *Concerto for Bass Tuba and Orchestra* by Ralph Vaughan Williams (1954). There are a few tremolos throughout the third movement (Figure 41).

49 Except for the lip trill

50 “A valve combination that is used as a second choice to produce a given note in order to facilitate the performance of trills, to simplify awkward fingering patterns, or to provide different options for intonation and tone colour” (Koehler, 2015: 8)

51 The difference between a trill and a tremolo is that trills have a preparation, harmonic resolution, and the speed of the alternation of notes varies. The tremolo is the same speed throughout, with no harmonic purpose, it is more an effect than a decoration of a melodic line



Figure 41 Tremolos in third movement of *Concerto for Bass Tuba and Orchestra* (Vaughan Williams, 1954: 6)

3.14.3 Mordents

Mordents are simple, fast, short(er) trills that are performed on the beat (Alessi and Bowman, 2002: 134; Vizzutti and Jacobs, 2007: 95; Jacobs and Young, 2000: 122). They are neither prepared nor resolved, and the duration corresponds to the note it is assigned to (Vizzutti and Jacobs, 2007: 95; Jacobs and Young, 2000: 122). Depending on the speed of the passage, a mordent may consist of one or numerous repetitions of the trill (Alessi and Bowman, 2002: 134). There are two different types of mordents, the upper mordent (Figure 42) and the lower mordent (Figure 43). If an accidental is required in the ornamentation, the accidental is placed above the mordent (Taylor, 2012: 94) as in Figure 44.



Figure 42 Upper mordent (personal figure)



Figure 43 Lower mordent



Figure 44 Upper mordent with accidental (personal figure)

3.14.4 Grace Notes

Grace notes may occur as single notes, double notes (or more), and are normally played as quickly as possible; however, in the case of a slow or lyrical passage, they are played more slowly (Taylor, 2012: 88). Grace notes are generally performed before the beat, and do not rhythmically displace the principal (main) notes in the passage (Bowman, 2014; Taylor, 2012: 88). A grace note/s is/are normally articulated, followed by a slur to the main note (Bowman, 2014). The basic types include the acciaccatura, appoggiatura, and the double appoggiatura.

3.14.4.1 Acciaccatura

The acciaccatura, or standard grace/short appoggiatura, is a non-harmonic ornament notated as a single grace note⁵² that normally appears in faster tempos (Vizzutti and Jacobs, 2007: 93). The ornamented note is either a tone or a semitone above or below the main note (Taylor, 2012: 88), and takes its value from the preceding note (Vizzutti and Jacobs, 2007: 93; Jacobs and Young, 2000: 110) – played just before the following principal note (Alessi and Bowman, 2002: 121). Although Vizzutti (2007: 93) advises that the acciaccatura should be accented to have a slightly more pronounced attack than the principal note, Bowman (2002) advises against it, and adds that it should be played “softly and quickly” (Alessi and Bowman, 2002: 120). Neither interpretation is incorrect, but the choice of which approach to take should be guided by the context of the music.



Figure 45 Acciaccatura above a note (personal figure)



Figure 46 Acciaccatura below a note (personal figure)

⁵² Small quaver, with crossed/slashed stem

3.14.4.2 Appoggiatura

The appoggiatura (long appoggiatura or simple appoggiatura) is a non-harmonic note that is notated in a similar manner to the acciaccatura, except without the dashed/crossed stem (Alessi and Bowman, 2002: 119). It takes half the value of the main note (Alessi and Bowman, 2002: 119), creates dissonance with the intended harmony and resolves by step to the weakest beat (Taylor, 2012: 95).



Figure 47 Appoggiatura above (personal figure)

3.14.4.3 Double Appoggiatura

The double appoggiatura is a melodic ornament consisting of two grace note semiquavers before the main note (Alessi and Bowman, 2002: 116); they may present with or without a slur. There are two basic types (Alessi and Bowman, 2002: 116; Vizzutti and Jacobs, 2007: 93; Jacobs and Young, 2000: 106), differentiated by description rather than their names. The first type entails the two grace notes approached diatonically from a third below (Figure 48) or above (Figure 49), with all movement in the same direction (Vizzutti and Jacobs, 2007: 93; Randel, 2003: 251; Alessi and Bowman, 2002: 116). The duration is taken from the main note, which appears after the ornament (Vizzutti and Jacobs, 2007: 93), implying that the double appoggiatura begins on the beat. The second type (*Anschlag*) features the two grace notes rising by a leap or fall of a third and resolving to the main note below or above respectively (Grove Music Online, 2019; Alessi and Bowman, 2002: 116). In this type, the rhythmic value of the ornament is taken from the previous note (Vizzutti and Jacobs, 2007: 93).



Figure 48 Double appoggiatura approached from third below (personal figure)



Figure 49 Double appoggiatura approached from a third above (personal figure)

3.14.4.4 Gruppetto

The gruppetto (turn) is a melodic decoration consisting of a group of grace notes that ‘turns around’ the main note (Alessi and Bowman, 2002: 109; Vizzutti and Jacobs, 2007: 95; Randel, 2003: 924). There are two basic types of gruppetto, the four-note gruppetto, and the three-note gruppetto; either of these types can appear either ascending (Alessi and Bowman, 2002: 109), and descending (inverted).

3.14.5 Conclusion

From the literature, I identified 14 aspects of the well-rounded tuba player. Although five of these are fundamental to tuba performance and pedagogy, they cannot serve as criteria for the envisioned grading system because none of them appear as indications in the score and are therefore not objectively quantifiable. The aspects I am referring to here are sound and tone, embouchure, posture and balance, intonation, and vibrato. Although embouchure cannot independently function as a criterion, it can serve under range and endurance, as a descriptor that influences the level of difficulty. For instance, a work that requires playing in the extreme high range would require the player to have a well-developed embouchure that would enable him/her to reach those notes; therefore, the work would be suited to the advanced student. In terms of endurance, a work that requires the performer to play in the higher register for an extended period (or a very long work) would be very fatiguing and would thus better suit an advanced player with a great degree of embouchure strength/fitness.

The remaining nine aspects that could function as criteria in the grading system include breathing, articulation and tonguing, extended techniques, endurance, flexibility and dexterity, range, dynamics, rhythm and tempo, and ornaments. The combination of the 14 aspects of the well-rounded tuba player, with their descriptions and other important information, along with the syllabus compilation and grading system information from the literature provide a solid foundation on which to continue this study. The next chapter will explain the methodology followed and explain the inherent processes, with the purpose of realising the study objectives.

CHAPTER 4: METHODOLOGY

4.1 Introduction

In this chapter, the reader is provided with a description of the various components that constituted the methodological framework used in this research project, as well as the reasons for the choice thereof. These components include the type of research method, approach, paradigm, and research design. Moreover, the process followed in the collection of data, the sampling procedures employed, and how data was analysed when answering the research questions is described. The role I assumed in the study is explained, as well as the validation strategies followed to authenticate the study results. Since all research involves a degree of ethical consideration, I present the steps taken to protect the rights of respondents and institutions involved in the study.

4.2 Research method: Qualitative

The research method that best suited my study is the qualitative research method employing a descriptive approach. In qualitative research, researchers seek to discover the meaning or interpretations respondents attribute to a particular phenomenon (Creswell and Creswell, 2018: 41). The phenomena referred to are the individual's lived experiences, and qualitative researchers are concerned with the "what, how and why" thereof (Lichtman, 2017: 21). Qualitative research is not limited to a mere description of these phenomena, but also attempts to provide a holistic understanding, interpretation, and meaning of people's behaviour towards these phenomena (Lichtman, 2017: 13). The qualitative research process is motivated by emerging questions and the research procedure involves the collection of data in the participants' setting, using inductive analysis in constructing themes (ranging from the particular to the general), drawing interpretations therefrom, and reporting in a flexible structure (Creswell and Creswell, 2018: 333). The main difference between qualitative and quantitative research is that instead of deriving their interpretation from numbers, qualitative researchers derive meaning from words (Creswell and Creswell, 2018: 41).

4.3 Paradigm: Interpretive

A paradigm, or conceptual framework, is a "shared set of assumptions and perceptual orientations" held by members of a research community that informs how phenomena are viewed and studied, as well as the research methods that should be employed (Given, 2012: 591). The paradigm explains the process of research from a theoretical concept into a workable project (or plan) and provides an overarching frame that influences the research design (Given, 2012: 1). A paradigm is significant to research projects because it dictates and shapes beliefs about the subject, defines the researcher's philosophical disposition and interpretation of results, and clarifies how meaning will be interpreted from the collected data (Kivunja and Kuyini, 2017: 26-27).

The chosen paradigm employed in this study is the 'Interpretivist paradigm'. Interpretivists regard how individuals understand the world in which they live as paramount, and they rely heavily on the respondents' views and experiences of a particular phenomenon/object in developing their understanding (Creswell and Poth, 2016: 24), and not the views and experiences of the researcher (Kivunja and Kuyini, 2017: 33). Data is normally gathered through interactions and discussions with respondents using open-ended questions (Creswell and Poth, 2016: 24). Through inductive reasoning, researchers (as observers) construct patterns of meaning (Creswell and Poth, 2016: 52). This meaning is not constructed from a singular perspective; instead, researchers construct their knowledge from multiple respondents by synthesizing these different interpretations (Merriam, 2009: 9). Researchers using this paradigm look for complexity within various perspectives (Creswell and Creswell, 2018: 24), and thus their interpretation is "socially negotiated" (Creswell and Poth, 2016: 24).

It was decided that this paradigm best resonated with the study as it aligned with the author's goals and provided a suitable plan for the conducting of research. An example in this study that illustrates this is that the interview questions are aimed at understanding the respondent's perspective of tuba performance studies syllabi and grading systems as well as the experiences ascribed to them. An additional aim was the determination of the contents of existing syllabi, and the interrogation of respondents on the origin of their contents in the syllabi; the responses gleaned

assisted in the construction of a collective opinion regarding which components should be included in the proposed syllabus.

4.4 Design: Descriptive

The research design is one of the most essential components of the research methodology. It is the logical structure (DeForge, 2012 : 2), plan, or process (Mouton, 2013: 55) that details the entire research process from conceptualisation to conclusion (Creswell and Poth, 2016: 5; Given, 2012: 2). The design begins with the research questions or problem, details the type of data that will be collected, and explains the process by which this data will be analysed, interpreted, and reported (Creswell and Poth, 2016: 24). Furthermore, research designs also explain how the researcher approaches issues such as ethical concerns and validity.

My research project was informed by a descriptive research design. Descriptive designs aim to "systematically describe the facts and characteristics of a given phenomenon or the relationships between events and phenomena" (Merriam, 2009: 5). It also details individuals who experience the phenomenon, and explains how widespread the phenomenon is, as well as its prevalence.

4.5 Sampling: Stratified purposive

Sampling is the process of selecting a subset of individuals from a population for inclusion in a research study and constitutes another of the most important aspects of the research design (Guest, Namey and Mitchell, 2013: 2). Of the two general types of sampling (probability and non-probability), non-probability sampling is best suited to qualitative research since probability sampling involves the generalisation of results among respondents and is outside the realm of qualitative research (Merriam, 2009: 77). The "general rule" regarding sampling in qualitative research is that researchers use purposive sampling (Padgett, 2017: 116).

This study thus employs predominantly purposive sampling – more specifically, stratified purposive sampling. Purposive sampling is the most commonly employed, non-probabilistic sampling approach (Guest, Namey and Mitchell, 2013: 8), and involves an "intentional sampling of a specific group of people that will best inform the

researcher regarding the study” (Creswell and Poth, 2016: 148). Stratified purposive sampling, a derivative of purposive sampling, involves the selection of respondents that share certain characteristics within the group (Creswell and Creswell, 2018: 212); indeed, it may be said that it is respondents’ possess one or more common criteria that ensures their participation (Guest, Namey and Mitchell, 2013: 8).

As the study involves syllabi for tuba performance studies at the university level and the grading systems associated with these syllabi, the individuals who can most inform my study are those who possess extensive experience in university level tuba performance studies pedagogy – the tuba lecturers themselves. The specific criteria developed for respondents included the following:

- Local respondents

As the study concerns local tuba lecturers specifically, and the objective of compiling a syllabus for usage at South African universities would benefit this group, all tuba lecturers employed by the universities that offered tuba performance studies were invited to participate.

- International respondents

International respondents were chosen according to their acknowledged reputations as leading tuba lecturers with considerable experience in their field; they were identified as being representative of certain countries, should be current/past tuba lecturers and possess experience in the design and use of syllabi in university tuba performance studies modules.

To ensure that respondents’ work experience matched these criteria, I designed an instrument, the biographical questionnaire (Addendum 26), in order to collect relevant information that would assist in the validation of the characteristics. The results of the biographical questionnaire are provided and discussed in Chapter 5 and Addendum 50-51.

“Snowball and chain” sampling was also employed, if to a lesser degree. This strategy involved asking respondents to suggest other individuals that might also provide rich source of information, (Creswell and Poth, 2016: 158). There are three reasons why this approach was employed; firstly, it helped avoid personal bias in the selection of respondents; secondly, it elucidated possible suggestions from respondents that would provide more in-depth information and better inform the study; thirdly, it provided

recommendations of respondents with whom I was not familiar. These suggestions were gleaned from respondents at various stages of the study, including the first email contact and interviews.

4.6 Sample size

After consultation with my study promoters, the decision was made to utilise a smaller sample size, perhaps 10-20 respondents; it was determined that this would best benefit the study. There are generally no set rules regarding sample size (Padgett, 2017: 119) since this number is specific to the demands of each study (Guest, Namey and Mitchell, 2013: 21). As the focus of qualitative studies is, in addition to the gathering of data, the elicitation of the deeper meaning of a phenomenon (Dworkin, 2012: 1), and considering that smaller sample sizes yield greater insight and more extensive detail from data (Creswell and Poth, 2016: 158; Dworkin, 2012: 1), a smaller sample size seemed to be the correct path for the study. Additionally, smaller sample sizes also contribute to homogeneity among responses (Padgett, 2017: 119), which proved helpful categorising comparable responses during the analysis process.

4.7 Participants

To attract as wide an international representation as possible, over 40 potential respondents that matched the criteria mentioned above were originally earmarked. Some respondents were chosen based on their international reputation as tuba teachers and performers, some were recommended by other individuals. Furthermore, the goal was to also include specialists that were representative of certain areas that in my opinion were prominent in tuba pedagogy and performance. In cases where I was not aware of an individual from a specific country, I searched for academic institutions within the area, and perused institutional websites for staff and their contact details. Some individuals were also approached using social media platforms. The original list included respondents from South Africa (5), Japan (1), China and Taiwan (3), Italy (2), Norway (2), Germany (4), Canada (3), Australia (4), New Zealand (1), the USA (15), Austria (1), and England (3).

Initially, invitation emails (Addendum 27) were sent to the various respondents, and in some cases, institutions, and departmental representatives (where the envisaged respondent emails were not available). The email informed the respondents about the study, what their participation would entail, why they were chosen, and the procedure should they accept the invitation. Other necessary documents that were attached to the email included the informed consent form (Addendum 28), the biographical questionnaire (Addendum 26), the participant information sheet (Addendum 29), ethical clearance letter (Addendum 30 and Addendum 31), and the institutional permission letter (Addendum 32).

Originally, 25 persons responded positively to the email; however, after several withdrawals, the final number of respondents was 13. The particulars of these respondents are provided in Table 22.

Table 22: Interview respondent details

Respondent Number	Age	Sex	Current position	Years of university teaching experience	Highest qualification	Other qualifications	Area represented	Number of students currently taught by respondent
1	59	M	Full-time university professor (all brass)	32	Doctorate (PhD)	Bachelor's degree, Master's degree, Licentiate (ABRSM)	South Africa	0
2	39	M	Full-time university professor (tuba and euphonium)	14	Doctorate (DMA)	Bachelor's degree, Master's degree	USA	15
3	38	M	Part-time university instructor; International tuba soloist and clinician.	12	Advanced Diploma	Bachelor's degree	Germany, South America	4
4	47	M	Clinician, teacher, and postgraduate supervisor	15	Doctoral (DMA)	Bachelor's degree, Master's degree	USA, South Africa	0
5	57	M	University brass lecturer	13	Master's	Bachelor's degree	South Africa	5
6	47	F	Full-time university professor (tuba and euphonium)	18	Doctoral (DMA)	Bachelor's degree, Master's degree	USA	6
7	62	M	Full-time university professor (tuba and euphonium)	41	Doctoral (DM)	Bachelor's degree, Master's degree	Canada	2
8	52	M	Full-time tubist in symphony orchestra; part-time university tuba lecturer	25	Bachelor's	Licentiate (ABRSM)	New Zealand	1
9	40	M	Brass teacher at music school. Former university tuba teacher and full-time symphony orchestra musician	2	Bachelor's	None	Norway, South Africa	0
10	37	M	Full time tuba tutor	28	Postgraduate Diploma	Bachelor's degree (Hons); Professional Performance Diploma	England	16
11	71	M	Full-time university professor (tuba)	47	Master's	Bachelor's degree	USA	16
12	33	M	Adjunct university professor (tuba and euphonium)	8	Doctoral	Bachelor's degree, Master's degree	USA	11
13	37	M	Full-time university lecturer (brass)	3	Postgraduate Diploma	Bachelor's degree (Hons)	South Africa	2

4.8 Data collection

Data collection refers to the series of activities researchers undertake to gather information, or "evidence" (Mouton, 2013: 55), in order to answer the research questions (Creswell and Poth, 2016: 148). Types of data collection for qualitative research include interviews, observations, documents, and audio-visual materials (Padgett, 2017: 154; Creswell and Poth, 2016: 163). The data collection strategies employed in my study include interviews with respondents, a biographical questionnaire, and the examination of pre-existing documents. Creswell and Poth (2016: 148) advise that researchers should employ multiple forms of data; this will offer a diverse and broad scope and provide the researcher with better perspective than will reliance on a single data form.

4.8.1 Interviews

Interviews are considered the major source of qualitative data required for the understanding of the phenomenon or object under study (Merriam, 2009: 114). They are normally 'one-on-one' events that take place with the researcher and the respondent in the same room, although some may be conducted over virtual platforms (Creswell and Creswell, 2018: 163). Since most of my respondents reside in different cities and countries to my own, face-to-face interviews were not always a practical solution. Therefore, many interviews were conducted using the Skype video calling application computer software and recorded since recording ensures that everything said during the interviews is preserved for archival analysis (Merriam, 2009: 109). As a precautionary measure, the interviews were also video-recorded.

Local participants were given a choice of a face-to-face interview, and three of the four respondents took advantage of this option. This was also recorded with a video camera, and my mobile telephone was used as a backup device. The interviews with other respondents were conducted online using Skype video software, and recorded with the built-in recorder, in addition to two backup devices (my personal video camera and my mobile telephone).

Semi-structured, in-depth interviews were conducted with respondents; these took the form of twelve non-leading questions (see Addendum 33). These questions were approved by the study promoters and the Ethics Committee of the Faculty of Humanities, University of the Free State. Semi-structured interviews aim to extract specific information from respondents through a series of questions (Merriam, 2009: 89-90). The in-depth (intensive) nature thoroughly investigates an interviewee's experiences and thoughts regarding a particular phenomenon, often employing open-ended questions (Schutt, 2018: 303). These questions are generally a mixture of structured and unstructured questions, are flexible regarding order and content, and allows the researcher to spontaneously respond to emerging information and new ideas (Schutt, 2018: 304). The choice to use non-leading questions was preferred since leading questions can cause bias and harm the credibility of a study, since the researcher can predetermine their own opinions and conclusions before data is collected, or not be open to discover the respondents' unique perspectives regarding the phenomenon (Agee, 2009: 435). Leading questions also infract the ethos of qualitative research since they tend to ascribe certain predetermined characteristics to a phenomenon or group of individuals (Agee, 2009: 444).

All interviews were transcribed *verbatim* using the services of a transcription service. I chose *verbatim* ('as spoken') transcription since it provides the best database for analysis (Merriam, 2009: 109). Once the transcriptions were received, I was able to begin the process of analysis.

4.8.2 Documents

Documents were included in the data collection process since they are considered a constituent part of qualitative research, are highly informative (Guest, Namey and Mitchell, 2017: 2018), and are typically used to supplement interviews (Creswell and Poth, 2016: 162). Guest, Namey and Mitchell (2017: 28-29) advise that researchers identify documents that are designed by the study population, are conceptually related to the research study, and are readily available; these should include documents that will inform the research questions. In line with the guidance presented, the documents I collected consisted of publicly available tuba performance studies syllabi (or similar

documents) and repertoire lists which were collected at various stages throughout the study utilising a number of different methods. These methods comprised:

- *Google* searches using the following keywords: tuba syllabus, tuba performance studies syllabus, tuba curriculum, university tuba studies, and tuba repertoire.
- Recommendations received from informal inquiry with tuba teachers and players, as well as formal communications with respondents.
- The perusal of several websites of prominent tuba players, teachers, institutions, numerous American Public Schools State Music Lists, and graded examination boards.
- The examination of the present and archived International Tuba and Euphonium Association Journals - the leading scholarly source of its kind devoted to the tuba and euphonium

Since an aim of the study is to design a proposed syllabus for tuba performance studies, and syllabi generally include prescribed materials and sources, I collected repertoire lists from a number of sources. Apart from the above-mentioned approaches, I included those lists housed in scholarly-reviewed books. An extensive delineation of the syllabi contents and collected repertoire lists is provided in Chapter 5, while the comprehensive results are provided in Addendum 34 and Addendum 35-38 respectively.

4.9 Data analysis

One of the common characteristics of qualitative research is that researchers use both inductive and deductive analysis strategies (Creswell and Poth, 2016: 61) at various stages of the process. The initial analysis stage is inductive; researchers construct themes, patterns, and the relationships among them through discovery (Schutt, 2018: 322), and these emerge from the data (Guest, Namey and Mitchell, 2017: 32). Creswell and Poth (Creswell and Poth, 2016: 257) note that the process progressively organises data into more abstract units “from the bottom up”. Once themes are constructed, researchers then employ deductive analysis; this concerns the analysis of the data in order to provide evidence in support of the researcher’s themes and interpretations (Creswell and Poth, 2016: 43, 52).

The analysis process involves (1) preparing and organising the data for analysis, (2) reducing data into themes through coding and constructing them into themes, and (3) representing findings (Creswell and Poth, 2016: 183). The approach used in this study for the analysis of respondent interviews was *content* analysis, while *document* analysis was employed for the collected syllabi and repertoire lists.

4.9.1 Content analysis

Content analysis involves drawing interpretations from recorded information, including open-ended responses from respondents; through a prudent review of the responses, researchers identify and quantify "certain words, concepts, themes, phrases, characters, or sentences" (Fink, 2009: 89). Analysis involves a coding process - segmenting sentences from the collected data into categories or themes and labelling them (Creswell and Poth, 2016: 214). To do this, researchers read through the data, identifying certain key words or concepts they deem important or relevant to the study or research questions, and jot them down in the margins (Merriam, 2009: 178).

After conducting the interviews with the respondents, the recordings were stored on my computer hard disk (an external storage disk) and stored and shared with the transcription service using the Google Drive platform. Once I received all transcripts, I read through them and for ease of navigation, marked and numbered each question and its response in the transcript, and noted important concepts/ideas as I progressed. I then re-examined the individual responses, focusing on one question at a time to identify emergent themes from all the responses to the respective questions. These themes were discovered by identifying trends/ideas/concepts within individual responses, and then assigning these a category name. As I read through more responses to questions, more codes emerged; the common or similar codes were grouped together and further reduced into possible themes and subthemes. These draft themes and subthemes were further reduced and transformed into more abstract themes and subthemes and named appropriately. After the themes and subthemes were identified, I went back to the original responses, and synthesised them to provide the evidence in the supporting narrative. It was determined that the best method of representing the data was to use a combination of figures showing themes and

subthemes, supported by evidence in the form of descriptions. The results are discussed in Chapter 5.

4.9.2 Document analysis

As documents can assist in uncovering meaning, develop understanding, and discover relevant insights into the research problem (Merriam, 2009: 163), they were the second form of data used in the study. The two types of documents collected were existing tuba performance syllabi (or similar institutional documents), and repertoire lists. Document analysis refers to the collection and analysis of the contents of certain documents (Guest, Namey and Mitchell, 2013).

The purpose of analysing existing syllabi was the examination and discovery of their contents regarding the practical components of tuba performance studies, and the determination of any commonalities in the hope of devising a framework for the proposed syllabus. To achieve this, I examined each of the collected syllabi, and categorised their contents into pedagogical and organisational components. I then drafted a Microsoft Excel document (Addendum 34) with these components included and indicated the number of times a certain component appeared in the collected syllabi. Although the study primarily involved the practical components of the syllabi, suggestions of the organisational components are also included as suggestions. The results are available in Chapter 5: 5.4 (Institutional Documents).

The objective of the analysis of the repertoire lists (Addendum 35-38) was the determination of which materials and sources were prescribed in tuba performance studies syllabi. Each list was examined, and emerging items were divided into categories. These included solo repertoire, studies and etudes, excerpts, and 'other' items (including books and methods); these were listed according to their frequency across all lists. As solo repertoire is the major component of all tuba performance studies, and one of the primary concerns of the syllabi, I enlisted the services of a statistical specialist, Prof. Robert Schall of the University of Free State. He advised a procedure that identified the 20 most common works (per level) across all lists; these would make up the contents of the repertoire list of my proposed syllabus. I later discovered during the analysis that this was not possible, as explained in the conclusion of Chapter 5.

4.10 Validation

Validation refers to the procedures a researcher initiates in order to check for accuracy and credibility in their findings (Creswell and Creswell, 2018: 274). The recommendation is that researchers employ at least two validation strategies (Creswell and Poth, 2016: 263), as this can improve a researcher's ability to judge the correctness of the findings and convince the readers thereof (Creswell and Creswell, 2018: 274). The two strategies I used were member checking and peer debriefing.

4.10.1 Member checking

Member checking involves furnishing respondents with the final report that comprises the descriptions and themes from the analysis, and major findings, in order to determine their accuracy (Creswell and Creswell, 2018: 274). It can also lessen the chance of researchers reflecting their own opinions (DePoy and Gitlin, 2016: 321). Member checking also allows respondents to confirm the truth value of specific accounts and investigator impressions (DePoy and Gitlin, 2016: 265). After the completion of analysis and compilation of the section that would constitute the results in Chapter 5, I furnished each respondent with a copy of the final analysis of the responses and to offer an invitation for any feedback. To date, no responses have been received.

4.10.2 Peer debriefing

This process involves locating a peer who would act as the debriefer, having them review and ask questions pertaining to the study, to ensure that the research will resonate with someone other than the researcher (Creswell and Creswell, 2018: 275). The debriefers role involves asking hard questions pertaining to methods and interpretations and are normally colleagues or students (Creswell and Poth, 2016: 263). My study utilised the main research promoter, Dr Frelet De Villiers, and co-promoter, Dr Phil Golson, as peer debriefers – they provided regular, consistent feedback throughout the research process regarding each aspect of the study.

4.11 Ethical considerations

During the course of any research project, there may surface potential ethical concerns relating to the protection of participants (Merriam, 2009: 161). Since qualitative research primarily involves respondents, researchers need to be cognisant of the ethical considerations that include the rights, needs and desires, and values of respondents, as sensitive information may frequently be revealed about them (Creswell and Creswell, 2018: 287), and sometimes their institution. In order to protect the individuals and institutions involved in the research project, the precautions outlined in the following paragraph were taken.

Before any data collection took place, I obtained ethical clearance to conduct research through the Faculty of the Humanities of the University of the Free State (Addendum 30 and Addendum 31). This process also required the securing of institutional permission from the line managers of potential respondents (see Addendum 32 for an example of the Institutional Permission Letter). In order that respondents were comprehensively informed about the study, the invitation email included all essential and relevant documentation. The purpose of the email was to introduce myself, provide an explanation of the nature of the study and the methods of data collection, as well as detail the role and duties of respondents. Respondents were also provided with information that explained why they were contacted, assured them that their participation involved no potential risks, and outlined the procedure they should follow should they accept the offer. Respondents were also assured that even if they agreed at first, they were not bound to this commitment and could withdraw at any time.

To minimise any risk and inconvenience to the respondents, interviews were limited to 90 minutes, and the respondents were asked to choose the date and time of their interview. All South African respondents were given the option of a live interview; the others were conducted and recorded on the Skype software application, and safely stored on an external storage device. The videos were then uploaded and shared with a transcription service using the password-enabled storage and sharing platform Google Drive. An external, professional transcription service was engaged, in order to limit chances of the transcribers recognising any of the local respondents. The responses were transcribed *verbatim* to ensure that the respondents' own words were

represented and used in the analysis. Respondents' names were deleted from transcripts and replaced with numbers (Respondent 1-13) to ensure anonymity. All mentions of institutional names in the transcripts were also removed.

4.12 Role of the researcher

Although objectivity is striven for, researchers cannot help but impart certain biases, experiences, and background to their study; thus, an excessive degree of subjective influence could have negative consequences. For instance, not only does a researcher's background have the potential to affect their findings or interpretations (Schutt, 2018: 284; Creswell and Poth, 2016: 167-168), but may even cause researchers to gravitate towards certain themes and seek evidence that supports their own conclusions. Qualitative researchers realise and acknowledge that their perspective can be influenced by their background and experiences; therefore, it is imperative that researchers should not only clearly define their role but declare these factors too (Schutt, 2018: 284). They should also explain their past experiences to respondents and be transparent regarding their own biases and what they have learned about the topic at that stage of the research. This is so that readers can better understand the connections and consider how these may affect the findings or interpretations (Schutt, 2018: 284).

The roles I assumed in the interview process were that of the primary data collection instrument, and interviewer. As the primary data collection instrument, the researcher is actively involved in the interview process, and this can increase their knowledge regarding the topic, improve efficiency (since they can immediately process information), clarify and summarise responses, validate the accuracy of information, and explore or probe various responses (Merriam, 2009: 231). As an interviewer, the researcher's role is to guide the conversation and function as a listener (Guest, Namey and Mitchell, 2017: 33).

Creswell and Creswell (2018: 281) provide a different perspective on the effects that these factors can have on a study, arguing that these may also be positive (Creswell and Creswell, 2018: 281). Although I could neither guarantee that I would not bring any biases to the study, nor disregard my own background and experiences, I believed these benefitted the study in many ways.

My own tuba performance studies background exposed me to three different perspectives, including British and South African graded music examinations (ABRSM, UNISA, and Trinity College London), South African (Undergraduate studies at the University of Cape Town) and North American (postgraduate studies at the University of North Texas) higher education context. This revealed several discrepancies between the syllabi of international and local institutions. Furthermore, one of my duties as a brass lecturer involves the compilation of performance studies syllabi for all the brass instrument performance studies modules. The discrepancies in international versus local syllabi, and the absence of a comprehensive one that could be used for our university, were the chief motivators for inquiry and the eventual conducting of this study.

As a professional tuba player and lecturer, I bring to this research several years of experience in both performing and teaching, and my involvement in these areas is continuous and ongoing. This, I believe, provided me with a significant degree of understanding of the subject matter before the interviews, and contributed to the efficiency of the interview process. I was also able to probe respondents into providing greater depths of insight during the interview process, and to comprehend their subsequent responses. As a peer, I established a rapport with respondents that was conducive to the provision of helpful responses. When respondents veered 'off topic', I could understand the path taken from the question; when they drifted too far, I was able to guide us back to the topic/question at hand.

Understanding the language and terminology in the three above-mentioned educational contexts, coupled with the jargon from the tuba performance studies and teaching contexts allowed me to better understand and relate to the interviewees' responses. I was also able to provide clarity on certain questions and terminology that respondents did not comprehend. For instance, the term 'grading' may refer to both the academic process of assigning a mark to a specific activity or assessment, as well as to the act of classifying repertoire/studies according to their difficulty level. My knowledge of the current trends in the tuba pedagogy and an awareness of famous personalities informed the study in terms of potential local and international respondents.

4.13 Conclusion

In this chapter, I explained how I created a framework to collect comprehensive data as evidence in answering the research questions. Each component of the methodology included a brief description from the literature, and I motivated my choices for choosing specific types.

The data collected from the interviews were analysed using content analysis and the emerging themes provided a guideline for the compilation of the proposed syllabus and grading system. Documents in the form of existing syllabi and repertoire lists were collected and analysed in order to supplement the interview data. Both extant syllabi and suggestions from respondents regarding suitable tuba performance syllabi were used as guidelines in the compilation of the proposed syllabus. Not only were repertoire lists used to provide prescribed materials for inclusion in the syllabus, but the 20 most common solo repertoire pieces per grade would be used as the prescribed repertoire choices. This is discussed in Chapter 5.

In the next chapter, I will discuss the results of the biographical questionnaires, provide a report on the analysis of the interview responses, and present the results from the document analysis.

CHAPTER 5: DISCUSSION OF RESULTS

This chapter will present the results from the various forms of inquiry undertaken in this study. The first part is a summary of the biographical information of the respondents taken from the biographical questionnaire completed prior to the interviews. This is followed by the results of the interview analysis for each question – themes, subthemes, and discussion. The final section is the analysis of the documents in the form of existing syllabi and repertoire lists.

5.1 Biographical questionnaire

This section provides the summarised results of the biographical questionnaire. The purpose of this supplementary questionnaire was to ensure that respondents matched the criteria as set out in 4.5. Table 23 represents the summarised results, while the template for the biographical questionnaire and the comprehensive results are provided in Addendum 26 and Addenda 50-51 respectively.

Table 23 Summarised biographical information

1. Respondents' ages					
Average age: 48	30 – 40 years: 5	40 – 50 years: 3	50 – 60 years: 3	60 – 70 years: 1	70 – 80 years: 1
2. Countries represented (8)					
South Africa, United States of America, Norway, Germany, Argentina, United Kingdom Canada, Germany, New Zealand					
3. Respondents' gender					
Male: 12			Female: 1		
4. Respondents' highest qualifications					
PhD = 1	DMA = 5	Master's degree: 2	Postgraduate diploma: 2	Honours degree: 1	Bachelor's degree: 2
5. Summary of respondents' other qualifications					
Master's degree: 5	Bachelor of Music (Hons): 2	Bachelor's degree: 8	Postgraduate diploma: 1	Licentiate ABRSM: 2	Professional performance diploma: 1
6. Years in which qualifications were awarded⁵³					
1970 – 1990: 3		1990 – 2000: 3		2001 – 2010: 6	
				After 2010: 2	
7. Combined years of university tuba teaching					
258					
8. Number of students currently taught by respondents					
87 (not all were tuba students)					
9. Academic year/level of current students					
Undergraduate: 40			Postgraduate: 8		
10. Does the respondent utilise a syllabus at the institution?					
Module guide: 2		Course outline: 1		Syllabus: 8	
				No syllabus/document: 2	
11. Who compiled the syllabus?					

⁵³ Not all respondents could remember the exact year in which they received their qualification.

Head of Department: 2	Self: 7	Assisted: 2	Predecessor: 1	Combined effort among staff: 1
12. Number of respondents in full-time university employment				
11/13 ⁵⁴				
13. Duties or respondents at Institution (11/13 respondents only)				
Duties		Number of respondents	Number of hours	
a.	General brass tuition ⁵⁵	5/11 respondents	60	
b.	Tuba/euphonium practical teaching	7/11	70	
c.	Studio class	3/11	4	
d.	Brass methods/teaching methods	3/11	7	
e.	Brass techniques	1/13	2	
f.	Ensemble conducting	6/11	7	
g.	Large ensemble sectional rehearsals	1/11	2	
h.	Chamber music coaching	1/11	2	
i.	Conducting tuition	1/11	2	
j.	Ensemble direction	1/11	2	
k.	Repertoire	1/13	2	
l.	Music history	2/13	9	
14. Genres of materials covered by university students				
a.	Solo repertoire and orchestral excerpts			9
b.	Chamber music			6
c.	Band excerpts			4
d.	Etudes and scales			3
e.	Fundamentals and tuba/euphonium ensemble			2
f.	Tuba/euphonium ensemble			2
g.	Books			2
h.	Brass ensemble, flow studies, transposition, intonation, Rhythm, technique, method books, duets, jazz standards, bass lines, improvisation			1

5.2 Respondent Interview questions⁵⁶

5.2.1 In your own words, could you explain what you understand by a “syllabus” related to tuba performance studies modules at the university level?

In the course of interrogating respondents’ understanding of a “syllabus”, all respondents provided meaningful insight. The responses gathered are divided into three broad categories: different types of documents, purpose, and characteristics.

⁵⁴ 11 respondents were included in this section since two were not lecturers at the time of the interviews.

⁵⁵ The figures for ‘General brass tuition’ include some tuba/euphonium teaching – respondents did not specify the exact numbers.

⁵⁶ For the transcribed interviews refer to Addenda 50-62

Different types of documents	Purpose	Charecteristics
<ul style="list-style-type: none"> • Module guides • Contract/agreement/ understanding • Framework • Course of study • Literature-orientated syllabus 	<ul style="list-style-type: none"> • Basic course information • Expectations and assessment • Repertoire and pedagogy requirements 	<ul style="list-style-type: none"> • Flexible • Progressive

Figure 50: Question 1 themes and subthemes

5.1.1.1 Different types of documents

It became clear that not only do respondents have differing views on the definition of a syllabus, but eight respondents (1, 2, 6, 7, 8, 11, 12, 13) revealed that their ‘syllabi’ are known by different names or resembled other documents. These documents included module guides (1, 13), a contract/agreement (2, 6, 11, 12), framework (2, 8, 9), a course of study (2), and a “literature-orientated” syllabus (11).

5.1.1.2 Purpose

A syllabus may be interpreted as a document that fulfils three purposes: (1) it provides basic course information, (2) outlines the expectations and assessments, and (3) lists the details of the repertoire and pedagogical requirements.

The syllabus should provide the students with all the basic information of the course (2, 8, 10, 12), and detail the outcomes (1, 4) and objectives (2). It should clearly explain course structure (2, 3, 4, 8), by providing directions for each level per semester/year (2, 5, 6, 7, 8, 10), include an outline/plan of the work of each semester (2, 6, 8) and clarify the manner in which content will be taught (12).

Seven respondents explained that their syllabi clarify expectations (2, 4, 6, 7, 10, 11, 12). This includes the student expectations (2, 4, 6, 10, 11, 12), and the expectations of the teachers and the profession (10). Additionally, syllabi also explain the amount of work required to complete the course (1, 6, 7, 9, 10, 11, 13), provides a list of all assignments (2), and explains assessment methods (2, 4, 6, 12).

Four respondents (7, 10, 11) indicated that syllabi should detail the minimum performance requirements; one respondent (1) suggested that these ought to include the number of repertoire pieces to be performed (1), and three (1, 6, 9) the level of these pieces. Four respondents (3, 5, 8, 9) also felt that syllabi should provide repertoire guidelines in the form of a prescribed graded repertoire list from which repertoire is chosen for course assessments; one respondent (5) added that syllabi should also include a list of the required pedagogical books.

5.1.1.3 Characteristics

Seven respondents (1, 3, 7, 8, 9, 10, 13) elaborated that a syllabus should have certain characteristics. The majority mentioned the notion of flexibility (1, 7, 8, 10): these ranged from adaptability to students' career choices (10), and varying student levels (7). Respondent 3 added that the syllabus should also be progressive and respondent 10 suggested that a syllabus should be strict in some respects, but flexible in others.

5.2.2 What considerations do you think need to be taken into account when designing a syllabus for university tuba performance studies?

This question elicited valuable responses from all respondents; these responses are classified into three broad categories: general development, variables, and characteristics.

General development	Variables	Charecteristics
<ul style="list-style-type: none"> • Performance skills • `Technical development • Repertoire development • Musical skills • Job skills 	<ul style="list-style-type: none"> • Student • Module • Time • Standards 	<ul style="list-style-type: none"> • Flexible • Progressive • Relevant • Current

Figure 51: Question 2 themes and subthemes

5.2.2.1 General development

General development comprises performance skills (technical and repertoire), musical skills and job skills. The performance skills include technical and repertoire development. The majority of respondents considered technical development an important consideration (1, 4, 5, 6, 7, 8, 10, 13). The specific items of tuba technique mentioned were sound/tone (1, 4, 7, 13), breathing (1, 4, 6), tonguing (4, 6), flexibility (4), dexterity (13), vibrato (13), buzzing (6), and posture (4). Furthermore, respondents also referred to the development of the basic tuba/brass playing fundamentals (1, 5, 8, 9, 10) and learning of all scales and arpeggios (4, 7, 8, 10).

Repertoire development should not only constitute the repertoire played by students in their own performances (4, 6, 8), but also those pieces which they would use to teach (4). It is recommended that this repertoire take the form of a list of standard solo repertoire (4, 8) that students should perform regardless of their preference (5), as these works demand acquisition of the basic technical and musical skills (4). These standard works should include music from the various style periods (8), including transcriptions of historical literature (4), to allow students to gain an understanding of the history and future of the solo tuba repertoire (6). Some respondents debated that a syllabus should not only contain standard repertoire, but also other forms and genres including new music (6, 8), electronic music (6), improvisation (6), music by composers of diverse ethnicities and ages (6), and music by local composers (9). Other considerations include band and orchestral excerpts (6), as well as chamber music (9).

Respondents recommended that the syllabus should also contain etudes/etude books (6, 8, 9, 10), comprising basic etudes (9), other etudes of various types (6), and that these studies should be progressive (8).

Five respondents (4, 6, 7, 11, 13) emphasised the importance of musical skills as an area of development that should be addressed by the syllabus. This includes the interpretation of the marked articulations (4, 6, 13), dynamics (13), and “developing a mature sense rhythm” (11). The musical skills also include the development of musicianship on the instrument (11), phrasing (4, 7), use of imagination (7), and lyricism (4).

A syllabus should provide training in the skills required by the various jobs available for students specialising in tuba studies (2, 10). While two respondents recommend the development of specific skills for certain jobs (2, 11), three (3, 4, 11) advocate that tuba majors should be educated in a more generalised manner, to achieve “well-rounded status” (4). This will better equip them with skills required for the varied and scarce career opportunities available to tuba

players (3). Other skills mentioned by respondents include those that prepare students for futures as band teachers (2) (transposition, clefs, solfege, ear training), and employment/marketing skills (3) (drawing up contracts and *curriculum vitae* ('CVs')).

5.2.2.2 Variables

Some respondents advised of certain variables that affect the syllabus design process. These intimated, firstly, that lecturers should be aware of a student's background (4, 5, 7), specialisation choice/major (2, 12), career goals (3, 4), and his/her individual goals and deficiencies (2, 12). Secondly, these respondents emphasised that due consideration be given to the goals and outcomes (1, 2, 12) of the module. Thirdly, time-specific aspects such as the programme length (4, 7) and the amount of practice time available (12) ought also to be considered. Lastly, the respondents mentioned that the process of syllabus design ought to include a consideration of the various aspects of musical standards (5, 8); examples elaborated upon include minimum programme standards (8), the standards of one's specific institution as an entity (5), the general standards in one's own country (and how this standard compares to those at the international level) (8).

5.2.2.3 Characteristics

Respondents remarked that syllabi should be marked by certain characteristics. Four respondents (1, 4, 8, 10) suggested that there should be a certain degree of flexibility that sought to accommodate students whose levels and abilities ranged from average to advanced (4, 10); one respondent (8) noted that the syllabus should also be adaptable in order to meet the challenge of student problems. Respondents also felt that the syllabus should be progressive (4, 8), relevant (5, 10), current (8), and that the repertoire should be appealing to students (5).

5.2.3 The biographical questionnaire asked whether you make use of a syllabus in your university tuba teaching. If so, who compiled the syllabus?

All but three responses (3, 4, 9) were excluded since the respondents were not currently employed as university tuba teachers, and therefore did not make use of a syllabus. Replies

from the other ten respondents (1, 2, 5, 6, 7, 8, 10, 11, 12, 13) are categorised as follows: tuba lecturers, and similar documents.

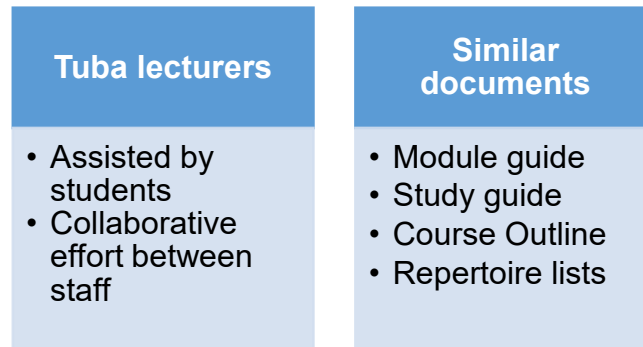


Figure 52: Question 3 themes and subthemes

In the majority of cases (8/10), the respondents, in their capacity as tuba lecturers, compile the syllabi (2, 5, 6, 7, 8, 10, 11, 12) themselves. The lecturers are sometimes assisted by a postgraduate student/teaching fellow (11), or in cases where there are multiple tuba instructors, it is a collaborative effort between all staff (10). Three respondents stated that their institutions do not use a syllabus, but instead use similar documents such as a module guide (1), study guide (13), or course outline (7). While the head of department compiles the study guide and module guide (1, 13), the lecturer compiles the course outline (7). In addition to a syllabus, three respondents (6, 8, 12) have separate repertoire lists.

5.2.4 Could you elaborate on the makeup of the syllabus?

Of the thirteen respondents, three (3, 4, 9) were not probed on this question because they did not make use of a syllabus. The other ten responses gathered regarding the makeup of syllabi, are divided into two broad themes: pedagogy and course organisation.

Pedagogy	Course organisation
<ul style="list-style-type: none"> • Repertoire development <ul style="list-style-type: none"> • Solo repertoire • Orchestral excerpts • Benchmarks • Technical development <ul style="list-style-type: none"> • Scales and arpeggios • Fundamentals • Etudes • Required materials and equipment 	<ul style="list-style-type: none"> • Basic information • Course requirements • Assessments • Student assistance • Performance • Lessons

Figure 53: Question 4 themes and subthemes

5.2.4.1 Pedagogy

Pedagogy in this context refers to the teaching and learning elements within the performance studies syllabi, and includes repertoire development, technical development, and the materials and equipment required.

Concerning repertoire development, the development of solo tuba repertoire is addressed in seven respondents' syllabi (1, 5, 6, 8, 10, 11, 13), and they appear in the form of either repertoire lists (5, 6, 8, 10, 11) or guidelines (1, 13). The repertoire lists include recommended and required literature (8), are mostly in the form of graded repertoire lists (5, 10, 11), with one list according to style period (6). The guidelines indicate the amount (1, 13), level (1) and style period of repertoire to be performed (1).

Four respondents include information pertaining to the study of orchestral excerpts (8, 10, 11, 13). Of these, two include a graded list of excerpts per year/level (8, 13), one a list of the prescribed orchestral excerpt books/collections (11), and the last (13) merely indicates the required number of excerpts for study per year/module. It is worth noting that three respondents stated that the pedagogical aspects of their syllabi are benchmarked against those of external bodies (1, 7, 13).

All respondents regard technical development as an integral part of their syllabi. The specific subcategories include scales and arpeggios (1, 2, 7, 8, 11, 13), the study of etudes (2, 5, 7, 8, 10, 11, 12, 13), and the fundamentals of tuba performance (11). Regarding scales and arpeggios (1, 2, 7, 8, 11, 13), the information varied from the mere mention of scales (1, 7) to a detailed list of scales per year of study/level (2, 8, 11, 13), with one respondent mentioning

scales-based exercises (7). While the majority of information on etudes is in the form of a graded list of prescribed etude collections (2, 5, 10, 11, 12), other respondents include quick studies (1, 7, 13), sight-reading exercises (1, 13) transposition- and clef studies (8), and self-studies (7).

Seven syllabi list required/recommended materials (2, 6, 7, 8, 11, 12, 13) and equipment (2, 8, 12, 13) for the course. Some syllabi also include information regarding how students may obtain these materials (7, 11, 13).

5.2.4.2 Course organisation

Pedagogical aspects aside, respondents' syllabi comprised information critical to the organisation of the course. The large tracts of pertinent information is categorised as basic course information, course requirements, assessments, student assistance, performances, and lessons.

Most respondents included basic information regarding the course (1, 2, 5, 6, 7, 11, 12, 13), comprising the course description (5, 6, 7), outcomes (1, 2, 12), objectives (2, 6), presenters (1, 2, 7, 11, 12, 13), pre/co-requisites (1, 6, 13), and information on studio classes or 'departmentals' (1, 2, 5, 6, 8, 11, 12, 13).

Some syllabi include general course requirements (6, 13), comprising items such as the attendance policy (1, 2, 5, 6, 7, 11, 12) and regulations pertaining to ensemble participation (2, 7, 8, 11).

Examples of assessment information include assessment schedules (8, 13), types (2, 5, 12), and procedures (1, 2, 7, 11, 13). More performance orientated assessment data contained in syllabi consists of information regarding practical examinations/juries (2, 5, 7, 11, 12), recitals (2, 5, 7, 13), and accompaniment (7, 11, 12, 13).

Respondents' syllabi also include information available that provide assistance to students including important hyperlinks (11), policies pertaining to disability (2, 6, 11, 12), academic honesty (6, 13), student records (11), practicing guidelines (1, 7, 8, 11, 12, 13), and student conduct (2, 6, 11, 12, 13).

Few respondents included information regarding both departmental performances (11) and off-campus performances (7, 11), while others included information specific to lessons (8) including absences and rescheduling (11), lesson feedback (12) and lesson plans (8).

5.2.5 What are your experiences in using the syllabus for university tuba teaching (E.g., Strengths, limitations, clearer goal for students, etc.)?

While respondents 4, 7, 9 and 13 did not use syllabi for university teaching, all others provided meaningful insight when answering this question. The responses are categorised into negative and positive experiences. The number of positive and negative responses are tallied based on the number of responses in total, and not the number of participants.

Negative experiences	Positive experiences
<ul style="list-style-type: none">• Repertoire shortcomings• Student limitations• Updating• Vague goals• Not representative	<ul style="list-style-type: none">• Provides clarity• Benefits to repertoire• Flexibility• Vital

Figure 54: Question 1 themes and subthemes

5.2.5.1 Negative experiences

There were six negative responses. Two respondents (1, 5) emphasised that some syllabi have certain shortcomings concerning repertoire. The critique regarding graded examination syllabi indicated that there is a discrepancy in the number of solo repertoire choices for tuba compared to other instruments, and that certain standard repertoire works are not in the syllabi (1). Respondent 5 acknowledged that his/her own syllabus lacked easier works or high-quality transcriptions of classical and romantic works; this is because the works currently available for tuba are predominantly difficult contemporary-era pieces.

Some respondents stated that certain syllabi are compiled with a specific type of student in mind, and were therefore limited (6, 10). The same two respondents intimated that any syllabus geared towards students of a certain level of competence could be detrimental to weaker students. Some syllabi also exclude the study of band or orchestral excerpts, and their suitability is thus limited to students following rather specific career paths (10). In addition, respondent 10 commented that the rigidity of some syllabi forces students to play only the repertoire that is in

the syllabus, which is a limiting factor. Respondents 6 and 8 pointed out that keeping a syllabus current is a difficult task. Other limitations mentioned include vague goals or milestones due to the large discrepancy of the technical demands within the same category of works (8). Respondent 6 added that some repertoire lists do not represent women and minority composers.

5.2.5.2 Positive responses

There were twelve positive responses, which is double the number of negative ones. Respondents pointed out that syllabi provided a clear outline how student's time will be spent in teaching and learning at the university, and everything related to the module (12). This includes scheduling (2, 12), requirements (8), weekly/termly expectations (12) and certain technical goals/milestones (8). This clarity (2) makes students more accountable (10).

Three respondents advocated for syllabi, explaining that they were "useful" (3), "helpful" (11), "beneficial" (11) and that "it worked" (3). They explained that syllabi expose students to the repertoire available "out there" (8) and served as a guide in matching student levels with the appropriate repertoire (2, 3, 6, 11) and method books (3). Certain syllabi were also commended for their flexibility (10). This contributes to a wider variety of materials from which to choose, and therefore lecturers can better adjust the materials to the particular level, type, and career goals of individual students (6, 10).

Two respondents (6, 8) felt that a syllabus or repertoire list is vital. Firstly, these documents are vital when establishing a foundational framework on which to base the course (8). Secondly, they are especially necessary when the tuba lecturer is not a specialist and may lack the ability to gauge if a student will relate to and master certain repertoire, or the knowledge of how to effectively to plan repertoire to achieve certain goals (6).

5.2.6 What genres would you recommend a syllabus for university tuba performance studies cover (orchestral studies, solo repertoire, etc.)?

The responses pertaining to genres respondents feel should be included are divided into the following three categories: aspects influencing genre choice, types of music to perform, and specific genres.

Aspects influencing genre choice	Type of music to perform	Specific genres
<ul style="list-style-type: none"> • Holistic approach • Core focus area • Flexibility • Time considerations 	<ul style="list-style-type: none"> • Solo repertoire • Technical development • Chamber music/ensemble • Large ensemble excerpt study • Style periods 	<ul style="list-style-type: none"> • Western Art Music: Classical and Modern music • Light music: Jazz, Rock and Pop, local music

Figure 55: Question 2 themes and subthemes

5.2.6.1 Aspects influencing genre choice

Respondents 2, 3, 7 and 13 suggested the implementation of an all-encompassing/holistic syllabus. This would establish a more generalised view (3, 4) by including a variety of different genres – “a little bit of everything” (3, 13). This approach is motivated by the limitations of careers available for tuba players (7, 13), demanding a “more well-rounded musician” (2).

The syllabus should still have a core focus area (3, 5, 7, 13), but offer some genres as an option to students that progress at an advanced rate (5). There should also be a general degree of flexibility to adjust for various factors (3, 5, 7, 8, 11) such as students’ career choices (2, 4, 7, 13), levels (2, 13), instrument⁵⁷ (2), needs/deficiencies (13), and interests (2, 4, 12, 13).

A student’s university career is limited to few years. Thus, lecturers should maintain a realistic perspective of the results these students might hope to achieve in this period (4, 5); this should guide and govern the number of genres included in the syllabus, as well as the focus placed upon them.

5.2.6.2 Type of music to perform

Respondents unanimously advised that the syllabus should include solo repertoire development for the media of both accompanied and unaccompanied tuba (11). The concept

⁵⁷ Respondent 2 explained that some incoming students would only have experience in playing contrabass tubas in Bb and C, and therefore assigning them works written for the bass tuba in F would not be appropriate.

of “collaborative performance” with piano raises a tuba student’s level of musicianship, timing, rhythm, and intonation (11).

The development of ‘classical’ technique is a necessity (1, 2, 5, 6, 8, 11, 12, 13) regardless of specialisation (13). This comprises the study of scales (8, 11), the warmup/daily routine (1, 6), and technical and melodic etudes (1, 2, 5, 6, 12, 13). Etudes should be included according to those the student would use to work on in their own playing as well as for pedagogical reasons (2). Specific etude collections mentioned in this context include the Blazeovich (1, 2, 13), Bordogni/Rochut (1, 5), Grigoriev (13), and Kopprasch (2) collections.

Chamber music or ensemble playing was recommended by 10/13 respondents (1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13). Respondents 5 and 11 did not recommend chamber music as their institutions offer a standalone chamber music module. Two of these respondents considered chamber music to be very important (7) or a necessity (4). Respondent 13 intimated that students ought to play a considerable number of such pieces, while Respondent 10 stated that chamber music should carry “a heavy weighting”, as it is essential for player development. Respondents named specific chamber music formations, including the brass quintet (2, 10, 11, 12, 13), the tuba/euphonium quartet/ensemble (6, 11, 13), the ten-piece brass ensemble (1, 11), and non-standard/contemporary ensembles (1, 4, 12, 13). The non-standard/contemporary ensembles referred to include *avantgarde* ensembles and bands or ‘combos’ (13), where the tuba assumes the role of the bass guitar (4) such as Dixie bands (6, 13), or New Orleans “NOLA”-type bands (4, 13).

The study of large ensemble (orchestra, wind band and brass band) excerpts is also considered a necessity. The elementary study of wind band and orchestral excerpts is encouraged by 8/13 respondents (1, 2, 3, 4, 7, 10, 12, 13); however, there should be some level of flexibility in the number or focus of these pieces dictated by students’ vocational interests (2, 4, 7, 13). As the brass band tradition grows and strengthens internationally, Respondent 3 advises the study of brass band excerpts as this develops players on the technical and musical levels, and the repertoire is far more challenging than that of orchestra or band music.

The performance of transcriptions of historical literature was recommended by five respondents (2, 4, 5, 6, 8), as the practice exposes students to the historical development of tuba literature (4), supplements the learning of structure and form (2), and teaches the authentic performance of ornaments from different style periods (6). Transcriptions of works by J.S. Bach, particularly

the *Six Solo Suites for Violoncello* (5, 8), and songs by Johannes Brahms were provided as examples.

5.2.6.3 Specific Genres

Respondents noted mentioned classical and contemporary forms among the genres of the Western Art Music tradition. Five respondents (2, 4, 5, 6, 8) endorse the study of modern/contemporary music, specifically electronic/computer music (4, 13), and experimental music (13). This would equip students with some knowledge of modern forms and harmony (2), and deep their insight into the performance of ornamentation in contemporary music (9).

The other genres mentioned are categorised as light music, referring to jazz, pop and rock, and local/cultural music. Jazz was most popular among respondents, as it was suggested by 8/13 respondents (1, 2, 5, 6, 7, 9, 10, 13) for all specialisations. Tubists should have a basic introduction to (and an understanding of) the genre (1, 2, 9) in order “to play convincingly in jazz styles” (6) should the repertoire demand it. Specific competencies include the performance of a basic improvisation solo (6, 9, 10, 13), how to swing (6), the construction and playing of bass lines/walking bass from chord progressions (2, 9, 13), and the playing of chord changes (2).

Respondents 8, 9 and 13, recommend music of the rock and pop genres for inclusion. Although these genres lie outside the domain of tertiary study, they may be included if they are “virtuosic arrangements” and “as long as it is good music” (8). Local/cultural music should also be considered according to three respondents (3, 4, 11), specifically mentioning South American (3), Norwegian (11), and South African music (4) – “Cape flats” style, brigade bands, and street bands.

5.2.7 Could you elaborate on your knowledge of methods/systems/tools that grade or classify repertoire into specific levels? For example, different levels of university tuba study

This question posed a particular challenge in eliciting an initial response. Most respondents did not understand the term ‘grading system’ and required further explanation. (This confusion likely arose from the North American use of the word ‘grading’ as referring specifically to the assigning of a mark for a particular test, assignment, or activity.) It is interesting to note that the

issue was clarified once I referred to grading system criteria in the context of a particular work; responses were then received in number. These responses are categorised according to the following headings: general reactions to grading systems, and other systems.

Reactions	Other systems
<ul style="list-style-type: none"> • Overall awareness of grading systems • Positive reactions to the idea of grading systems • Negative reactions • Other reactions 	<ul style="list-style-type: none"> • Other grading systems • Syllabi/repertoire lists

Figure 56: Question 7 themes and subthemes

5.2.7.1 Reactions to grading systems

Of the 13 respondents, eight were familiar with grading systems (1, 3, 4, 7, 9, 10, 11, 13), and one was inconclusive (6). Five of the respondents felt that such a system would be both useful and valuable (8, 9, 11, 12, 13); respondent 11 said that the system is a good idea, and Respondent 12 stated that in the South African context, it would be both interesting and beneficial. Respondent 13 felt that a grading system is useful since users would be able to judge the grade level of the repertoire they were currently playing. Two respondents said that a grading system would provide more information about specific works, which would prove especially useful for non-specialist tuba teachers (1, 9).

Five respondents did not agree with the idea of a grading system (2, 7, 8, 9, 10), and provided various reasons motivating their responses. Respondent 2 explained that he/she was opposed to the manner in which the system was used to grade repertoire, and not necessarily the system itself. One respondent (7) compared a piece of music to a work of art, concluding that all efforts to grade it would be subjective, and because all music is different, he/she did not believe that an adequate or accurate system could actually exist. Two respondents (7, 9) mentioned using an approach taught by the legendary brass teacher Arnold Jacobs; instead of considering the technical difficulties of a piece of music, which would constitute the criteria of a grading system, Jacobs kept the musical result or message as the focus. Thus, repertoire is decided upon based on the needs and deficiencies of the student. Two respondents concluded that an

experienced, specialist tuba teacher should be able to assign a difficulty level to a piece, and to match it to a particular student (2, 7).

5.2.7.2 Other systems

In the course of interrogating respondents' knowledge of other grading systems, four systems were identified, including *The Guide to the Tuba Repertoire* (7, 9, 11), the *ITEA Standard Literature List* (1, 3), the *ITEA Journal Review for New Materials* (11), and one non-specific response, wind band repertoire systems (8). Some respondents also noted the following pointed to syllabi or repertoire lists:

Table 24: Syllabi/repertoire lists mentioned as grading systems

1.	UIL Texas Music Educator's List	1, 9
2.	ABRSM Graded examination syllabus	10
3.	ABRSM Diploma Syllabus	2
4.	UNISA Graded examination syllabus	10
5.	Trinity College London Graded Music Examinations List	10
6.	Trinity College London Diploma Syllabus	2
7.	I.T.E.A. Standard Literature List	1, 3
8.	New York State School Music Association (NYSSMA) List	1
9.	Wisconsin State Music Association (WSMA) List	1
10.	David Zerkel: "Do You C What I C?": An Examination of Solo Literature for the Contrabass Tuba	1
11.	Skip Gray List	1
12.	Leonard Falcone Competition List	9
13.	Other university syllabi (online)	9

When respondents were asked if they were familiar with any other systems for purposes of further investigation for the purposes of the thesis, they identified the following sources:

Table 25: Sources mentioned for further research

1.	State Music Lists (USA)	4
2.	Publisher systems	4, 13
3.	UK Publishers systems	3
4.	Editorial boards	4
5.	Music educators	4
6.	Commissioners of works	4
7.	Composers of works	4

5.2.8 (If the respondent is familiar with grading systems above) Could you elaborate on any limitations you are aware of that these systems have in grading material for specific years of university study?

This question is directly related to the previous question, probing respondents' knowledge of grading systems. The resulting seven responses (2, 3, 4, 5, 6, 10, 12) address both limitations of existing and theoretical/hypothetical grading systems. The limitations are grouped into the following themes: inaccurate grading, and user limitations.

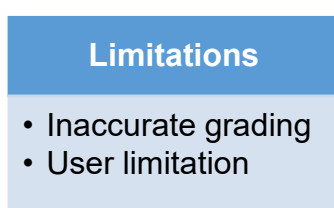


Figure 57: Question 8 themes and subthemes

5.2.8.1 Inaccurate grading

Three respondents (2, 3, 4) pointed to the inability of grading systems to grade repertoire in an adequate manner. One respondent argues that although systems can grade the technical characteristics of a composition, they fail to grade the musical aspects (2). Respondent 4 felt that some works were “under-graded”, implying that they were more complex/difficult than their indicated level, and this was due to subjective standards and an ineffective grading system (4). It was also suggested that some works may be assigned a difficulty level based on other factors, and not their actual grading. For example, while Vaughan Williams’ *Tuba Concerto* is considered a ‘traditional’ work as it appears on many audition lists, however, certain later works graded at the same level are considerably more challenging (3). Some pieces are generally very difficult to grade (4), particularly works that are in the “grey area” between two adjacent levels (3).

5.2.8.2 User limitations

Four respondents (4, 6, 7, 12) stated that a grading system does not cater for everyone. These systems are not applicable to students of all backgrounds and levels (4, 6), but rather suited to students hailing from a strong pre-university programme that included private lessons and a

band programme (6). Although the system is beneficial, Respondent 7 felt that they best suit conservatory-style institutions where all levels are pre-determined, such as South African universities⁵⁸. To some university tuba teachers, particularly the non-specialist types, the grading system may prove “ambiguous” - as some works might be categorised at the same level but would have subtle differences that make them more difficult (12). A non-tuba specialist (or someone not wholly familiar with the repertoire), might not identify the hierarchy within a specific level (12).

5.2.9 What criteria, would you suggest, should be included in such a grading system?

In response to the question, all respondents provided suggestions of criteria that should be included in the grading system. The specific criteria are divided into the following headings: technical and musical criteria, theoretical criteria, and miscellaneous.

Technical and musical criteria	Theoretical criteria	Miscellaneous
<ul style="list-style-type: none"> • Technique • General • Range • Breathing • Extended techniques • Musical 	<ul style="list-style-type: none"> • Harmonic language • Aural skills • Notation • Temporal elements • Expressions 	<ul style="list-style-type: none"> • Performing forces • General

Figure 58: Question 9 themes and subthemes

5.2.9.1 Technical and musical criteria

Respondents unanimously contended that technique should be a criterion, and therefore this aspect the first to be discussed here. Six respondents referred to technique in general (2, 3, 5, 6, 10, 11), while others referred to specific technical elements. Nine respondents (2, 3, 4, 5, 6, 8, 9, 12, 13) considered range highly pertinent to the discussion, with Respondent 9 going so far as to describe it as the “biggest and most limiting [technical] factor”. Respondents mentioned

⁵⁸ South African universities have standardised levels using graded examination boards as benchmarks. For instance, for entry into university, students should have passed, or demonstrate their ability at auditions, to be at the Grade 6-7 level. Are both these statements true for all the universities?

range in general (5, 6, 8, 9, 13), player/student ranges (4, 12), atypical tuba ranges (4), range in relation to the type of tuba (10, 13), tessitura/note density (4, 5), and frequent shifts between ranges (6).

After range, four respondents (6, 11, 12, 13) alluded to breathing. Breath was noted as important in relation to the length of phrases (6) and the total length of a work (12), an aspect particularly challenging to tuba players (12). Additionally, breath in relation to dynamics and intensity, and the amount of space that is available to breathe during performance are also factors that contribute to the difficulty of a work (13).

Respondents 1, 4, and 13 advocated extended techniques as a criterion, specifically mentioning multiphonics (13), tongue clicks (4), popping (4), thumping the instrument (4), slide removal (4) and clusters (4). Included in this category are improvisatory events such as instances of free rhythm/meter, playing arpeggiated figures over a specific amount of time, and sections of a work without barlines (4). The comprehension and interpretation of the notated symbols concerning extended techniques was mentioned by one respondent as an aspect for consideration (13).

Two respondents (5, 10) argued that the “musical complexity” (5) of a work should be a criterion, referring to the depth of knowledge and interpretation required for the effective performance of a particular piece. The musical challenges include phrasing and breath placement (10). The motivation supporting this notion is that whilst some works are easy to perform from a technical perspective, they are often musically quite demanding (the reverse is also true). In addition, Respondent 10 suggests that the grading system should strive for a balance between the technical and musical complexity of a work.

5.2.9.2 Theoretical criteria

Five respondents (2, 4, 5, 9, 13) promoted theoretical knowledge as a criterion, specifically mentioning the harmonic language (keys, scales, tonality, and melodic characteristics), notation, and aural perception skills required. The performance of complex intervals/scales (13) requires a high level of maturity of such skills, which places repertoire of this nature in the more challenging categories. The ease/difficulty in pitching certain notes on the tuba is also a consideration (1).

According to four respondents (2, 4, 5, 13), the key or tonal centre of a work (and indeed, whether it is written in the tonal or atonal idiom (2), are important concerns that influence its

difficulty. The total number of sharps/flats (4), key changes (modulations) should also be considered (4, 5), along with their type, speed, and frequency (13). The number of accidentals in the sheet music was mentioned by one respondent (9), who explained that the more accidentals present in the sheet music, the harder it is to read, which exerts an influence upon the level of difficulty. Other factors mentioned include key in relation to the pitch of tuba used/recommended⁵⁹ (2, 13), the complexity of scales within the work (9), and the contour (angularity) of the melody (5).

Four respondents (2, 4, 9, 13) added that the manner in which music is notated also affects difficulty. Specific items include the clefs used (2, 13), as well as the presence of transition points in the music, including fermatas (4).

Temporal elements that influence the level of difficulty include rhythm (13, 11, 9, 4), tempo (13, 5, 4, 2), the length of a piece (13, 4, 2), note values (4), occurrences of asymmetrical meters and multiple time signatures (4). Four respondents recommend rhythmic complexity as a criterion (4, 9, 11, 13), and noted that the presence of polyrhythms, syncopations, and cross-rhythms contribute to difficulty (13). Likewise, rhythm, in relation to technique (specifically, the coordination of tongue and fingers), also influences difficulty (13). The tempo or speed of a piece of music is suggested by four respondents (2, 4, 5, 13), involving the tempo/speed in relation to keys (5), tempo modulations (4), and tempo in relation to note values (4). Three respondents stated that the total length of a work should also be considered as it affects endurance (2, 4, 13), and Respondent 4 argued that note values are obvious indicators of difficulty level, referring to the intensity and number of shorter note values (semiquavers, demisemiquavers) or more complex types (triplets etc).

Six respondents (1, 5, 6, 11, 12, 13) suggested criteria that grade the “extra-musical” (12) characteristics, or musical expression – articulation and dynamics. Articulation is recommended by four respondents (1, 6, 11, 13), considering the various articulations (1), changes/alternations (6, 13), and the interplay of all these (6). Furthermore, these should be considered in relation to range, as difficulty performing certain articulations differs over the various ranges, and across pivots (13). The dynamics of a work should also be considered (1, 5, 13), including the different gradations, changes, and their relation to range (13). The style of the music being graded is mentioned as a criterion by four respondents (1, 3, 5, 13). As

⁵⁹ Certain instruments are limited concerning their ability to adjust intonation, and the number of valves on certain types of tubas, further limits accessibility of some notes.

Respondents 5 and 12 noted, it is not the style itself that bears consideration, but the extra-musical characteristics of the style, including ornamentation (5). Respondent 13 explains that classical music is more accessible, whereas modern music contains more “weird stuff”, referring to expressions and ornamentation that adds to the complexity of the work (12).

5.2.9.3 Miscellaneous

Two respondents (5, 11) suggested that the accompaniment or ensemble challenges of a work should be a factor in grading since it influences the difficulty of a work. This includes the difficulty/complexity of the accompaniment itself, along with the coordination of entrances between the soloist and accompanist (5). The pitch and size of tuba for which the piece is written, or used during performance, also influences the level of difficulty (2, 10).

Three respondents observed that rating the difficulty of a work is subjective (10, 8, 3), and is dependent on the selector⁶⁰ (8), and teacher (3). Other suggestions include that the criteria should be designed with the South African context in mind (12), should be based on the needs of the (researcher’s) students (12), and should cover “everything” (10).

5.2.10 How did you, or how would you decide which materials to include and exclude in your syllabus?

Responses are categorised into themes: decision-making factors, considerations, and essentials to include.

⁶⁰ The selector refers to the end user that may include the student or teacher.

Decision-making factors	Considerations	Essentials to include
<ul style="list-style-type: none"> • Lecturer's experience, preference, background and research • Recommendations from peers • New repertoire and trends • Existing syllabi 	<ul style="list-style-type: none"> • Flexibility • Development of musicianship • Technical development • Accountability/self reliance • Time constraints 	<ul style="list-style-type: none"> • Standard repertoire • Materials used on regular basis

Figure 59: Question 10 themes and subthemes

5.2.10.1 Decision-making factors

The first decision-making factor is the lecturer's own experience, denoting experience in general (4, 5, 8, 11), as a performer (2, 3, 5, 6, 7, 8), and as a teacher (3, 8). Respondents also mentioned lecturer recommendations by peers (4, 9, 10, 12, 13), research (4, 5, 6) and their own background (3) as factors.

In addition, materials are also included based on peer recommendations (4, 8, 10, 12), consulting or building on existing syllabi (2, 4, 6, 8, 10, 12), and the worth/value of materials – referring to their importance (10, 12), quality (8, 12), pedagogical value (5, 6), “musical depth” and “richness of experience” (4). Some respondents stressed the importance of including new/trending materials (2, 4, 6, 7, 8, 10).

5.2.10.2 Considerations

Respondents also stated that only materials that included certain characteristics ought to be considered as suitable for selection. These works should cover a variety of styles, tempi, and registers (8, 10, 13), and there should be some flexibility (2, 8, 12). Furthermore, the materials should be balanced regarding what is mandated and voluntary (8), display a variety of styles (12), and include both new and standard repertoire (12).

The decision regarding which materials are suitable should also be driven by students' development including the development of musicianship (1, 2, 12), technique (1) and self-efficiency/accountability (2, 12, 13). Finally, the choice of materials should consider factors

relating to the time available to students (8), such as programme length (4, 8), and the number of lessons each student receives (4).

5.2.10.3 Essentials to include

Respondents concluded that syllabi should contain two essential items. Firstly, the materials should include and consider the international standard repertoire as the core (3, 7), as regards solo repertoire (10), studies/etudes (8), and standard orchestral excerpts (8). Secondly, syllabi should include materials that students will play in their careers on a regular basis (1, 2, 12, 13).

5.2.11 Can you name any other syllabi that you are aware of for tuba performance studies that cater for university level tuba studies?

Of the thirteen respondents, eight indicated that they were not familiar with any other syllabi that could cater for university level study (1, 3, 4, 5, 6, 7, 9, 12). Certain respondents, however, provided recommendations for further inquiry including existing syllabi, individuals/institutions, and countries/regions.

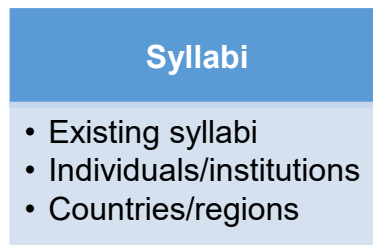


Figure 60: Question 10 theme and subthemes

5.2.11.1 Existing syllabi

Existing syllabi mentioned by respondents are external examination boards syllabi including the ABRSM (1, 9, 10 and 13), Trinity College London (1, 4, 5 and 13), UNISA (1), and the Royal Conservatory (7). Other syllabi include those of Cambridge International (4 and 13), the Independent Examinations Board (13), and the International Baccalaureate Programme (4, 13).

5.2.11.2 Individuals/institutions mentioned

Some respondents (2, 6, 7, 12 and 13) recommended certain individuals and organisations as points of departure for further research for university tuba study. The majority of these recommendations are for lecturers/organisations from the United States.

Table 26: Individual/Intuition recommendations of syllabi

1.	Donald Little	University of North Texas	2, 12
2.	Daniel Perantoni	Indiana University	2, 12
3.	Itai Agmon	Israel Philharmonic	13
4.	Chris Olka	Cincinnati Symphony Orchestra	13
5.	Michael Lind	Royal Academy of Music, Stockholm	7
6.	David Zerkel	University of Georgia, Athens	6
7.	Joe Skillen	Louisiana State University	2
8.	Kevin Wass	Texas Technological University	2
9.	Michael Moore	Emory University	2
10.	John Stevens	University of Wisconsin, Madison	2
11.	Velvet Brown	Pennsylvania State University	2
12.	Floyd Cooley/Scott Tegge	De Paul University	8
13.	Kenneth Amis	New England Conservatory	8

5.2.11.3 Countries/regions

Instead of naming specific syllabi, some respondents suggested geographical areas for further investigation. These areas included Europe (1, 13), the United Kingdom (10), Norway (13), Hungary (13), Scandinavia (7), and Japan (13).

5.2.12 Can you elaborate on your experiences (if any) with them, and their limitations/strengths for university level?

The responses to this question were dependent on answers provided in question 11. Responses gathered were either not applicable, or respondents provided their experiences with existing syllabi.

Not applicable	Experiences
<ul style="list-style-type: none"> • No responses • Recommended syllabi/individuals 	<ul style="list-style-type: none"> • Experiences with existing syllabi • Traits of a good syllabus

Figure 61: Question 11 themes and subthemes

Respondents 2, 5, 6 and 9 did not know of any other syllabi and therefore no responses were forthcoming in this section. Two respondents (11, 12) recommended syllabi/individuals for further research, but also had no experience with these syllabi. Five respondents (1, 4, 8, 10, 13) provided invaluable insight in answering the question. It should be noted that the latter five respondents adhere to (or are familiar with) the conservatory-style approach and subscribe to the same definition of a syllabus – a prescribed list of pieces similar to the graded music examination syllabus.

Their responses are categorised into the following two subcategories: experiences with existing syllabi, and the traits of a good syllabus.

5.2.13 Experiences with existing syllabi

The experiences of the above-mentioned five respondents (1, 4, 8, 10, 13) regarding the graded music examination- and university syllabi were both positive and negative. The graded music examination syllabi were regarded as beneficial or useful (1) as they provided an exemplary system (10). A particular benefit mentioned was the standardisation of levels at certain points (13). Institutions that incorporate the graded examination syllabi into their programmes presume that students at the same year/level would be at approximately the same level (for instance, a first-year student would play at the Grade 7 level).

Respondent 10 opined that a certain well-known graded examination syllabus was outdated, and not representative of the development of the tuba repertoire or pedagogy. Another respondent also felt that the limitation of the graded examination syllabus is that it does not “make a musician” (13); the reason given was that a syllabus was a list of pieces and technical work and could not effectively address aspects (such as fundamentals) that produced a holistic musician.

5.2.14 Traits of a good syllabus

The first trait of a syllabus should be guided by the fact that there are many different types of syllabi (8), and it is not a “one size fits all” scenario (4, 8) – in other words, a syllabus cannot be designed by one institution and implemented in another. The reason for this is that there are too many variables (student levels, academic programmes, academic philosophies etc.), and this would create many problems (4). A good syllabus should therefore be personalised to the environment (4), matching current student levels (4), student career choices (8, 13), teacher vision/philosophy (8, 13), academic demands (4), and programme timing and duration (4).

A syllabus should also strive for balance in two areas. The first is that there should be a balance between standard repertoire and new/current repertoire. While standard repertoire has educational value, current repertoire accurately represents the state of repertoire and pedagogical development. Secondly, not only should the repertoire be graded, but within the specific year/grade levels, a syllabus should include different levels of works (13) to cater for different levels of students (4). A good syllabus should also demonstrate a level of flexibility – including materials that are both mandated and optional (8).

5.3 Document analysis

Below I provide the reader with the results of the analysis of the documents I considered supplementary to the interview questions, in the hope of answering the research questions. The proposed syllabus, which is one ultimate aim of this study, would use the respondent suggestions, and the results of the document analysis as the basis for the proposed syllabus.

5.3.1 Institutional syllabi (documents)

During the data collection process, 66 institutional documents were collected representing eight countries including South Africa (4), Germany (1), Austria (2), the United States of America (41), Canada (1), New Zealand (2), Australia (1), Argentina (1), England (3), Ireland (1), and international graded examination syllabi (9). The categorisation of documents per country is provided below.

The specific type of documents collected include institutional documents (42), solo repertoire lists (10), graded examination syllabi (9), and other documents including module guides (3), a

course outline (1) and a module overview (1). Table 27 is an exposition of the different sources found (comprehensive results are available in Addendum 34).

Table 27: Summarised analysis of document contents

1. Non-pedagogical items	n=66	%
Non-pedagogical items including course objectives, course codes, contact details, marking (grading) method, and examination information	50	78
2. Pedagogy		
a. Technique		
Scale requirement	44	67
Technical and musical goals	38	58
Scales list	32	49
Sight-reading	25	38
Quick study	4	6
Tunes in different keys (transposition)	4	6
Scales-based exercises	3	5
b. Repertoire (Applied) studies		
Study and etude requirements	42	64
Specific study/etude books mentioned (required and suggested)	42	64
Solo repertoire requirements	36	54
Orchestral excerpt study	35	53
Solo repertoire list	32	48
Band excerpt study	14	21
Graded list of excerpts	12	18
c. Pedagogical course materials		
Required/suggested materials	37	56
Lists required/recommended method books	27	41
Lists recommended/required texts	24	36
d. Other		
Ensemble participation requirements	30	46
Practice information	29	44
Chamber music	17	26
Listening requirement	12	18
2 nd instrument option	5	8
2 nd instrument repertoire suggestions	2	3
2 nd instrument excerpt suggestions	2	3
Listening suggestions provided	5	8

The contents of the institutional syllabi fall into two categories: namely, non-pedagogical items, and pedagogical items. While the non-pedagogical items are integral to the proper functioning and organisation of syllabi, their examination lies beyond the scope of this study. Therefore, only the items related to pedagogy will be discussed here.

The pedagogical items encompass aspects related to the development of proper tuba technique, repertoire studies, and miscellaneous items. It is understandable that the most

frequently mentioned aspect is the requirement for scales, as these are not only one of the building blocks of music but also have many other benefits for tuba players. Although less than half of the documents included a scales list, this is not to say that there is no list used, as the list could conceivably be found as part of another document or prescribed in another manner (including during individual lessons). It is concerning that some technical items considered vital skills for tuba players (sight reading and tunes/transposition) received the least mention.

It is no surprise that study/etude requirements were the most frequently cited items in the second sub-category, 'repertoire study'. After all, it is through studies/etudes that musicians learn a new skill (technical and/or musical), or perfect an older one. These abilities are then transferred to other repertoire items, notably solo repertoire, and excerpt study. To the same extent, documents included a listing of specific study/etude books, and this gives students an idea of the books they should acquire timeously. The researcher is of the opinion that it would make good sense to include specific studies instead of collections (as with the graded examinations), since there are varying levels of studies in one collection.

Most of the documents noted a solo repertoire requirement for the module, and orchestral excerpt study is mentioned at approximately the same rate. Since it is a given that any practical module involves solo repertoire study, there is probably no need to mention it in the syllabi, and this could explain the lower number of citations. Just under half the documents included a solo repertoire list, and again, there are two probable reasons for the lower number of citations here. Firstly, other lists/sources are consulted for solo repertoire; secondly, solo repertoire is chosen according to other factors (such as the capabilities of individual students). It is interesting to note that orchestral excerpts study is mentioned more than is the study of band excerpts, considering that there are more career possibilities for tuba players in bands than in orchestras worldwide. The lower number of citations of either aspect may be due to a combination of the following factors. One possibility is that excerpt study forms part of the tuba performance studies module in some institutions and were as result was not specifically mentioned by some respondents. Another scenario is that other lists are used for assigning excerpts (including audition lists). Finally, excerpt study might be assessed as additional content.

The results indicated that just over half the documents have a suggested/recommended materials component, but very few name the actual materials. A possible reason for this is that 'materials' could also include study/etude collections or repertoire, or that these are also

prescribed in a different way. An interesting observation is that many of the items required for the development of a musician are listed in less than half the documents (this includes ensemble participation, practice information, listening requirements/suggestions, and chamber music/ensemble participation).

5.3.2 Repertoire list analysis

The second type of documents collected included repertoire lists, and the purpose of examination of these lists was to determine what specific materials and sources were prescribed for tuba performance studies in existing repertoire lists. The investigation looked at 81 documents including graded examination syllabi (9), USA public school and ensemble music lists (2), university/institutional documents (57), theses and dissertations (1), books (6), and articles (6). Of the 57 university/institutional documents, 49 were taken from the syllabus analysis above since they included materials and sources. Since the remaining eight documents only included non-pedagogical information, they were excluded from this section. The breakdown of the included and excluded documents is provided in

Table 28 and Table 29 respectively.

Table 28: Breakdown of included documents

1. Document types (49)	
Graded examination syllabi	9
University syllabi	31
Repertoire lists	9
2. Contents of documents from institutional analysis⁶¹	
Study/etude collections	42
Instructional method books	27
Recommended/required texts	24
Solo repertoire list	32

Table 29: List of excluded documents

Excluded documents (17)	Number of documents
University syllabi	12
University module guides	3
University module overview	1
University course outline	1

⁶¹ The documents include either or combination of study/excerpt collections, method books, required/recommended texts, or solo repertoire listing

The goal of this analysis was the determination of whether the lists contained any of the pedagogical items (solo repertoire, studies/etudes, methods, and books) in common; if so, the frequency of these occurrences would also be established. In addition, the grade level of the studies and solo repertoire would also be considered in order to identify the most common items per university year/level. These findings would guide the recommendations in the proposed syllabus.

A detailed list of all the sources consulted may be found in Addendum 41. From these documents, I gleaned invaluable information regarding materials for the courses/modules and they are each treated separately below according to the following categories: solo repertoire, solo repertoire collections, study/etude collections, and other sources. Comprehensive results of the analysis are available in Addendum 34.

Each of the entries in the analysis includes the full work title, composer surname, publisher, date, medium, number of 'hits'⁶² and the institution/s or documents that the work is mentioned in. Some documents included a grade level, and this appears in the brackets next to the name of the institution.

5.3.2.1 Solo repertoire

The solo repertoire category is limited to repertoire wherein the tuba is considered the main melodic voice, with or without accompaniment. It should be noted that there were also a few entries that included tuba in other combinations; an example is David Lang's "*are you experienced?*" for tuba, narrator, and ensemble (1990). The 78 sources consulted collectively identified 815 solo repertoire entries. Of all the works collected, 615 (75%) are original works for tuba and were written in a 70-year period between 1950 and 2020, and the remainder (200 pieces) are transcriptions of works for other instruments.

Table 30 represents an abridged version of the solo repertoire analysis and includes all the solo repertoire entries (33) that received a minimum of fifteen hits. Of these, twenty-eight were for tuba and accompaniment, and five for unaccompanied tuba.

Table 30: Summarised results of solo repertoire

	Work	Composer/Arranger	Hits
1.	Sonata	Hindemith	50
2.	Concerto	Vaughan Williams	44

⁶² 'Hits' refers to the total number of times an item was mentioned across all the documents.

3.	Concerto	Gregson	39
4.	Suite No. 1 "Effie"	Wilder	35
5.	Serenade No. 12	Persichetti	34
6.	Fantasy	Arnold	31
7.	Capriccio	Penderecki	30
8.	Suite	Hartley	29
9.	Andante and Rondo from Concerto for Double Bass	Capuzzi/Catelinet	27
10.	Suite	Jacob	23
11.	Three Miniatures	Plog	23
12.	Sonata No. 1	Wilder	23
13.	Suite	Haddad	22
14.	Encounters II	Kraft	22
15.	Concerto in one movement	Lebedev	22
16.	Air and Bouree	Bach/Bell	21
17.	Six studies in English Folksong	Vaughan Williams/Wagner	20
18.	Introduction and Dance	Barat	19
19.	Alarum	Gregson	19
20.	Sonatina	Stevens	19
21.	Concertino	Bozza	18
22.	Sonata No. 5	Marcello/Little	18
23.	Sonata	Salzedo	18
24.	Sonata (Concerto)	Broughton	17
25.	Sonatina	Glass	17
26.	Sonatina	Koetsier	17
27.	Waltz for Mippy	Bernstein	16
28.	Tuba Concerto	Williams, J	16
29.	Sonata	Beversdorf	15
30.	Concertino	Frackenpohl	15
31.	Concerto	Heiden	15
32.	Concertino	Koetsier	15
33.	Parable XXII	Persichetti	15

It is interesting to note that all the works from the list above constitute part of what one would consider 'standard' repertoire for the tuba. The top five works with the most hits are:

1. Hindemith: *Sonata for tuba and piano* (50)
2. Vaughan Williams: *Concerto in F minor* (44),
3. Gregson: *Concerto* (39)
4. Wilder: *Suite No. 1 "Effie"* (35)
5. Persichetti: *Serenade No. 12* (34).

5.3.2.2 Solo repertoire collections

Few solo collections (24) were listed in the documents, probably because such collections are often for beginner and intermediate level instruction, and not university level study. Table 31 lists all the solo collections named in the documents.

Table 31: Solo repertoire collections list

	Collection	Composer/arranger	Hits
1.	Classics for Tuba	Woods/Death	12
2.	First Solos for the Tuba Player	Wekselblatt	10
3.	Tuber Music	Proctor	9
4.	Concert and Contest Collection	Voxman	6
5.	Solo Sounds for Tuba Volume 1 Level 3-5	Hankinson/Lamb	5
6.	Take the Tube	Proctor	4
7.	Tuba Solos Vol. 1	Fletcher	4
8.	Classic Festival Solos, Vol. 1	Lamb	3
9.	Solos for the Tuba Player	Wekselblatt	3
10.	Thomas Wyss Tuba Collection	Wyss	3
11.	Master Solos, Intermediate Level	Perantoni	2
12.	NYSSMA Folio for tuba	Various	2
13.	Classic Festival Solos, Vol. 2	Lamb	1
14.	Concerto Grosso	Nelybel	1
15.	Concert Music for Tuba	Graham	1
16.	Kendor Master Repertoire	Saltzman/Strommen	1
17.	Let's Face the Music for Tuba	Iveson	1
18.	Medici Masterworks	Gershenfeld	1
19.	Nine Miniatures for Eb Tuba	Gregson/Ridgeon	1
20.	Savoire Faire for tuba	Mowat	1
21.	Soloist Folio	Various	1
22.	The Music of Jim Parker	Parker	1
23.	Tubaphonics	Marcelino	1
24.	Tuba Solos Level 1	n/a	1

The five solo collections with the highest frequency of recurrence are:

1. Woods/Death: *Classics for Tuba* (12)
2. Weksselblatt: *First Solos for the Tuba Player* (10)
3. Proctor: *Tuber Music* (9)
4. Voxman: *Concert and Contest Collection* (6)
5. Hankinson/Lamb: *Solo Sound for Tuba Vol. 1* (5)

5.3.2.3 Study/etude collections

There were considerably fewer study/etude collections (154) mentioned in the documents compared with solo repertoire. Among them, 72% are collections originally written for the tuba,

whilst the remaining 18% are collections borrowed from other instruments. Tuba players either play the etudes in the original edition with some modification (for example, playing an octave below written pitch in the case of trombone music), or play transcriptions or arrangements of these works (an example is Ralph Sauer's *Unaccompanied Suites for Tuba* is an arrangement of the cello suites by Bach). The summarised results (Table 32) includes thirty-six collections, and since there were far less entries than solo repertoire, the minimum number of hits for this list is five.

Table 32: Study/etude books with most hits

	Composer/arranger	Study collection	Hits
1.	Blazevich	Studies for BB \flat tuba Vol. 1 ⁶³	51
2.	Bordogni/Rochut	Melodious Etudes for Trombone (Vol. 1 and 2)	24
3.	Bordogni/Roberts	43 Bel Canto Studies	23
4.	Tyrell	40 advanced studies	23
5.	Vasiliev	24 melodious studies	20
6.	Blazevich	Studies for BB \flat tuba (Vol. 2 specifically)	18
7.	Bordogni/Jacobs	Legato Etudes for Tuba	16
8.	Bourgeois	Fantasy Pieces for Tuba	15
9.	Bourgeois	Per Tuba ad Astra	14
10.	Pilafian and Sheridan	Brass Gym	12
11.	Kopprasch	60 Selected Studies	11
12.	Grigoriev	78 Etudes	10
13.	Muczynski	Impromptus for Solo Tuba	10
14.	Bach/Bixby	Bach for Tuba Vol. 1 and 2	9
15.	Cimera	73 Advanced Studies	9
16.	Fink	Studies in Legato for Bass Trombone and Tuba	9
17.	Getchell	Practical studies Vol. 1	9
18.	Kuehn	60 Musical Studies vol 1 and 2	9
19.	Bell	William Bell Daily Routines for Tuba	8
20.	Charlier	32 Etudes de perfectionnement pour Trombone en si bémol a 4 pistons ou tuba	8
21.	Clarke/Gordon/Hickman	Technical Studies for Bass Clef Instruments	8
22.	Getchell	Practical studies Vol. 2	8
23.	Ostrander	Shifting Meter Studies	8
24.	Pilafian and Sheridan	Breathing Gym	8
25.	Green	Tuba Eurhythmics	7
26.	Bai Lin	Lip Flexibilities	6
27.	Concone/Shoemaker	Legato Etudes	6
28.	Knaub	Progressive Techniques for Tuba	6
29.	Kuehn	28 Advanced studies	7
30.	Little	Embouchure builder	6
31.	Maenz	Zwölf specialstudien for tuba	6

⁶³ Some sources did not specifically state which volume, so those are combined with all entries for 'volume 1'.

32.	Sear	Etudes for tuba	6
33.	McKenzie	Rhythms of Life	5
34.	Pares	Scales	5
35.	Schlossberg	Daily Drills and Technical studies (trombone)	5
36.	Snedecor	Low etudes	5

The five study/etude collections with the most hits include:

1. Blazevich: *70 Studies for the BB^b tuba* (51)
2. Bordogni/Rochut: *Melodious Etudes for Trombone Vol 1 and 2* (24),
3. Bordogni/Roberts: *43 Bel Canto Studies* (23),
4. Tyrell: *40 Advanced Etudes* (23)
5. Snedecor: *Low Etudes* (23).

It is worth noting that it is was not possible to determine the grade level of all solo repertoire and study/etude collections from the sources – this is because not all items were graded, and any grading systems that were used were not consistent. The variances among the systems used included different tier grading – some of the graded examination syllabi used an eight-grade system (University of West London), whereas others used a 10-level system (Royal Conservatory Music Development Programme. Other sources used more general gradations (beginner to advanced), while others were very specific (per year of university study). A comprehensive discussion of grading systems may be found in 2.3 Grading systems.

5.3.2.4 Other

Other items that were also identified include texts and methods and the condensed list is represented in Table 33. These items totalled 115 entries, of which 67 were books, and the remaining 48 were method books.

Table 33: List of books and methods from sources

	Composer/arranger	Text/Method	Hits
1.	Arban/Young	Arban Complete Method for Tuba	26
2.	Arban/Randall & Mantia	Famous Method for Slide and Valve Trombone and Baritone	9
3.	Hovey	Rubank elementary method	8
4.	Little	Practical Hints on Playing the Tuba	7
5.	Beeler	Method Vol. 1 and 2	6
6.	Fredericksen	Arnold Jacobs: Song and Wind	6
7.	Morris & Perantoni	The Guide to Tuba Repertoire	6
8.	Bell	Foundation to Tuba Playing	5
9.	Arban/Bell	Method for Tuba	4

10.	Arban/Prescott	First and Second Year Authentic Excerpts from the Celebrated Arban's Complete Method for E ^b and BB ^b Tuba	4
11.	Bobo	Mastering the Tuba	4
12.	Gower & Voxman	Rubank Advanced method vol. 1 and 2	4
13.	Morris & Goldstein	The Tuba Source Book	4
14.	Stewart	Arnold Jacobs: the Legacy of a Master	4

5.3.2.4.1 Method books

Of the 48 method books, the majority (37) are specifically written for the tuba, while there are fewer for general instrumental instruction (8) and brass (3). Most of the books were published in the years 1970-1999 (22), while sixteen were published in 1930-1939, and eight in 2000-2020 (8). Most of the method books from the list are over twenty years old; however, there are possible reasons for this. Firstly, newer editions of the methods might be available, but were not discovered during the research. Secondly, many method books are not listed, or might be listed other documents (such as brass method course syllabi). Lastly, it is possible that the current method books are adequate, and newer editions are unnecessary. Nonetheless, the list below represents the five most frequently mentioned method books, with the number of hits in brackets:

1. Arban/Young: *Complete Method for Tuba* (26)
2. Arban/Randal & Mantia: *Arban's Famous Method for Trombone*⁶⁴ (9)
3. Hovey: *Rubank Elementary Method for Tuba* (8)
4. Beeler: *Method for the BB^b tuba* Vol. 1 and 2 (6),
5. Bell: *Foundation to Tuba Playing* (5)

5.3.2.4.2 Books

The 67 books cited in the documents include general brass-related books (27), tuba-related books (19), general music books (14), and a few non-music books (7). Most of these were published in the 1970-1999 period (44), with fewer from 2000-2020 (18) and 1930-1939 (5). Although this is a slightly better statistic than method books, it is unfortunate that most of the sources mentioned in the documents are more than twenty years old. The five most frequently cited books are listed below with the number of hits in brackets:

1. Little: *Practical Hints on Playing the Tuba* (7),
2. Fredericksen: *Arnold Jacobs Song and Wind* (6),

⁶⁴ Common practice on the tuba is to play the trombone line an octave lower.

3. Morris & Perantoni: *Guide to Tuba Repertoire* (6).
4. Stewart: *Arnold Jacobs: the Legacy of a Master* (4),
5. Morris & Edward Goldstein: *The Tuba Source Book* (4)

5.4 Conclusion

5.4.1 Interview analysis

Respondents provided valuable insight into the questions posed. The themes and sub-themes are grouped under the following headings: general responses, grading systems, and guidelines for syllabus compilation.

5.4.1.1 General responses

The responses revealed that despite the various definitions and document types, syllabi all serve three essential purposes: they contain course information, outline expectations, and clarify assessment details, and list repertoire and pedagogy requirements. Since it is the tuba lecturers compile most syllabi, they have the autonomy to steer students in the right direction in terms of their deficiencies and career prospects, with little influence from other parties, who might not have the necessary experience.

The respondents expressed a variety of opinions regarding their experiences with existing syllabi for university tuba studies. Not only did they commend the use of syllabi in the fulfilling the three purposes above (as integral to the course) but considered them particularly necessary in institutions where the lecturer is not a tuba specialist; this is in order to prevent discrepancies that might arise from the assignment of inappropriate repertoire. Furthermore, the variety inherent in some syllabi allows for customisation to student needs and careers.

Apart from repertoire limitations, some syllabi may potentially be detrimental to student development. For instance, the repertoire prescribed in some syllabi is limited to performance mediums, contradicting the notion of holistic development. Some syllabi limit vocational training by excluding orchestra/band excerpt study, which are two of the main careers available to tuba players internationally. Forcing students to play only the prescribed repertoire for the respective year/level, or repertoire that does not match the student capabilities, may be harmful to that student's progress – repertoire that is too easy can result in over-confidence, while repertoire

that is too difficult may have the opposite effect, resulting in a lack of confidence (and perhaps poor marks). Another limitation mentioned included how some syllabi do not cater for all students but are written with a particular level and type (background and education) of student in mind.

The graded music examinations syllabi were noted as syllabi that could be used for university study. Although “exemplary” and praised by certain respondents for achieving levels of standardisation at certain points (invaluable in the South African context), others alluded to their limitations – that they are outdated and therefore not an accurate representation of materials currently available for tuba (furthermore, that they lack materials pertaining to the development of the fundamentals of tuba playing). Respondents who did not express an opinion on the matter were not familiar with any other syllabi but provided names of individuals/organisations and countries as possible sources for further inquiry. A valid argument raised in the interviews is that a syllabus cannot simply be “cut and pasted” (merely transferred) in its entirety from one institution to another because there are too many variables (such as student levels, course requirements, and students’ career choices).

5.4.1.2 Grading systems

In their capacity as specialist tuba teachers and performers, respondents were able to provide criteria suggestions for the grading system from unique and informed perspectives. These comprised technical, musical, and theoretical criteria and some descriptors, and their suggestions (Addendum 43) will be considered when designing the grading system.

Just over half of the respondents were familiar with systems currently in use to grade tuba repertoire - the *Guide to Tuba Repertoire*, *ITEA Standard Literature List*, and the *ITEA Journal New Materials Review* – while single mentions were made of wind band repertoire grading systems and other syllabi/repertoire lists. Some respondents expressed their view regarding the limitations of existing grading systems in general; these included the inability of these systems to grade repertoire accurately (under-grading), the inability to grade the musical aspects of repertoire, and discrepancies in the difficulty of works within the same level classification.

Other respondents motivated their support for grading systems, stating that users will be able to better determine the grade level of repertoire, and that the more information available about specific repertoire pieces is particularly useful to non-specialist tuba teachers. By contrast,

some respondents felt that an art form such as music is impossible to grade, and that the perfect system could therefore not exist. A small number of respondents disputed the validity of grading systems because of their own unique approaches to teaching and argued that good teachers should have the ability to match student needs with repertoire.

5.4.1.3 Guidelines for syllabus compilation

The process of designing a syllabus design should take into account a number of considerations. One is student development, comprising the development of performance skills, job skills, repertoire study, and overcoming deficiencies. Another, dependent on many variables includes student background/history, major choice, career goals, the module (goals and outcomes), time (practice time, length of programme), and the standards (minimum programme standards within a particular institution, across the country, and how these compare with international standards).

After having examined the respondents' answers in this section, I was able to discern a number of features that characterise a good syllabus. An overarching concept, which respondents noted many times, was that of flexibility. It was mentioned as an exemplary trait of existing syllabi, as a virtue for the basis of future syllabus compilation, as well as a factor in deciding genre and material choice. In addition to flexibility, syllabi should be progressive, relevant, current, and appealing.

The respondents also provided invaluable guidelines on practical (music) aspects that ought to be covered in the syllabus. The repertoire chosen should be useful to students in their future careers, and should demonstrate a variety of styles, tempi, and registers. Factors to be considered when choosing syllabus materials should include the lecturer's background, preference, and experience, as well as peer recommendations, consultation with other syllabi, building on existing syllabi, the pedagogical value of the materials, and the musical and technical development of the student. It is further recommended that there should be a balance between mandated and voluntary materials, and syllabi should include new/trending materials, all within the allotted course timeframe.

Respondents stated that there should also be a core focus area when discussing the genres of the materials, with some adaptability to student levels, deficiencies, career choice, and interests. Additionally, syllabi should emphasise a broad, holistic development comprising various genres in order to achieve well-rounded status. The motivation was that broader

development would better prepare students for the unpredictable and limited career choices currently available to tuba players. Aside from Western Art Music, respondents included Light Music (jazz, pop, rock) as specific genres. Surprisingly, an overwhelming number of respondents mentioned jazz, advising the acquisition of basic jazz skills (improvisation, bass line formation, and stylistic playing), as some repertoire demands it.

As per the respondent's guidelines, a syllabus should address the development of classical technique, applicable to all specialisations. This comprises the tuba-specific techniques (such as breathing and tone production) as well as general technical aspects common to all instruments (such as scales and sight-reading). A syllabus should also address the musical skills encompassing the development of instrument-specific musicianship, lyricism, and interpretation. As platforms for the acquisition and development of these skills, respondents advocated the study and performance of etudes from basic and varied etude collections (both technical and melodic/lyrical), and appropriate warmup/daily routine exercises. These should be presented as a graded and progressive list per year/level and should encompass etudes that students will use in their own playing and teaching.

The syllabus should also address repertoire development, encompassing solo repertoire, chamber music, and large ensemble (band/orchestra) excerpt study. In general, it was advised that international standard repertoire should constitute the core studies in each of those mediums. Solo repertoire should be prescribed as a graded list; furthermore, this list should include standard as well as newer repertoire, and should include other forms (electronic music and music by local composers). In order that the student may trace the development of tuba repertoire and gain an understanding of ornamentation, repertoire should represent the different style periods (including the transcriptions of historical literature). Solo repertoire study should include both unaccompanied and accompanied repertoire, since playing with accompaniment benefits musicianship, time, rhythm, and intonation. The specific repertoire included in the list should include repertoire that students regularly use in their own playing and teaching.

The inclusion of wind band and orchestral excerpts is a necessity as part of vocational training. These should also appear as a graded list of excerpts according to year/level, with some flexibility to adjust content according to student's envisioned career. The inclusion of chamber music was considered essential to tuba player development, and some respondents further recommended that it should carry a significant weighting as within the syllabus assessment

structure (however, this depends upon whether the study of excerpts is offered as a separate module/course by the institution). The specific chamber music ensembles mentioned include the brass quintet, tuba/euphonium quartet, ten-piece brass ensemble, and non-standard/contemporary ensembles.

An important part of the syllabus is being able to grade repertoire and classify these pieces as specific to certain levels/years of university tuba study. Although some respondents value grading systems and their purpose, the current systems have their limitations, and cannot grade repertoire for university tuba study in the South African context. A new or revised system is needed, and the criteria and descriptors provided by respondents can be used in the new system.

The interview process was informative and successful. The respondents were forthcoming in providing responses to the questions, and the data received was abundant and invaluable to the research study. They were generous in terms of providing information of the inner workings of their studios, departments, and most importantly, their syllabi. Although these existing syllabi are generally held in high regard, respondents acknowledged the limitations of these syllabi; they seemed to conclude that coupled with differing variables, these syllabi cannot be transferred from one institution to another. Similarly, neither can the extant syllabi of international universities and the graded music examinations be superimposed upon other institutions without modification. Therefore, a comprehensive syllabus for the South African context is still required. This syllabus should be tailored to the unique needs of the institution. I will use the guidelines provided by respondents as well as the findings of the document analysis to compile the proposed syllabus.

5.4.2 Document analysis

Tuba-related literature has witnessed enormous growth since the first major solo repertoire pieces appeared in the 1950s, and evidence of this is provided in the 815 solo repertoire entries from 1950-2020 detailed in the sources. It is also commendable that the majority of solo repertoire and study/etude collections from these lists are original works for tuba, complemented by the common practice of borrowing literature from other instruments. Solo repertoire transcriptions are necessary to educate and allow the performance of historical masterworks on tuba, while borrowed studies/etudes satisfy the need for correcting deficiencies in the mastering of technique and musicality. Tuba methods are preferred to other methods,

while general brass books are mentioned more than tuba books. If we consider that the majority of solo repertoire, study collections, and texts mentioned in the documents are over twenty years old, the conclusion reached is that there is still a need and much room for new, original literature for the tuba.

Although many sources used grading systems to grade the difficulty of solo repertoire and study/etude collections, there is no standardised system used across all syllabi/repertoire lists. This means that because there are so many systems used, one cannot reliably determine the level of a work. Without a standardised system, it is also impossible to judge how many times a certain work is graded at a particular level. Furthermore, most of the grade descriptions used are either a numbered level/tier system, or simply state the level (beginner-advanced); the purposes of this study, on the other hand, require that repertoire and study/etude collections are graded per year of university study.

As not all sources used grading systems in the compilation of syllabi, nor was there a standardised system and level classification used across all repertoire lists and syllabi, it was impossible to determine the 20 most common repertoire pieces per level to be included in the proposed syllabus. However, a system is still required for the needs of this study as a prerequisite for grading repertoire per year of university study.

In the next chapter I will provide a discussion regarding how I answered each of the research questions drawing from the interviews and the literature consulted. Thereafter, I will provide further recommendations, and integrate the study with the five performance recitals.

CHAPTER 6: DISCUSSION, CONCLUSION, RECOMMENDATIONS, AND INTEGRATION

In this chapter, the reader is provided with the conclusion to this research project. This comprises an overview of the study, followed by the answers to the research questions. Recommendations are then offered for the compilation of performance studies syllabi. Thereafter follows an explanation of how the thesis was integrated with the performance recitals as a requirement of the degree, an outline of the limitations to the study, and a provision of suggestions for further study. Finally, the study is concluded with a series of closing remarks.

6.1 Overview of the study

As a tuba lecturer, I was expected to design a university tuba performance studies syllabus. Having concluded the preliminary investigation into existing syllabi, I determined that South Africa lacked a complete, comprehensive syllabus for tuba students. In order to realise the aims and objectives of the study and answer the research questions, interviews were conducted with a sampled population of national and international tuba lecturers. This was complemented by an extensive literature review examining available literature on syllabi for tuba performance studies, syllabus compilation, and systems/tools for grading repertoire.

The information collected was sufficient to enable me to effectively answer the research questions. In so doing, I provided what I believe to be a viable approach to the compilation of university tuba performance studies syllabi. This includes a suggested framework for the syllabus, examples of possible administrative and practical (music) components for inclusion in syllabi, and advice regarding the determination of the content and the extent of these components. As an accurate and comprehensive system for the grading of solo repertoire for the purposes of university study proved to be unavailable, I designed a grading system myself. This system merges existing systems, the information gathered from the literature and respondent interviews, and my own ideas as an experienced tubist and lecturer.

6.2 Addressing the research questions

In this section of the chapter, the answers to the research sub-questions are dealt with first, followed by the main research question.

6.2.1 To what extent do local/international university tuba teachers utilise syllabi to prescribe materials to their students?

After an examination of the data in comparison with the literature study, it was concluded that syllabi prescribe materials in exhaustive detail. Syllabi provide the necessary bibliographical information of all prescribed materials (for example, author, publisher, and date). I concur with Boye's (2015) statement that the collected syllabi and participant responses (2, 6, 7, 8, 11, 12, 13⁶⁵) provide a distinction between recommended and required materials.

Another point of concurrence between Boye (2015) and the data (see 5.3; and respondents 7, 11, 13) is that syllabi ought to provide details of how materials might be obtained (for example, suggesting specific vendors or libraries). Although respondents did not elaborate much regarding this, the collected documents provided various examples. These varied from the simple provision of hyperlinks to printed music score websites as exemplified by the *Tuba Repertoire and Study Materials of the Carnegie Mellon University School of Music* (Knox, 2018), to a more collaborative approach that actively involved the participation of music publishers. Companies such as *Just for Brass* have studio pages, which include lists of the materials which lecturers require or recommend students purchase for the module. If a specific password is used on this website, students will also receive a 10% discount on their purchase. The links to the studio pages are provided in the syllabi, and websites also list the studio pages by teacher. Two syllabi that follow this method are the University of Arizona (Swoboda, 2015), and the University of Memphis (Sanders, 2015).

Gillis (2003) states that performance studies syllabi should include solo repertoire. However, the examination of the data revealed that syllabi additionally prescribe studies/etudes, excerpt study, pedagogical methods, and other books. These materials and the extent to which syllabi prescribe them are discussed in the following sections.

65 The numbers in brackets represent the respondents.

6.2.2 What are the components, design process, and limitations of these syllabi?

The answer to this sub-question is threefold and addresses the components, design process, and limitations of existing syllabi.

6.2.2.1 Components

From the investigation into the different components of syllabi, two general trends emerged – administrative information, and information pertaining the practical portion of tuba performance studies.

6.2.2.1.1 Administrative components

A comprehensive list of possible syllabus components surfaced during the research project, including those found in the literature (University of South Florida, 2021; Johnson, 2014; Parkes and Harris, 2002; Cohen, Millis and O' Brien, 2008; Woolcock, 2006; Gillis, 2003), discovered through the analysis of the collected syllabi (Chapter 5), as well as those identified by respondents (Chapter 5). Coble, Picard, and Riviere (2014) explain that syllabi consist of five basic components (general information, materials, requirements, policies, schedule), as well as more comprehensive versions that are merely expansions. The data regarding the administrative components of course syllabi varies and is inconsistent. Due to the large number of components discovered, administrative components found in the literature and the responses of the participants have been tabulated in Addendum 40. The organisation of the components is based on the headings provided by Coble, Picard, and Riviere (2014), and constitute recommendations of the essential administrative components for course syllabi. Of the components listed, some can be customised to music performance, as demonstrated by Gillis (2003). These were comprehensively discussed in Chapter 5, and include the course overview, goals and objectives, evaluation, materials, and activities.

6.2.2.1.2 Music-related administrative components

In addition to those already mentioned, the respondents listed additional administrative components they considered unique to performance studies syllabi; these included the following:

- Studio class/departmental information (1, 2, 5, 6, 8, 11, 12)

- Ensemble participation regulations (2, 7, 8, 11)
- Performance-orientated assessments
 - Jury/examination information (2, 5, 7, 11, 12)
 - Recital information (2, 5, 7, 13)
 - Accompaniment (7, 11, 12, 13)
- Practicing guidelines (1, 7, 8, 11, 12, 13)
- Performance information
 - Departmental performances (11)
 - Off-campus performances (7, 11)
- Lessons
 - Lesson-specific information (8)
 - Absences and rescheduling (11)
 - Feedback (12)
 - Lesson plans (8)

In addition to these, the data also outlined comprehensive details regarding the practical components of performance studies syllabi.

6.2.2.1.3 Aspects pertaining to musical components of syllabi

All of the collected syllabi and responses from participants contained information pertaining to the practical (music) portion of syllabi. These components are categorised as repertoire study, technique, and texts.

6.2.2.1.3.1 Repertoire study

Both the contents of collected documents and the participant data includes repertoire study as an integral component. According to the data, repertoire study includes solo repertoire, etudes/studies, and excerpt study. Each of these is discussed briefly below.

6.2.2.1.3.1.1 *Solo repertoire*

According to the data, the most important repertoire study sub-component of tuba performance studies is solo repertoire development. From the 81 collected documents (see Addendum 35), it followed that of solo repertoire, texts, studies/etudes, repertoire collections, and pedagogical method books, the largest component was solo repertoire. The repertoire lists altogether contained a total of 815 original works and transcriptions (Chapter 5: 5.3.2), and these included accompanied and unaccompanied works from both the Western art- and light music genres.

Participant responses echoed this opinion regarding the prime importance of solo repertoire, and it was mentioned as an integral component of more than half of their syllabi (1, 5, 6, 8, 10, 11, 13). In addition to the documents analysed and participant responses, Gillis (2003) argued that solo repertoire is an integral part of performance studies and should therefore be included in syllabi.

The data revealed that this sub-component consists of a listing of the repertoire requirements for the module (36 of 66; respondents 7, 10, 11), guidelines pertaining to the amount of repertoire to be performed at each level (1, 13), the difficulty and style of the repertoire (1, 6, 9), and the inclusion of a repertoire list (32 of 66; 3, 5, 8, 9). A discussion of the way in which these lists are organised and the extent to which syllabi prescribe solo repertoire has already been discussed in the answering of sub-question 1 above. For more comprehensive information on the solo repertoire component of existing documents, see Chapter 5: (5.3.2.1).

6.2.2.1.3.1.2 Studies/etudes

Another sub-component of repertoire studies concerns melodic and technical studies/etudes. These were considered integral components since they received the second most entries (157) in the analysis of repertoire lists (Addendum 35-38), were categorised as an integral part of a syllabus by participants (2, 5, 7, 8, 10, 11, 12, 13), and constituted a component in 42 of 66 institutional documents (Addendum 34). My inference is that the technical studies component addresses the development of certain techniques, which equips students with the required technical facility to perform repertoire pieces. By contrast, the melodic studies/etudes address the development of students' musical skills. Respondents explained that these musical skills include the development of instrumental musicianship (11), phrasing (4, 7), lyricism (4), and the use of imagination (7).

Students and teachers choose studies/etudes for assessment in performance studies modules. In the majority of cases, students and teachers tended to choose a graded list of study/collections in its entirety, rather than choosing specific studies from these collections. This was confirmed across all data types, including participant responses (2, 5, 10, 11, 12), the analysis of institutional document contents (42 of 66), and the analysis of repertoire lists (154 collections in total). Of the 154 collections, most were originally written for tuba (111), and the rest borrowed from other instruments (43). Examples of etude collections from other instruments that appear in the repertoire list analysis include the *Daily exercises: for trumpet* (Verzari, 1989), *A Singing Approach to the Trombone* (Vernon, 1995), and *Studies for the*

Bassoon (Weissenborn, 1952). Further information pertaining to prescribed study/etudes can be viewed in 6.2 (sub-question 2).

The analysis of the collected documents from the literature demonstrated that the topics addressed in these etude collections include scales and arpeggios, daily routines, lip flexibilities, clef studies, lyricism, legato, sight reading, scales-based exercises, intonation, articulation, speed reading, rhythm, dynamics, embouchure development, tone development, and breathing. It is interesting to note that many of these items align with the aspects of the well-rounded tuba player (see Addendum 42), as well as the criteria in the proposed grading system (Addendum 5). Participant responses showed an alignment with the topics covered by the collected study/etude collections, including sight reading (1, 13), scales-based exercises (7), quick studies (1, 7, 13), as well as transposition and clef studies (8). Further information regarding the manner in which these studies/etudes are presented and the extent to which they are prescribed in syllabi are provided above in answering Research Question 1.

6.2.2.1.3.1.3 Excerpt study

An interesting observation made in the course of the study was that of the limited inclusion of excerpt study as a component of existing syllabi. The data showed that excerpt study was mentioned as a component of existing syllabi by only four respondents (8, 10, 11, 13). On the other hand, the literature demonstrated that 35 of 66 of the collected institutional documents addressed orchestral excerpt study, whereas only 14 of 66 documents addressed band excerpts study. As alluded to previously, this concern could be misrepresented in the case of excerpt study being included in the module, while not appearing in the syllabus prescriptions.

In my view, this component should receive significantly greater priority in the tuba performance studies syllabi, since band- and orchestral posts are the two major full-time careers available to tuba players globally. The reason for this stance is that the standard literature for bands and orchestras studied or performed at university level often comprise the very excerpts required in auditions and for these performance positions. Excerpt study at university level better prepares students to perform them, thus improving their chances of playing better auditions (and indeed, more effective in their jobs). Furthermore, it is my experience that the methods used to learn the excerpts are beneficial, they can be applied to learn any repertoire. The extent to which existing syllabi present and prescribe excerpts has already been discussed in answering Research Question 1.

6.2.2.1.3.2 Technique

A significant portion of both respondents' syllabi and the published literature was devoted to matters pertaining to instrumental technique. Thus, technique constitutes a major component of performance studies modules and their syllabi. A comparison of the technical components from the data is provided in Table 34.

Table 34: Aspects of technique as mentioned in the literature and by respondents

Technical aspects		Respondent	Literature
1.	Lists specific technical goals	x	✓
2.	Scales and arpeggios	✓	✓
3.	Scale requirements	x	✓
4.	Scales list per year	✓	✓
5.	Scales-based exercises	✓	✓
6.	Fundamentals	✓	x
7.	Includes quick studies and sight reading	✓	✓
8.	Includes transposition and clef studies	✓	✓
9.	Includes tunes in different keys	✓	✓

As one respondent noted, classical technique should be addressed regardless of the student's chosen major (13). From the data, the sub-components of technique include scales and arpeggios, fundamentals, and texts.

6.2.2.1.3.2.1 Scales and Arpeggios

In my opinion, two of the most fundamental components of technical development are scales and arpeggios, and this is reflected in all the data collected in this study. As many as 44 of 66 institutional documents, and six respondents (1, 2, 7, 8, 11, 13) laid out the specific scale requirements for the module, however, the information pertaining to scales varies across all data. For example, while two respondents (1, 7) make cursory reference to scales, other respondents (2, 8, 11, 13) and a number of analysed documents (32 of 66) prefer more detailed approaches and include a graded list of scales per year/level.

A few syllabi meticulously detail the manner in which scales should be performed. The graded examination syllabi, for instance (The Associated Board of the Royal Schools of Music, 2013; Trinity College London, 2018), list scales for the required assessments, tempos, ranges, articulations, dynamics, musical examples, and divide these scales according to the four different pitches of tuba available (B^b, E^b, C, or F). While some may consider this a little overzealous, there are many benefits to such an approach. In my view, this sort of scale list provides students with unambiguous clarity, with little margin for error in preparation and

performance. This sort of detail is also advised in syllabus compilation by Woolcock (2006), explaining that syllabi ought to pre-empt and answer any foreseeable questions. If the list of prescribed scales is vague in these details, there is a danger that error or confusion may result.

In my opinion, students benefit from performing scales and arpeggios at varying dynamic and articulation levels, as this familiarises them with the diverse parameters available to them; additionally, it makes the arduous task of listening to (or playing) scales a more exciting one. Familiarity with the diverse articulation and dynamic types also results in students paying more attention to detail of these aspects in the performance of repertoire. This in turn makes for a more enjoyable performance (audience and performer), and possibly a better grade in assessments. Another aspect is tempo: the prescription of scale tempos for assessment obliges students to practice and perform scales in strict time. This, in turn, encourages the maintenance of a steady pulse, which is beneficial to solo and ensemble performance.

Although the majority of the syllabi under discussion included the standard classical scale forms for tuba, some also prescribe more advanced types not found in the Western tradition; these include scales in major thirds (Salas, 2018), scales in minor thirds (Jarvis, 2013), scales in fourths (Royal Conservatory of Music Development Program, 2003), augmented arpeggios (Trinity College London, 2018), broken chords (David, 2015), and modes (Little, 2016).

6.2.2.1.3.2.2 Fundamentals

Common to all data types was the concept of the fundamentals of tuba performance and their related goals/objectives. Drawing from the 'Aspects of the Well-Rounded Tuba Player' outlined in Chapter 3, we may extract the 'playing' aspects and establish that a list of fundamentals for tuba performance includes sound and tone, the embouchure, breathing, posture and balance, articulation and tonguing, extended techniques, endurance, finger dexterity and lip flexibility, range, and intonation. Although only one respondent (11) referred to 'fundamentals' as a component of existing syllabi, a number of collected documents (38 of 66) listed technical (and musical) goals in their syllabi, as exemplified by Little (2016) and Hersey (2019). For 1st year students (concentration study), Little (2016) provides clear instructions to students, advising that they be able to "demonstrate competence in acceptable tone production and articulation skills, and basic embouchure development". Hersey (2019) provides a listing of fundamentals that students should focus on per semester including posture, breathing, articulations, tension relief, and intonation.

I believe that this sort of guidance is beneficial to player development as it provides greater clarity regarding the type of fundamentals which need to be addressed in specific years of study. If syllabi can list the fundamentals, along with the extent that each should be mastered, it will provide students with a clear plan of development of fundamentals for the duration of their studies. Clear and unambiguous guidance of this type will give students the confidence and independence to plan and diligently work on these aspects and reach their goals for the respective semester/year/programme.

6.2.2.1.3.3 Texts

In this context, texts refer to both books and pedagogical method books. Several authors state that a list of the required and recommended texts is essential for inclusion in university course syllabi (Gillis, 2003; Parkes and Harris, 2002; Woolcock, 2006). This opinion was reinforced in the course of my analysis of the repertoire lists and institutional documents. The repertoire lists showed that texts received the third most sources (115) consisting of 67 books, and 48 method books; institutional documents contained a listing of recommended/required methods (27 of 66) and books (24 of 66). There was limited consensus among the participant responses regarding texts, since it was only mentioned by two respondents (3, 5) during the interviews. For a further analysis of the texts prescribed across the data, refer to the answering of sub-question 1 above.

There are several reasons why I agree with the standpoint that texts are an integral component of syllabi. In the case of pedagogical method books, I believe that these are and should be an essential element of every musician's library, from the first instrumental lessons, to the achievement of professional musician status. These methods provide both perspectives and methodological approaches to many aspects of playing, including those of learning a new instrument or perfecting a technical or musical skill. Having a few different methods from different viewpoints can foster the understanding that there might exist numerous methods of solving the same issue. Cohen et al. (2008) intimate that this is an important step in the prescription of course materials in the syllabus compilation process. As every student is unique, it is often the case that the same problem might require a range of different solutions to suit the individual in question.

Regarding texts, my experience leads me to support an argument by Gillis (2003), who explains that learning should not take place solely in the practice room. I believe that progress is maximised through good experiences regarding ensemble performance, good teaching, a

learning and supportive environment (and support system), peer input, and personal research. Texts are essential tools for this type of research, as they can provide a resource for the solving of performance issues, the expansion of expert knowledge, the keeping abreast of trends (for example, repertoire in instrumental journals), aid in the improvement of one's own performing/teaching as well as other skills necessary at the university level, such as reading and comprehension.

6.2.2.2 Syllabus compilation process

As stated in Chapter 2, information regarding the process of syllabus compilation from the literature is limited; however, suggestions may be extracted from the data. Sources such as Woolcock (2006) and Cohen et al. (2008) provide different approaches to the syllabus compilation process for the general university course syllabus and can serve as the basic framework for syllabus compilation (especially with regards to the administrative components). Further choices regarding the administrative components of syllabi are available from the data garnered from the literature and participant responses in 6.2.2.1. The article by Gillis (2003) also includes advice on how the university course syllabus administrative components may be adapted to music performance studies⁶⁶, while an examination of the participants' responses may suggest administrative components specific to performance studies syllabi (6.2.2.1.2). One of the important components of performance studies syllabi is the practical (music) components.

6.2.2.2.1 Practical components

Lecturers are frequently afforded complete autonomy in the practical component section of performance studies syllabi. For this reason, there was significantly more information garnered from respondents regarding the compilation of these components in tuba performance studies syllabi, in comparison with that from the other data forms. The core of this information regards the recommended and required materials.

6.2.2.2.1.1 Required and recommended materials

Both the literature (37 of 66) and a number of respondents (2, 6, 7, 8, 11, 12, 13) indicated that syllabi should include the recommended/required materials for the course; according to the collected documents, these include solo repertoire (32 of 66), pedagogical method books (27

⁶⁶ For a comprehensive discussion on the three sources, readers can consult Chapter 2 of this thesis.

of 66), and studies/etudes (42 of 66). Boye (2015) advises that there be a clear distinction between required and recommended materials; this opinion was echoed by respondents (2, 6, 7, 8, 11, 12, 13). Respondent 5 specifically mentioned this with regard to texts, and Respondent 8 with regard to solo repertoire.

6.2.2.2.1.1 Graded repertoire

Both a number of respondents (1, 2, 5, 7, 8, 10, 11, 12, 13) and 13 examined university syllabi (Haubrich, 2015; David, 2015; Cosentino, 2011; Jarvis, 2013; Stein, 2018; University Mozarteum Salzburg, 2012; University of Performing Arts Graz, 2014) concur that the repertoire development portion of the materials component of syllabi (solo repertoire, study collections, and excerpts, and method books) ought to be graded into specific levels. Information pertaining to the grading systems are discussed in 6.2.3.

6.2.2.2.1.2 Lecturer influence over materials

A significant factor in the syllabus compilation process for performance studies modules is the selection of materials for inclusion in syllabi. The data demonstrated that this decision ought only to be taken after a process of consultation with a variety of sources. However, all data types intimated that principal authority for the final decision in this regard should be invested in the lecturer. This was mentioned by Cohen et al. (2008), while respondents explained that this included their individual experiences (1, 5, 8, 11) as performers (2, 3, 5, 6, 7, 8) and teachers (3,8), their own research (4,5,6), and background (3).

6.2.2.2.1.3 Student-centered materials

In addition to the information provided across data forms, respondents provided supplementary suggestions that were not directly evident in the literature. These suggestions have been discussed in Chapter 5 and will not be repeated here.

6.2.2.2.1.4 Other factors that influence material choice

Occasionally, materials are included based on other factors such as their pedagogical value, peer/colleague recommendations (Respondents 4, 9, 10, 12, 13), and those that build on other syllabi (2, 4, 6, 8, 10, 12).

6.2.2.2.1.5 Genre of materials

The data provided good advice regarding the choice of genre of materials for tuba performance studies syllabi. According to several respondents (1, 2, 5, 6, 7, 9, 10, 13) as well as the analysis

of the collected repertoire lists (Addendum 35-38) the materials should cover both Western Art (classical) and light music (jazz, pop, and rock). Respondent 3 explained that due to the limited career choices available to tuba players, various genres should be encompassed in the syllabi materials, which would contribute to achieving well-rounded status.

The inclusion of jazz as a genre of materials in syllabi was recommended by respondents (1, 2, 5, 6, 7, 9, 13); however, very few (only 9 of the 815 pieces³) entries in the collected repertoire lists for tuba were written in the jazz style or contain jazz elements. Of these nine pieces (listed below), at least two of them are considered standard tuba repertoire (*Sonata No. 1* by Alec Wilder and the *Tuba Concerto* by Gregson).

1. Bozza, Eugene: *New Orleans*
2. Crockett, Edgar: *Mystique*
3. Danburg, Russel: *Sonatina*
4. Gregson, Edward: *Concerto*
5. Jackman, Andrew: *Three Tuba Rags*
6. Mancini, Henry (Richards): *The Pink Panther*
7. Szentpali, Roland: *Pearls III*
8. Wilder, Alec: *Sonata No. 1* and 2

In addition to the repertoire pieces, there were also seven recommended jazz books, and at least one jazz study collection among the documents analysed (Addendum 38). It should also be noted that there exists a very large number of works for brass chamber- (for example, brass quintet) and ensemble music (for example, orchestra or band) written in the jazz style or with jazz elements. As the tuba is an integral part of these ensembles which frequently perform jazz works, it is my opinion that the mastery of basic jazz styles be a requirement for present-day tuba players.

6.2.2.3 Limitations of existing syllabi

There were indeed limitations to existing syllabi evident from data, most of which were alluded to by respondents. Each of these limitations is addressed in the following section.

6.2.2.3.1 Non-transferability

As there are already numerous tuba performance studies syllabi globally available, and these can merely be transferred from one institution to another, the question of the necessity of designing yet another will inevitably arise. Investigating the transferability of the collected documents was impossible, mainly because syllabi are designed by an institution for that institution. However, Respondents 4 and 8 stated that syllabi are not 'one size fits all'

documents. Their argument is that there are simply too many variables, such as differing student levels across the country and even within institutions.

6.2.2.3.2 Geared towards a specific type of student

Respondents and the institutional documents collected showed that certain syllabi were tailored to a specific type of student or career path. One of the negative observations (that may also be considered a limitation) made by Respondents 1 and 10 regarding existing syllabi (Chapter 5 [5.2.5.1]) was that syllabi are designed with a specific type of student (background, level) in mind. For instance, an institution might design a syllabus that assumes that students have had a very good pre-university music education, played for a number of years, received quality private tuition from a tuba specialist, and achieved an advanced technical and musical proficiency level. However, if a student that does not fit this profile enters the same programme, he/she will be at a disadvantage.

Respondent 10, in referring to a particular syllabus, notes that one of its limitations is that students are confined to only the prescribed repertoire lists, with no deviation allowed; he argues that this is potentially detrimental, especially when a student is not yet at the required technical/musical level to perform the listed works. In my opinion, not only could this negatively affect the student's assessment mark but could result in the manifestation of bad habits. For instance, if the prescribed works contain notes higher than the range of the student's ability, there is the danger that he/she might push more on the mouthpiece or exert excessive mouthpiece pressure on the lips that could result in unnecessary tension.

6.2.2.3.3 Limitations in vocational training

One of the primary objectives of a university education is the provision of students with the vocational training relevant to the careers available within their study field. The tuba student is no exception. Currently there are two full-time careers as performing artists available to tuba players – the wind band (two examples are defence force- and police bands) and the symphony orchestra, although with perhaps fewer positions available in the latter case. It is then logical to assume that all tuba performance studies syllabi should address band- and orchestral excerpts study; however, both respondents and the collected syllabi indicated that the manner in which several existing syllabi address the aspect of vocational training is somewhat inadequate.

Of the thirteen respondents, five did not mention orchestral- or band excerpts as components addressed in their syllabi, while one respondent (10) explained that a number of syllabi restrict students to certain career paths by only prescribing (for instance) solo literature, or orchestral excerpts study and omitting band excerpt study. Among the institutional documents collected, 31 of 66 did not include orchestral excerpts, whereas 52 of 66 did not include band excerpt study.

The exclusion (or limited inclusion) of orchestral and band excerpt study disadvantages students, who would lack the necessary basic training required of these careers. It would certainly negatively affect their chances of playing successful auditions.

6.2.2.3.4 Outdated syllabi

One significant limitation of existing syllabi was alluded to solely during the respondent interviews. Respondent 10 argued that in his experience, one of the graded examinations syllabi was outdated and the repertoire prescribed not representative of the tuba repertoire currently available. I discovered that this problem was not limited to that specific syllabus but applied to the collected repertoire lists as well (see Table 35).

Table 35: Breakdown of materials between 2000-2021

Material type	Number of items listed across repertoire lists	Years 2000-2021
Solo repertoire	815	126
Studies and etudes	152	41
Solo repertoire collections	24	2
Pedagogical method books	48	8
Books	67	18

6.2.2.3.5 Solo Repertoire limitations

A number of limitations regarding the solo literature components of existing syllabi came to light in both the literature and the participant responses. The first limitation revealed during the analysis of collected documents (as discussed in Answering Research Sub question 1) revealed that only 32 of 66 contained a repertoire list. Similarly, only 7 of 13 respondents (1, 5, 6, 8, 10, 11, 12) included repertoire lists in their syllabi. In my opinion, a repertoire list is an integral part of a performance studies syllabus, as it gives teachers and students a wide selection of works of approximately the same difficulty level. This translates to a higher number of repertoire options available within student levels for assessments, as well as greater flexibility.

The second limitation regarding solo repertoire is the inconsistency of graded repertoire lists across the data. From the collected documents, 32 of 66 contained repertoire lists, and 23 of the 32 contained graded repertoire lists, organised according to various systems (alphabetically, for example, or following the as discussion in 6.2.1, organised by era). In the case of respondents, the results differed slightly – of the 7 respondents' syllabi that included repertoire lists (1, 5, 6, 8, 10, 11, 12), only three (1, 5, 10) were graded.

I believe that a graded list of repertoire is essential for performance studies syllabi for a number of reasons. Such a list will allow students/teachers to immediately gauge the difficulty level of a specific work they are playing/prescribing to students to ensure that the work is neither too easy nor too difficult. Furthermore, if these lists are progressive, users will also be able to plan their repertoire goals for the programme with greater ease, and students will be able to judge the level that they need to attain by certain points in their training. This is especially helpful to students who may be unaware of the high standard of repertoire that will be studied in the programme. The earlier they realise and understand the standards required at various points in their academic careers, the sooner they can put measures in place that will guarantee their reaching that level. Alternatively, if a student realises that the expectations exceed his/her abilities, they could consider following another career path.

In addition to the limitations common to the literature, Respondent 5 mentioned a valid limitation regarding transcriptions, which in my opinion should be an integral part of tuba repertoire lists. In his view, his own syllabus lacked easier, high quality tuba transcriptions of historical literature. The reason is that such transcriptions are more accessible to university students than many actual tuba pieces, the majority of which are very difficult contemporary works.

Other limitations mentioned by respondents were specific to their experiences with the graded examination syllabi. Respondent 1 explained that there was a discrepancy in the number of repertoire choices available for tuba when compared with other instruments. The literature proved that this was true to a certain extent. Perusing the current graded examination syllabi (ABRSM, TCL and UNISA), there were cases where the amount of repertoire for strings was double that of the number of works for tuba.

Respondent 1 referred to certain 'standard' works, which he/she held in high esteem, that were not included in recent editions of a particular syllabus. I made similar observations in my experience with the graded examinations and international university syllabi. For example, the *Concertino for Tuba* by Rolf Wilhelm and the *Concerto* by Bruce Broughton have become

standard pieces of the tuba repertoire; however, neither work is included in any of the graded examination syllabi.

6.2.2.3.6 Technique limitations

One observation commonly shared between several respondents and the literature is that certain technical aspects crucial to player development are either not addressed in existing syllabi (or if they are addressed, the scope is inadequate). This was partly evident in the contents pertaining to technique from the analysis of the collected documents (Table 36).

Table 36: Extract from summarised analysis of collected documents

Technique	Of 66
Scale requirements	44
Technical and musical goals	38
Scales list	32
Sight-reading	25
Quick study	4
Tunes in different keys (transposition)	4
Scales-based exercises	3

Although scales are an indispensable component of music studies, some syllabi either do not have any such requirements, or do not explicitly list them (22 of 66); these include certain graded examinations diploma syllabi (The Associated Board of the Royal Schools of Music, 2019; Trinity College London, 2018), as well as some university syllabi (University Mozarteum Salzburg, 2012; Hosmer, 2018; Czubachowski, 2012; Brown, 2017). Furthermore, it appears that various syllabi (34 of 66) do not include a scales list per level. As a syllabus is a point of reference and a permanent record (Parkes and Harris, 2002), a scales list would provide students with a reference of the necessary scales for upcoming assessments. This would no doubt improve student preparation and accountability.

In certain graded examination syllabi (The Associated Board of the Royal Schools of Music, 2019; David, 2015; Trinity College London, 2018), scales are no longer required beyond a certain level. It is my belief that technical development should be a requirement at all levels of university study, as the mastery of technique provides facility in musical expression. If all the standard forms of scales have already been exhausted, teachers can look to existing syllabi for inspiration on more advanced scale types and include scales in major thirds (Salas, 2018), minor thirds (Jarvis, 2013), fourths (Royal Conservatory of Music Development Program, 2003), and broken chords (David, 2015).

One limitation I have experienced with a particular graded examination syllabus is that the number of keys from which scales are prescribed are extremely limited. This denies students the crucial skill of learning to perform in all keys, which may create difficulties for students within the first years of study.

In addition to the abovementioned points, another limitation is that very few syllabi addressed items that are crucial to player development. These syllabi included sight reading (25 of 66), quick studies (4 of 66), and the transposition of melodies into various keys (4 of 66).

6.2.2.3.7 Texts

Respondents mentioned no limitations regarding texts during the interviews; however, some were found in the analysis of the collected documents. The research found that among the institutional documents, there was a significant number of collected documents (42 of 66) that did not refer to any texts. In my opinion, certain texts are vital to player development, as they cover topics relating to discipline-specific knowledge that may not be covered in subjects.

6.2.2.3.8 Not representative

The topic of the discrepancy in the representation of genders and certain population groups was identified as a limitation exclusively in respondent interviews; this was chiefly in regard to composers whose works are prescribed in syllabi. Respondent 6 argued that the works included in syllabi are representative neither of female composers, nor minorities, nor composers of colour. Perusing the results of the contents of repertoire lists (Addendum 35-38) proves the inequality, since the composers are predominantly white males. In addition to the previously-mentioned underrepresentation of those demographic categories, there is only single South African composer whose music appears in the UNISA tuba syllabus. During my investigations into solo repertoire by South African composers for the purposes of this thesis, and for inclusion in the performance recitals, I discovered the reason for this – except for three works by Allan Stephenson, there are no published solo repertoire pieces by South African composers currently in existence.

6.2.3 What tools/systems/rubrics are currently available for grading repertoire for specific years of university tuba study?

Although grading systems are widely used to grade repertoire by the syllabus compilers, music publishers, composers, printed music outlets, and in books, little is known about these systems

and the method of grading repertoire. Apart from the availability of some of these systems, there does not seem to be any literature that discusses or compares the different systems available.

The crux of the sub-question was the determination of whether there were grading systems available that might be used in syllabus compilation for university tuba performance studies modules. From the literature and participant responses, ten grading systems were discovered, including those specifically for solo tuba repertoire (3⁶⁷), systems used by the graded examination syllabi (2), those for other brass instruments (2), other instrument groups (2), and one for ensembles (1).

6.2.3.1 Existing tuba repertoire grading systems

Regarding the grading systems specific to tuba repertoire, the same systems that were discovered during the literature review were familiar to respondents. These include the *Guide to the Tuba Repertoire* (Morris and Perantoni, 2006; respondents 7, 9, 11), and the *ITEA Official Standard Literature List* (ITEA, 2019; respondents 1, 3), and the ITEA Journal Review for New Materials from their quarterly journal. These systems were discussed in some detail in Chapter 2.

6.2.3.2 Graded examination syllabi grading systems

Both the participant responses (2, 10) and the literature (Chapter 2) referred to the graded examination syllabi of the Associated Board of the Royal Schools of Music (The Associated Board of the Royal Schools of Music, 2013), and the Trinity College London (Trinity College London, 2018) as existing grading systems. Although the syllabi do not contain any information regarding the process of grading repertoire, the representatives (Hatt, 2020; Munday, 2016) provided some information about the process and system used to grade repertoire; these have been discussed in Chapter 2 (2.1.3.4 and 2.1.3.5). As these systems were 'confidential' and inaccessible, it was impossible to determine whether or not they were suitable for use in the grading of solo tuba repertoire for university study. The information provided by the representatives was useful and is used in the recommended grading system (Addendum 7).

⁶⁷ The number in brackets here indicates the number of systems and does not refer to the respondent numbers as in the rest of this section of the chapter.

6.2.3.3 Grading systems for other brass instruments

There were grading systems discovered exclusively in the literature for other brass instruments – these are Mead’s *A grading catalogue of selected solo works for solo trombone and piano* (2016) and Alhorn’s *The creation of a skills-based Grading System for Solo Trumpet Repertoire* (2016). Both these systems are discussed in detail in Chapter 2 (2.3.1.3.2 and 2.3.1.3.3), and it was determined that they cannot accurately grade solo tuba repertoire for university study.

There were other systems discovered during the study; however, they were deemed unsuitable as they were designed for ensembles and other instrument groups including wind band repertoire (Respondent 7, Chapter 2: 2.2.1), strings and vocals (2.2.1).

My investigation of the existing systems and responses led me to determine that there was no system that suited to our specific educational context. The limitations I discovered are outlined in Chapter 2 (2.2.1), and additional limitations were provided by respondents. Their reasoning is twofold: firstly, that the existing systems have certain limitations in grading repertoire accurately (2, 3, 4). Respondent 2 stated that these systems merely grade the technical aspects of music, while Respondent 4 opined that the existing systems ‘undergraded’ certain works. Respondent 3 said that that in some cases the grading received was based on other factors, and that certain graded works fall in a grey area between adjacent levels. Secondly, some respondents alluded to certain user limitations (4, 6, 7, 12), such as that the systems were user-specific (4, 6), some suitable for conservatory-type approaches where there are predetermined levels (7), and that not all users may recognise the subtle differences in difficulty between works graded at the same level (12).

6.2.4 What aspects need to be considered when compiling a syllabus for tuba performance studies modules at South African universities?

To a large extent, the main research question will be/has already been answered through the sub-questions above. The conclusion is made that the aspects for consideration in syllabus compilation of tuba performance studies modules at South African universities comprise student backgrounds and interests, student development, vocational training, ensemble training, accessibility, standards, variables, and characteristics.

6.2.4.1 Student Backgrounds

The data showed that the process of syllabus compilation should take into consideration student backgrounds (including student interests), pre-university training, reading ability and ensemble training. There ought to be variety in the choices of materials available in order to accommodate the diversity of student interests. The materials to which students are exposed during their pre-university training should also form a point of important consideration, as is a student's fluency in reading music. Of particular concern in the early years of university study are students who play from memory and cannot read music at all (or can only manage this below the level required for university study). Yet another important factor for consideration is the extent of the students' exposure to ensemble, as the skills learned herein are crucial to player development; the most important of these are ensemble blend, intonation, delineating roles within the ensembles, and exposure to varied materials.

6.2.4.2 Student development

From the data I was able to compile a list of eight components which are crucial for student development. Technical ability is foremost, as it affords students fluency in performance. The development of this component is enabled by the teaching of the fundamentals of tuba performance, as well as general technical aspects (scales, transposition, and sight reading). Providing a list of the specific goals and the extent to which they should be mastered per year are of particular value in performance studies syllabi.

Repertoire study is a significant factor, and is comprised of solo repertoire, studies/etudes, and excerpts study. Lecturers ought to be the principal driving force behind the choices of solo repertoire, with additional assistance provided by peer suggestions, and the use of existing documents. The factors that most effectively drive repertoire choices include having international standard repertoire as the core, coupled with works that vary in tempi, styles, and registers. In addition, consideration should be given to materials that are relevant to their students' careers and to the amount of time available to them.

Studies/etudes must include the essential etudes and should be varied and progressive. Both the melodic and technical types ought to be included, and these should address the fundamentals of tuba performance, general technique, routines (daily and warmup), and touch upon orchestral excerpt and jazz studies. To add more variety and scope, the studies/etudes should include those for other instruments.

Preparation for the ever-changing job market necessitates that emphasis be placed upon a more holistic approach to vocational training, in addition to the two major performance careers as wind band or orchestral musicians. This includes the development of ensemble skills for performers, as well as skills that prepare students for careers as educators or ensemble directors.

6.2.4.3 Standards

The data indicated that there ought to be a consideration in syllabus design for the university entry-level standards, envisioned graduate standards, standards within the institution (across instrument groups), and across the country. Furthermore, an alignment of standards with international institutions can alleviate possible issues for students transferring from local institutions to those abroad.

6.2.4.4 Variables

Respondents mentioned that one of the reasons for the non-transferability of syllabi was the presence of numerous variables that add to their uniqueness. The variables mentioned in the data include the students' background, deficiencies, career training, and specialisation choices. However, the respondents affirmed the necessity for a basic level of competency regardless of specialisation choice; once this grounding has taken root in the initial stages, more specialised vocational training can commence that normally places higher expectations on students pursuing performance as a major. The data additionally alluded to the policies of the institution (disability, marking, student conduct, academic honesty, performances, lessons, and attendance). Other variables that ought to be considered include the programme length, the time available to students, and the goals/outcomes of the module.

6.2.4.5 Characteristics

Characteristics that merit important consideration in the compilation of a syllabus were also apparent in the data; these include flexibility regarding student career choices, levels and deficiencies, and that syllabi ought to be current and relevant.

6.2.4.6 Recommendations for syllabus compilation

A significant portion of the research was devoted to the investigation of aspects for inclusion in a syllabus for performance studies in South African tertiary institutions. The data provided ample information for the provision of a comprehensive list of both administrative and practical components pertaining to the aspects of music.

6.2.4.6.1 Administrative components

The administrative components of a syllabus are unique to every institution. As the focus of the research is primarily concerned with the practical components, the administrative components are provided as examples that could be included in syllabi.

<p>A. Basic course information</p> <ul style="list-style-type: none">- Instructor/presenter details- Course title and code- Venues/locations- Course description or overview- Course goals/objectives/outcomes- Prerequisites and corequisites⁶⁸- NQF levels- Studio class/departmental information- Ensemble participation information
<p>B. Materials</p> <ul style="list-style-type: none">- Required and recommended books- Required and recommended readings/articles- Required equipment (for example, tuba, mouthpieces, metronome, tuner)- Information regarding how materials may be obtained<ul style="list-style-type: none">• Library, online sources• Printed music companies (local, online)• Storage media: (for example, Google Drive)• Sheet music stores/companies (online and physical) where sheet music scores can be obtained as well as studio pages• Important website links
<p>C. Assessment information</p> <ul style="list-style-type: none">- Types- Procedures- Examinations/juries- Recitals- Examination/assignment information- Penalties for late assignments- Evaluation procedures

⁶⁸ Courses or conditions that students need to take or adhere to while taking the module.

<ul style="list-style-type: none"> - Reports
<p>D. Policies</p> <ul style="list-style-type: none"> - Assessment policies - Attendance - Student conduct - Academic honesty - Roles - Expectations - Disability - Accompaniment - Student records - Marking/grading - Weighting - Non-discrimination
<p>E. Course schedule</p> <ul style="list-style-type: none"> - Semester calendar - Assessment schedule - Important dates: <ul style="list-style-type: none"> • Visiting artist residencies • Concerts • Examinations • Tours • Test dates • Assignment due dates
<p>F. Additional information</p> <ul style="list-style-type: none"> - Hyperlinks to important websites such as publisher websites - Practicing guidelines - Information regarding on- and off-campus performances for students - Lessons (feedback and lesson plans) - Information regarding relevant off-campus concerts/recitals

6.2.4.6.2 Practical components

Below are the suggested components for the practical part of a syllabus.

<p>A. Repertoire Development</p> <p>Repertoire development is an important component of performance studies and comprises solo repertoire, studies/etudes, excerpt study [band and orchestra], and where applicable, chamber music/ensemble)</p> <p>In general, the choice of repertoire should be guided by:</p> <ul style="list-style-type: none"> - Student career choices - Holistic development - Lecturer's background and experience - Peer recommendations - Research

- Building on existing syllabi
- Worth/value of materials (importance, quality, pedagogical value, depth and richness of experience, new and trending materials)
- A variety of styles, tempi, registers, balance (between required and recommended materials), and include both new and standard repertoire
- Amount of time available (programme length, lessons, practice time)

1. Solo repertoire development

- State the minimum solo repertoire requirements for the module.
- Guidelines for deciding on solo repertoire inclusions – repertoire should include:
 - A base level of repertoire for personal development, and repertoire that students will use in their teaching
 - International standard repertoire as the core
 - Works from various style periods, including transcriptions of historical literature
 - New music, electronic music, improvisation, works by composers of diverse backgrounds (ethnicity and age), local composers
 - Repertoire should appeal to students
 - Works of varying degrees of difficulty within the same level
 - A list of repertoire that is flexible to student levels, problems
 - Works that consider students' holistic development
- The genre of materials should:
 - Encompass Western Art and light music (if permissible)
 - Have a focus area, however, consider a variety of genres that contributes to a holistic, or generalised view
 - Be flexible or adaptable to career choices, levels, instruments, needs/deficiencies, and interests
 - Include modern/contemporary, as well as electronic/computer and experimental music
 - Include basics in light music (jazz, rock, pop, and local/cultural) for all specialisations
 - Include both accompanied and unaccompanied works
- Solo repertoire should be presented as a graded solo repertoire list
- List full titles of works, or movements, as well as other information including publisher and edition
- The piano is the primary accompaniment instrument; however, there should be some degree of flexibility to play with other instruments or media, as was the case in my recitals
- For many reasons, the recommendation is that the repertoire list for all levels be included in the syllabus for each year. As an example, the list of works that were graded with the proposed system in the suggested format are provided in Addendum 9.

2. Studies/Etudes

- Required etudes or etude books (including editions and publishers)
- Include basic etudes; these should be progressive and stylistically varied
- Etudes that will be used in own playing and teaching
- Recommended etude books (including editions and publishers)
- Technical etudes listed per aspect of technique (dexterity, flexibility, breathing, etc.)
- Include melodic etudes

3. Excerpts

- Basic study of standard wind band and orchestral excerpts for all specialisations, adjusted according to career choice
- Brass band excerpts in applicable areas
- Graded excerpts list per year of study
- Include list of excerpts, and recommended/required excerpt collections
- Include excerpts that students will utilise in their own development and teaching
- Both orchestral and band excerpts (and others) depending on variables
- Number of excerpts dependant on variables (for example, time constraints)
- State the minimum number of excerpts that should be studied per semester/year, as well as how many should be presented per assessment
- Include some guidelines on approach in preparing excerpts including:
 - Listening to three different recordings
 - Recommended recordings (where applicable)
 - List the best orchestras/recordings
- Exact locations of important extracts (where possible)
- Publisher information

4. Chamber music/ensemble

- If not offered as a standalone module, chamber music/ensemble should be an integral component of performance studies
- Include the standard repertoire for the various mediums (where possible) - the brass quintet, tuba/euphonium quartet and ensemble, ten-piece brass ensemble, non-standard ensembles (for example, Dixie bands, New Orleans style)
- If not offered as a standalone module, and ensemble participation is not possible, lecturers should consider including the study of standard chamber music works in a manner similar to excerpts study

B. Technical development

Technical development should comprise scales and arpeggios, technical skills (fundamentals), warmup/daily routine, and other skills/exercises integral to development of the well-rounded tuba player

1. Scales and arpeggios

- List all the required scales and arpeggios
- Include information about range, dynamics, tempo, and format
- Include classical forms as well as the basic jazz scales

2. Technical skills

- As far as possible, list the technical skills and extent to which they should be mastered
- These comprise the fundamental skills including sound/tone, embouchure development, breathing, tonguing, articulation, dynamic levels, flexibility, dexterity, vibrato, buzzing, posture, extended techniques, range, intonation, rhythm and tempo, and ornamentation
- Well-rounded tuba player aspects as explained in Chapter 3 (3.1-3.14)

3. Warmup/Daily routine

- The warmup should include the internationally accepted basic warmup routines and introduce students to trends from many different perspectives; this will enable each student to develop a personal daily warmup routine

- The daily routine should encompass studies aligned with the technical skills required per level.

4. Other exercises/skills

- These should encompass other technical aspects integral to the development of the well-rounded player, including:
 - Scales-based exercises
 - Quick studies
 - Sight reading
 - Transposition and clef studies
 - Tunes in different keys
 - Self-study

Additional information

- Minimum practice requirements
- Suggestions regarding good practice methods
- Grievance procedures

The syllabus proposed above takes the form of mere suggestions based upon the literature review, the collected data, and some of my own ideas. The lecturers or syllabus compilers are free to decide on the content of their syllabi.

6.3 Integration with performance recitals

The PhD in performance offered by the University of Free State requires that the five performance recitals be integrated with and culminate in the thesis. The performances (see Addendum 44) took place in the period 2016-2019 in the Odeion Concert Hall (University of Free State). To fulfil this requirement, the integration was achieved in four ways, each detailed in the following section.

6.3.1 Selection of works for recitals

The wide selection of works performed in the recitals (Addendum 44) represent examples of pieces that may be included in university tuba performance studies syllabi to fulfil the requirements of the module. In choosing repertoire for performance in my recitals, I perused many of the collected repertoire lists. Some of the selected works represent the 'standard' repertoire, which respondents advised should form the core of a syllabus; this was so determined because of the frequency of the appearance of these pieces across the collected repertoire lists (Table 37).

Table 37: Examples of standard works performed at recitals

	Composer	Work	No. of hits
1.	Hindemith	Sonata	50
2.	Newton	Capriccio	15
3.	Vaughan Williams	Concerto	44
4.	Wilder	Suite No. 1 'Effie'	36
5.	Wilder	Sonata No. 1	24
6.	Plog	Three Miniatures	24
7.	Glass	Sonatina	17
8.	Koetsier	Sonatina	17

In addition to the standard media of (tuba and piano, and unaccompanied tuba), I included works on the programme that featured the tuba with other forms of accompaniment (organ, marimba, and computer). In my view, this constitutes a good demonstration of the versatility of the player, presents the tuba in various non-standard contexts, adds more variety to recital programmes, and opens further avenues for performance (for example, tuba and organ played in churches).

6.3.2 Aspects of the well-rounded tuba player

Many of the works I performed in recital employed aspects of the well-rounded tuba player (see Chapter 3). The following is a list of examples (Table 38).

Table 38: Examples of recital repertoire used as examples of aspects of the well-rounded tuba player

Composer	Work	Aspect
Corwell	Aboriginal Voices	Extended techniques: - Multiphonics - Flutter tonguing - Wind sounds - Pitch bends
Glass	Sonatina	Rhythm and tempo: - multimeter
Hindemith	Sonata	Extended techniques: - Sympathetic vibrations Rhythm and tempo: - multimeter
Madsen	Sonata	Breathing
Penn	Capriccio	Rhythm and tempo: - ratios
Ellerby	Concertino	Range: - Pedal range
Vaughan Williams	Concerto	Dynamics: - Inflection Ornamentation:

		- tremolo
Wilhelm	Concertino	Range: - Middle-high range
Wilder	Effie the Elephant Suite	Flexibility and dexterity: - Lip trill
Wilder	Sonata No. 1	Rhythm and tempo: - Jazz styles, swing

6.3.3 Grading of existing works

As previously alluded to, a crucial step in the process of syllabus compilation is the grading of solo repertoire using a grading system. I graded sixteen works (including three movements) that were performed at the recitals to exemplify this process. The grading score sheets for these works are provided in Addendum 10 - 25, and the works graded include the following:

1. Bach: *Partita in A minor*
2. Ellerby: *Concerto*
3. Hindemith: *Sonata*
4. Hindemith: *Sonata*, 2nd movement
5. Lebedev: *Concert Allegro*
6. Corwell: *Aboriginal Voices*
7. Madsen: *Sonata*
8. Ndodana-Breen⁶⁹: *Credoscapes*
9. Schumann: *Fantasiestücke*
10. Wilder: *Effie Suite* (complete)
11. Wilder: *Effie Suite: Effie goes Folk Dancing*
12. Vaughan Williams: *Romanza* from *Concerto*
13. Vaughan Williams: *Concerto*
14. Penn: *Capriccio for Tuba and Marimba*
15. Stephenson: *Suite for Solo Tuba*⁶⁹
16. Stockton: *Scherzo*⁶⁹

As a matter of interest, three of these works represent works by South African composers. Of the three, the *Credoscapes* by Ndodana-Breen is the only one that was graded previously for the UNISA brass syllabus (University of South Africa, 2012).

6.3.4 Programme notes

A requirement of the University of Free State PhD recitals is that each recital should have comprehensive programme notes. The programme notes provide contextual information about the works and their composers, and where applicable, connect the recitals with the thesis topic.

⁶⁹ The works listed under this footnote are original South African works for tuba, and except for *Credoscapes* none were graded.

I researched and compiled the programme notes for each programme, and these are provided in Addendum 45-49.

6.4 Limitations of the study

Although every effort was taken to avoid any limitations in this study, certain limitations surfaced regarding the repertoire analysis, the proposed grading system, the graded repertoire from the recitals, and the collected documents.

In consultation with statistician Professor Robert Schall from the University of Free State, one of the original aims of the study was to analyse the solo repertoire from the collected syllabi. This involved the determination of whether there were repertoire pieces common across the syllabi; if so, their frequency and recommended level were noted and recorded. The 20 most frequent works per year/level would then constitute the graded repertoire list in my proposed syllabus. Through this examination of the syllabi, I realised the impossibility of this, as there were inconsistencies regarding the method used to grade repertoire (or even a lack of any such method), and the level classifications used (i.e., 1st year-2nd year; Grade 1-10; Easy-Advanced). Although I successfully determined the frequency of the works (Addendum 35), they could not be grouped according to specific years/levels because the grading system (or lack thereof) and level classifications were different. Therefore, it was not possible to constitute the graded repertoire list as planned.

Although every effort was made to make the grading system as accurate as possible, I agree with one respondent who pointed out that compiling the perfect (universally applicable) system is simply not possible. The system I have proposed was designed to cater for the unique purposes of performance studies modules at the University of Free State, and, if adopted, other academic institutions in South Africa. Compilers may find that the system does not work for their purposes, and for that reason, it is classified as a proposed system only. It should also be noted that the criteria are equally balanced (not weighted); however, it may be argued that certain criteria should receive a greater weighting (for example, the category of range over that of ornamentation). In this case, the user is free to adjust the weighting according to their preferences. Furthermore, during the grading of the recital repertoire with the proposed grading system (Addendum 7), it became apparent that there could be a degree of user subjectivity that can influence the scores given to specific criteria based on the user's experience therewith.

While the respondents provided their unique and invaluable contributions to the proposed system, there was limited knowledge pertaining to the existing grading systems. However, I realised that more information might have been garnered from the individuals/institutions that compile the systems or use them on a regular basis.

Due to time constraints and in order to maintain focus of the study, only a selection of works that were performed at the recital were graded. The decisions regarding which repertoire pieces to grade from the recitals were based on the inclusion of certain standard works that appear frequently in the repertoire lists, representing works from all levels of university study, and including all South African solo repertoire works for tuba.

6.5 Further study

As a possible further study, it would be a worthwhile project to conduct inquiry with individuals/entities that have designed grading systems through the use of a questionnaire or interviews. The aim would be to examine these systems and determine the design process their compilers followed. Additional study regarding my proposed grading system could be conducted by allowing individuals (for example, lecturers) or entities that use grading systems regularly access to the system for a trial period and have them provide feedback on the effectiveness of the system to grade repertoire for university tuba performance studies syllabi. Another project that may merit study is the determination of what motivates the individual repertoire choices included in syllabi. It is suggested that this could take the form of a comparative study.

6.6 Closing remarks

The advice regarding performance studies syllabus compilation will equip lecturers with suggestions to this end. It is hoped that the suggested components and guidelines may provide lecturers with ideas of what to include in their syllabi, enabling them to design syllabi uniquely suited to their and their institution's requirements.

Additionally, it is hoped that the suggestions from the data on how to decide on what materials should be included in performance studies syllabi will provide sufficient guidance for lecturers regarding the choice of materials, and to what extent they should be prescribed. By utilising this proposed grading system, the calculated score will provide a comprehensive scoring system

that corresponds to a recommended year in which students should approach the repertoire. This will eliminate the problem of assigning repertoire that does not match the student.

In closing, I would like to acknowledge that the experience of conducting this study was an invaluable one for me personally. Of particular value were the interview sessions with the international respondents. Not only has this informed my study and my knowledge, but it provided me with a very good idea of the state of tuba pedagogy and outlined the deficits still prevalent in the field. The conversations with the respondents also assured me that the tuba education programme that is followed in South African tertiary institutions imitates and approximates international institutions. I hope that the findings and suggestions provided in this study will be of benefit to students and lecturers and may help improve the efficiency of tuba instrumental tuition at South African tertiary institutions.

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ADDENDA

Addendum 1: Example of a repertoire list as part of the Trinity College London Grade 6 tuba syllabus.

Tuba/E♭ Bass/B♭ Bass: Grade 6

Tuba/E♭ Bass/B♭ Bass: Grade 6

PIECES

Candidates perform a balanced programme of three pieces: two accompanied pieces from group A and one unaccompanied piece from group B. B♭ bass players may also choose pieces from the Grade 6 euphonium lists. An own composition may be played instead of one listed piece. See pages 14-18 for further guidance.

Composer	Piece	Book	Publisher
Group A (accompanied)			
1. BIZET	Chanson du Toréador	Savoir Faire (♩ or ♪)	Brass Wind 2145TC/BC
2. CAPUZZI	Andante from <i>Andante and Rondo</i> , (from <i>Concerto for Double Bass</i>) (♩/♪)		Hinrichsen H1474
3. CLARKE	Fighting Windmills	Sketches from Don Quixote (♩ or ♪)	Brass Wind 2111TC/BC
4. DUNCAN	A Cat and Mouse Chase Down Haworth Main Street!, no. 4	A Haworth Suite (♩/♪)	Music Company
5. EVANS	Duke Orsino – 'If Music Be the Food of Love...', no. 1	Comedie (♩)	Warwick TU047
6. FRACKENPOHL	Allegro (3rd movt from <i>Concertino</i>) (♩)		King RK814
7. HANDEL	Adagio (1st movt from <i>Sonata in C minor</i>) (♩/♪)		Warwick TU023
8. HARBACH & KERN	Smoke Gets in Your Eyes	Lets Face the Music for Tuba/E♭ Bass (♩ or ♪)	Brass Wind 2134TC/BC
9. JACOB	Hornpipe, no.2 or Saraband, no. 3	Tuba Suite (♩)	Boosey M060034008
10. MCGRATH & PHILLIPS	Theme from <i>Strictly Come Dancing</i>	Stranger on the A Train for Tuba (♩ or ♪)	Brass Wind 2149E (♩)/2149T (♩)
11. MOZART	Horn Concerto no. 4, Rondo or Romanza	Classics for Tuba (♩/♪)	Studio M050045458
12. PROCTOR	Circle Line Dance	Take the Tube (♩ or ♪)	Brass Wind 2129TC/BC
13. PROCTOR	Swing That Yam	Tuber Music (♩ or ♪)	Brass Wind 2126TC/BC
14. SAINT-SAËNS	The Swan	Savoir Faire (♩ or ♪)	Brass Wind 2145TC/BC
15. STRAYHORN	Take the A Train	Stranger on the A Train for Tuba (♩ or ♪)	Brass Wind 2149E (♩)/2149T (♩)
16. VIVALDI	Allegro from <i>Sonata no. 3</i> (♩)		Belwin BW100473
17. WALLER	Ain't Misbehavin'	Big Chillers for Tuba (♩ or ♪)	Brass Wind 1151TC/BC
18. WILDER	Effie Goes Folk Dancing, no. 5	Suite no.1 (Effie Suite) (♩)	Margun HL35022124
19. WILSON-DICKSON	Monoceros	Creatures of the Deep (♩ or ♪)	Brass Wind 2151TC/BC
Group B (unaccompanied)			
1. BORDOGNI	No. 12	43 Bel Canto Studies	King AL28604
2. BOURGEOIS	Carefree or Convivial	Per Tuba Ad Astra (♩ or ♪)	Brass Wind 1122TC/BC
3. DUNCAN	Napoleon, Blown Apart	15 Advanced Studies for Tuba Based on Orchestral Excerpts	Music Company

Tuba/E♭ Bass/B♭ Bass: Grade 6

Tuba/E♭ Bass/B♭ Bass: Grade 6

4. ELVIN	Pushed to the Limit or Stealthy Approach	Journeys by Tuba (♩)	Superbrass
5. HARTLEY	Any two movts from <i>Suite for Unaccompanied Tuba</i> (♩)		Elkan-Vogel 164-00061
6. JACKSON	Skittishly, no. 19 or Daringly, no. 20	Adverbial Etudes (♩/♩)	Onyx TJ-AETCE/ TJ-AE-FCB
7. KOPPRASCH	Study no. 26, Allegro moderato	60 Selected Studies for B♭ Tuba (♩)	King AL28601
8. MCKENZIE	Czardas or Jota	Rhythms of Life (♩/♩ or ♩)	Con Moto CMT1007 (♩/♩)/ CMT1009 (♩)
9. MUCZYNSKI	Allegro moderato, no. 3	Impromptus for Solo Tuba, op. 32 (♩)	Schirmer GS29162
10. SPARKE	Party Piece, no. 40	Skilful Studies (♩ tuba or E♭/ B♭ bass edition)	Anglo AMP102-401/ AMP103-401
11. SWERTS	Tuba Rag	Performance Studies (♩/♩)	De Haske DHP1043738-400

TECHNICAL WORK

Candidates prepare section **1.** and *either* section **2.** or section **3.** (see pages 19-20).

For instruments in other keys, see the table on pages 243-244.

Lip flexibility exercises, scales and arpeggios are in Trinity's books *Treble Clef Brass Scales, Arpeggios & Exercises from 2015* and *Bass Clef Brass Scales, Arpeggios & Exercises from 2015*.

1. LIP FLEXIBILITY EXERCISE AND CHROMATIC SCALE (from memory)

- ▶ Grade 6 lip flexibility exercise (see page 249 [treble clef] or 254 [bass clef])
- ▶ Treble clef: chromatic scale starting on A (two octaves) or
- ▶ Bass clef: chromatic scale starting on C (two octaves) (tempo, dynamics and articulation as for scales below)

Either

2. SCALES & ARPEGGIOS (from memory) – Examiners select from the following:

Treble clef	Bass clef				
Candidates should prepare scales and arpeggios from the following tonal centres:	Candidates should prepare scales and arpeggios from the following tonal centres:				
▶ A major, A minor	▶ C major, C minor				
▶ A♭ major, G♯ minor	▶ B major, B minor				
Plus:	Plus:	two octaves	min. ♩ = 72-120	<i>f</i> or <i>p</i>	tongued or slurred as requested by the examiner
▶ Whole-tone scale starting on A♭	▶ Whole-tone scale starting on B				
▶ Dominant 7th in the key of D♭	▶ Dominant 7th in the key of E				
▶ Diminished 7th starting on A	▶ Diminished 7th starting on C				
▶ Augmented arpeggio starting on A	▶ Augmented arpeggio starting on C				

When the examiner requests a **major tonal centre**, candidates should play in succession the:

- ▶ major scale
- ▶ major arpeggio

When the examiner requests a **minor tonal centre**, candidates should play in succession the:

- ▶ melodic minor scale
 - ▶ harmonic minor scale
 - ▶ minor arpeggio
-

Or

3. ORCHESTRAL OR BRASS BAND EXTRACTS (music may be used) – Candidates prepare all extracts for tuba, E♭ bass or B♭ bass.

Candidates choose one extract to play first. Examiners then select one of the remaining two prepared extracts to be performed.

Tuba:

1. Berlioz: *Symphonie fantastique*, *Dies irae* (page 3, bars 127-176)
2. Bruckner: *Sinfonie Nr. 4*, 1. Satz (page 7, bars 51-67)
3. Mahler: *Sinfonie Nr. 1*, 3. Satz (page 15, entire extract)

(Extracts from *Orchester Probespiel* (Peters EP8666))

E♭ bass:

1. Brahms, *arr. Wright*: *Academic Festival Overture* (no. 1, passages 2 & 6)
2. Boëllmann, *arr. Ball*: *Suite Gothique* (no. 43, passage 1 (lower octave), passage 3 (lower octave))
3. Gregson: *The Plantagenets* (no. 37, passages 1 and 2)

(Extracts from *Our Heritage vol. 7* (Con Moto CMT2007))

B♭ bass:

1. Brahms, *arr. Wright*: *Academic Festival Overture* (no. 1, passages 2 & 3)
2. Boëllmann, *arr. Ball*: *Suite Gothique* (no. 44, passage 1)
3. Gregson: *The Plantagenets* (no. 38, passages 2 (lower part) & 3)

(Extracts from *Our Heritage vol. 10* (Con Moto CMT2010))

Addendum 2: Example of a repertoire list within a book (Bailey et al., 2008: 127)

Kopprasch	<i>60 Selected Studies</i>	Corelli	<i>Prelude and Allegro from Sonata no. 10, op. 5</i>
Kuehn	<i>28 Advanced Studies for Tuba</i>	Geib	<i>Caprice in B-flat Minor</i>
Ostrander	<i>Shifting Meter Studies</i>	King	<i>The Octopus and the Mermaid</i>
Grade 1 Solo Literature		Kreisler	<i>Rondo</i>
Bell	<i>Low Down Bass</i>	Phillips	<i>Eight Bel Canto Songs</i>
Bell	<i>The Tubaman</i>	Presser	<i>Rondo</i>
Buchtel	<i>Adonis</i>	Scarmolin	<i>Introduction and Dance</i>
Buchtel	<i>Ajax</i>	Sear	<i>Sonatina</i>
Buchtel	<i>At the Ball</i>	Grade 4 Solo Literature	
Buchtel	<i>Attila</i>	Barnhouse	<i>Barbarosa</i>
Buchtel	<i>Gladiator</i>	Bell	<i>Folk Song Medley</i>
Buchtel	<i>Golden Glow</i>	Bilik	<i>Introduction and Dance</i>
Buchtel	<i>Pied Piper</i>	Buchtel	<i>Introduction and Rondo</i>
Buchtel	<i>When the Saints Go Marching In</i>	Cohen	<i>Romance and Scherzo</i>
Fote	<i>Tubadour</i>	Frankiser	<i>Melodie Romanza</i>
Merle	<i>Quintero—The Farmer</i>	Galloway	<i>Essay for Tuba</i>
Monroe	<i>In the Garden</i>	Geib	<i>Cavatina</i>
Petrei	<i>Asleep in the Deep</i>	Goode	<i>Tune for Tuba</i>
Schlemuller	<i>Cradle Song</i>	Handel	<i>Adagio and Allegro from Sonata no.7, op.1</i>
Schlemuller	<i>A Prayer</i>	Harlow	<i>Old Home Down on the Farm</i>
Grade 2 Solo Literature		Howe	<i>Three Tuba Solos</i>
Bell	<i>Elephantine</i>	McCurdy	<i>Blues Basso Profundo</i>
Bell	<i>Gavotte</i>	McCurdy	<i>Troje</i>
Bell	<i>Jig</i>	Voxman	<i>Concert and Contest Collection</i>
Bizet	<i>Toreador's Song</i>	Grade 5 Solo Literature	
Edelson	<i>Tuba Tango</i>	Arnold	<i>Fantasy for Tuba</i>
Handel	<i>Air from "Judas Maccabeus"</i>	Bach/Bell	<i>Air and Bourée</i>
Kinyon	<i>Breeze Easy Recital Pieces</i>	Bencriscutto	<i>Concerto</i>
Lotzenhizer	<i>A Hornpipe</i>	Capuzzi/Catelinet	<i>Andante and Rondo</i>
Lotzenhizer	<i>Solitude</i>	Beversdorf	<i>Sonata for Tuba and Piano</i>
Merle	<i>Demetrius</i>	Corwell	<i>New England Reveries</i>
Merle	<i>Mummers</i>	Curnow	<i>Concertino</i>
Miller	<i>Tuba Tantrum</i>	Defaye	<i>Suite Marine</i>
Morra	<i>Nocturnal Serenade</i>	Haddad	<i>Suite for Tuba</i>
Rubank	<i>Mulberry Street Tarantella</i>	Hartley	<i>Suite for Unaccompanied Tuba</i>
Grade 3 Solo Literature			<i>Sonatina</i>
Beach	<i>Lamento</i>	Holmes	<i>Lento</i>
Benson	<i>Arioso</i>	McFarland	<i>Sketches</i>
Brooks	<i>The Message</i>	Sibbing	<i>Sonata</i>
Buchtel	<i>Apollo</i>	Tcherepnin	<i>Andante</i>
Buchtel	<i>Il Penseroso e l'Allegro</i>	Vaughan Williams	<i>Six Studies in English</i>
Christensen	<i>Ballad for Tuba</i>	Wagner	<i>Folk Songs</i>
		Vivaldi/Morris	<i>Sonata in A Minor</i>

Addendum 3: ABRSM response (Munday, 2016)

George Foster

From: Nic Munday <nmunday@abrsms.ac.uk>
Sent: 31 March 2016 11:27
To: George Foster
Subject: ABRSM Website - Contact Form - The syllabus

Dear George,

Many thanks for writing in. Here at ABRSM, each time we revise the syllabus repertoire, we appoint a team of generally two selectors - specialists in the instrument, and experienced teachers/players and often ABRSM examiners too - to look at the widest range of music possible (we ask publishers to send them as much music as they can) - and to propose pieces for the new grades according to a set of parameters provided by ABRSM (these are confidential but they include factors such as key, length, technical elements, balance of pieces across each list, balance of publishers, affordability of music etc).

The selectors' long lists are then viewed, piece by piece, by a further specialist (the 'moderator'), in consultation with the in-house syllabus team, to ensure accuracy of grading as well as parity of level within each grade and also parity with instruments in the same family. For example, on the last brass syllabus revision, our moderator was a brass-family specialist and each syllabus was 'cross-moderated' against the other brass subjects to ensure parity of grading as well as relationships of books/pieces across the subjects (particularly pertinent when publishers package the same pieces for more than one instrument).

Kind regards,

Nic Munday
Syllabus Administrator
ABRSM

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-----Original Message-----

From: www-data [mailto:www-data@abrsms.org]
Sent: 30 March 2016 11:45
To: ABRSM Syllabus
Subject: ABRSM Website - Contact Form - The syllabus

Dear ABRSM

A Contact form submission has been made:

Name:
George

Email:
FosterGR@ufs.ac.za

Applicant Number:

Addendum 4: Trinity College London's response (Hatt, 2020)

Dear George

Thanks for your email, which Jenny has forwarded.

Broadly, the development process for the tuba syllabus was as follows. Do let me know if you have any further questions or if you would like further detail.

1. A range of market research activities, including (i) meetings with a range of teachers/performers/examiners to discuss general principles/direction for the upcoming syllabus, (ii) teacher survey to collect feedback on current syllabus and ideas for upcoming syllabus, (iii) analysis of data on which pieces were chosen by candidates from current syllabus.
2. Decide which areas of the syllabus to be reviewed/updated (eg repertoire, technical work, supporting tests).
3. Compile graded parameters, detailing specific repertoire characteristics for each grade (eg keys, time signatures, ranges, techniques, durations, etc).
4. Contact music publishers to request copies of new publications from the past few years.
5. Appoint consultants to select repertoire.
6. Consultants select repertoire using graded parameters, and decide which items to retain from current syllabus.
7. Repertoire selections reviewed by lead syllabus consultant.
8. Availability and product code checks for selected repertoire.
9. Similar processes for other syllabus content (eg technical work, supporting tests) as appropriate.

I hope this is the kind of information you need.

Best wishes

Andrew

Andrew Hatt
Qualifications Development Manager - Music
T +44 (0)20 3752 4821

Addendum 5: Criteria applicable to the proposed grading system

1. Range and Tessitura

Range and tessitura are the primary criteria in determining the difficulty of a work for tuba, where progressively higher and lower notes become increasingly more difficult. Whereas range refers to the compass between the lowest and the highest note, tessitura refers to the density of notes corresponding to the range designations. To determine the range, find the lowest and highest note, and label the pitches according to the ITEA Pitch Notation Chart (Figure 62). To determine the tessitura, analyse each phrase, determining the density of notes corresponding to the Recommended Tuba Range Designation (Figure 63). The range descriptors are borrowed directly from Morris and Perantoni (2006), while the range designations are my own. As an example, for calculating tessitura, if a particular work has a range from 'BB-b', and the majority of phrases contain notes in the middle and lower register, with 1-2 high register notes, it will correspond best with the criterion description '1' and would therefore receive a score of '1' for 'Range and Tessitura'. The key and type of tuba being used should also be considered when calculating range. The suggestion is to use the

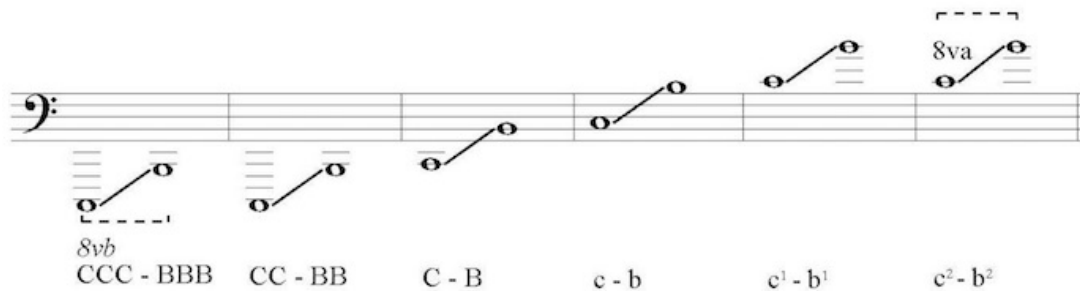


Figure 62: ITEA Pitch notation guide (2019: 12)

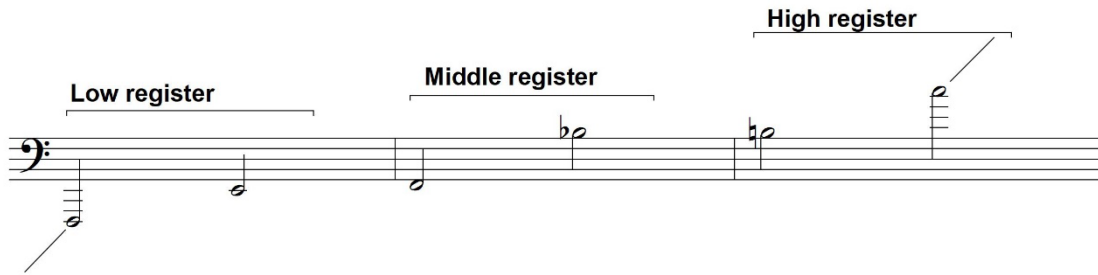


Figure 63: Recommended tuba range designation⁷⁰

2. Harmonic language

The indicator 'harmonic language' is a measure of the difficulty of the tonality, intervals, scales, key signatures, and melody contour/shape, of the work.

3. Tonality

Tonality ranges from the easier standard (major, minor) to more difficult advanced types (atonality, Chromaticism, 20th century, jazz, world music, or any other nonstandard form). A general scan should provide an impression of the tonality of the work and should be matched up with the most appropriate description. Works that have many accidentals are indicators of more advanced types.

4. Intervals

Interval difficulty is rated by type from basic to advanced, gauging the leaps required between adjacent notes (5^{ths}, 6^{ths}, etc.) and the encompassing range (ranging from one octave). To determine the interval difficulty level, first determine the most difficult interval (e.g., augmented 4th). Then determine the most difficult leap between adjacent intervals the player would be required to perform simultaneously (e.g., C – B – minor 7th ascending). Lastly, determine the range which the intervals occur - either 1 octave, 1.5 octaves or 1.5 octaves and more (e.g., smallest interval = major 2nd between C-D; largest interval = major 7th C-B. Interval range is an octave).

⁷⁰ The range designation for the tuba pitched in F is provided in the figure, however, for each pitch of tuba, the following guidelines are applicable: low range = 2nd partial and lower, middle range = 2nd through 6th partial, high range = 6th partial and higher.

5. Scales⁷¹

The difficulty of scales (including arpeggios) within a work is measured by choosing the most appropriate indicator according to the following descriptions:

1. Basic: major and harmonic minor scales, major and minor arpeggios, chromatic and whole tone
2. Intermediate: major, and all forms of minor scales, chromatic, dominant, and diminished 7th arpeggios
3. Advanced: including non-traditional and advanced forms – diminished, augmented, octatonic, pentatonic, modal, other unconventional

6. Key signatures

The key signature or key centre is a common determinate factor in grading the difficulty of a work. There are a few additional things that can increase the difficulty including:

- Key signatures with many sharps/flats (>5)
- Works with no notated key signature, that have many accidentals – these also pose a challenge to reading
- The presence of other devices like polytonality⁷²
- The pitch of tuba used - For instance, a work in E^b major on the E^b tuba would be considered easier compared to the same piece on a C tuba - more fingers required is generally more difficult, as it requires more effort, especially in faster tempo's, and contains more awkward cross finger combinations⁷³.
- Keys modulated to, the frequency of modulations – a work that modulates frequently, to many keys, is more difficult than one that stay in C major for instance.

For this step, the user should analyse all the key signatures in the sheet music. In cases where there is no key signature, a deeper analysis will be required.

7. Melodic contour and shape

Melodic contour and shape refers to the overall characteristics of the melody in the solo part. The shape of the melody is graded from easy (scalar, arpeggiated, diatonic) to difficult (atonal,

⁷¹ Includes all forms: arpeggios, diminished 7ths, and dominant 7ths etc.

⁷² Polytonality: when more than one tonality is used simultaneously **Invalid source specified.**

⁷³ A fingering chart for the specific pitch of tuba is a necessary aid for determining the fingers used.

angular). The approach of notes are considered, ranging from cases where notes (e.g., higher notes) are approached by scale (easy), or contain easy intervals, compared to those approached by large, difficult intervals (advanced).

8. Rhythm and tempo

Rhythm and tempo encompasses note durations, rhythms, rhythmic patterns, syncopations, and tempo. Note durations (note values) are graded from basic to advanced, their interplay/contrast with each other, and the frequency of their occurrence. Rhythmic patterns (repeated sequences) are rated by the difficulty of the rhythmic elements involved, and are further influenced by their complexity, frequency, and combinations. Syncopations range from basic to advanced, taking into consideration the frequency of occurrence, and the combinations.

Tempo is also a factor in grading a piece, where slower works are typically easier to perform, and faster works tend to be more difficult. The tempo ranges extend from very slow – slow - moderate - fast - very fast. The frequency and amount of tempo changes is also considered. Very fast and slow works are sometimes harder to perform as they require faster execution of techniques and place greater demands on endurance and interpretation (for instance, vibrato) respectively. Analysing the most frequent note durations, rhythms, patterns, syncopations, and tempi will provide the user with a good idea of the rhythm and tempo of a work. The user should then match the criterion with the best description to determine the score.

9. Time signatures

Time signatures are graded from simple (e.g., 4/4) to compound (e.g., 9/8), and basic to complex/irregular (16/8). Also considered are factors including the inclusion of time signature changes, the type, frequency, speed, and interplay of the time signatures. Other advanced aspects include multimeter and polymeter. To determine the grading score, summarise the time signatures used, and match with the closest description.

10. Dynamics

Dynamics are graded by type from basic to advanced, considering the number of different dynamics present (more types increases level), combinations (types and frequency), and contrasts (type, frequency, and speed thereof). The more dynamics present, as well as their

frequency/combinations, and the speed at which they occur, the more they affect the difficulty of the work. The range of dynamics is also a factor, referring to the audible distance between the dynamic levels. If dynamic markings are more extreme (e.g., 'pppp'), they also increase the difficulty of a work.

11. Ornaments

Ornaments are graded by type (basic to advanced), number of occurrences, and combinations and contrasts. Refer to the 'ornaments' section in the literature review and match the ornaments with the best description to determine the score.

12. Endurance

Endurance is an indication of the overall physical fitness required of a brass player to perform a specific work. Generally, works that require the player to play for an extended amount of time, or play consistently with little to no breaks requires greater endurance. Playing in the higher register vs. lower register also requires more endurance. Endurance can also be affected by tempo, for instance, playing in the high or middle range at very slow tempos is very fatiguing. The amount of rest places (recovery) in a piece is also a factor. If a piece is written with many opportunities to rest, it gives the lips enough time to recuperate, whereas a piece with very few spaces could increase the rate of fatigue. Advanced students with stronger embouchures can play for longer periods. To determine the endurance demands, refer to the range and tessitura score, and analyse the elements described in previous sentences.

13. Overall length of work

The overall length of a work or movement is a factor in the grading system since the length of the work influences many aspects of performance including endurance, fatigue, stamina, and concentration. At the entry level, university students would only have performed shorter, one movement works of 4-8 minutes. However, by the end of their fourth year, many universities require students to play full-length recitals (40-60 minutes).

14. Tonguing and articulation

Tonguing and articulation takes into consideration the demands on tongue speed, articulation type (basic to advanced), amount, and combinations/contrasts. The maximum single tongue

speed is considered, as well as the speed, type and frequency of multiple tonguing required within the work. Use the basic articulation types (Addendum 39) and the tonguing speed recommendations (Table 39) to assist with assigning the best description. The user would need to analyse all the articulation types within the work to determine a summary and match it with the best description.

Table 39: Tonguing speed recommendations (personal table)

Tonguing technique	Max/min Tempo (beats per minutes)
Single tonguing	Average minimum = 120 bpm
Double tonguing	Overlap with single tongue; From about ♩ = 110 bpm for semiquavers
Triple tonguing	Start from ♩ = 80 bpm.

15. Flexibility and Dexterity

Flexibility and dexterity grade the demands of lip flexibility and finger dexterity required respectively. Lip flexibility considers the amount, speed between, range and span of partials the player has to navigate. For example, the descriptor ‘limited demands on flexibility’ implies few passages that require the player to navigate between 1-3 partials, within comfortable range, at slow-moderate tempi, and would rate a score of ‘1’. By contrast, a medium-advanced would refer to a work/passage that would require frequent leaps and may appear over several partials.

Dexterity refers to the technical fingering skill demands. This considers the amount, speed of the passages/sequences, as well as the smallest note values (e.g., limited flexibility; few slow-moderate speed passages sequences; shortest note value sequences semiquavers at maximum 116 bpm). The presence or absence of the advanced form of lip flexibility, the lip trill, may also increase the difficulty. To score for flexibility requirements, simply scan the work, taking note of the wider adjacent intervals (especially if they are slurred/legato), the speed they would need to be performed, and categorise them according to the harmonic series of the tuba being played. An example of the harmonic series for the F tuba is given in Figure. For dexterity, determine the smallest note value passage at the fastest tempo required of the work. Use Table 39 (above) to determine the corresponding recommended tonguing techniques.

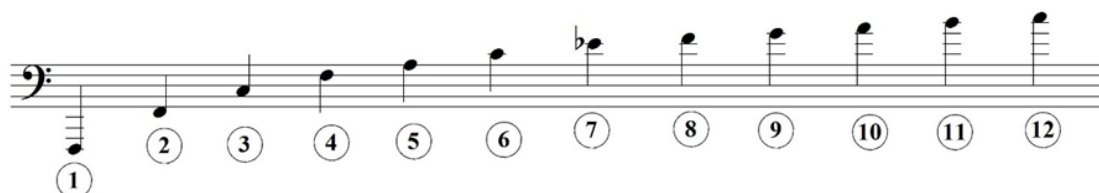


Figure 64: Harmonic series of F tuba showing partials 1-12

16. Breathing

Since breath is a major consideration for tuba players, the breath demands of the work affect the difficulty. The length of phrases influence breathing, so longer phrases are generally more suited to advanced players.

Works/passages that lack frequent breath spaces are more difficult (e.g., transcriptions of cello music), while works with obvious spaces are easier. Advanced players will have more breath control, efficiency, knowledge, and the ability to apply breath types to works.

17. Extended techniques

These refer to the techniques outside normal sound production methods. The grading system considers the number of different types of extended techniques, ranging from basic (wind sounds, sympathetic vibrations, thumping instrument, slide removal) to the more advanced (glissandi, tongue clicks, popping, improvisatory), and the frequency, and combination of the techniques. To score, determine the extended techniques required, their frequency, and combinations, and match with the description and score.

18. Accompaniment

Accompaniment only considered the difficulty level of combining the solo and accompaniment into a coherent whole, and not the difficulty of the accompaniment itself. Since the piano is the default accompaniment instrument, other instruments or electronic accompaniment may represent an increased difficulty level, especially if they are hard to hear while playing - for example, a work for tuba and piano is easier to put together than tuba and marimba. The style of solo and accompaniment is also important – homophonic music (melody and accompaniment) is easier to perform than polyphonic music or works that employ complex compositional techniques (canon, inversion, retrograde etc.). Additionally, the difficulty of the accompaniment is proportional to the amount of people that make up the accompaniment – band or orchestra.

Addendum 6: Criteria and descriptors from respondent interviews

Technical criteria	
1.	General technique
2.	Range <ul style="list-style-type: none"> • General • Player/student range • Atypical tuba ranges • In relation to the tuba being played • Tessitura/density of notes • Frequency of shifts between ranges
3.	Breath requirements <ul style="list-style-type: none"> • In relation to length of phrases, and the total length of the work • Breath in relation to dynamics and intensity • The time available to breathe within a piece
4.	Extended techniques <ul style="list-style-type: none"> • Multiphonics • Tongue clicks • Popping • Thumping the instrument • Slide removal • Clusters • Free meter • Arpeggiated figures • Absence of barlines • Comprehension and interpretation of symbols
Musical criteria	
5.	Musical complexity <ul style="list-style-type: none"> • Amount of knowledge and interpretation required to perform • Phrasing and musical breath placements • Musical demands
Theoretical criteria	
6.	Harmonic language <ul style="list-style-type: none"> • Keys/tonal centre, including the number of sharps/flats, where more flats/sharps are more difficult • Key in relation to pitch of tuba • Key changes: type, frequency, speed • Type, speed, and frequency of key changes • Complexity of scales • Tonality (tonal or atonal) • Melody characteristics <ul style="list-style-type: none"> • contour • angularity
7.	Aural skills required <ul style="list-style-type: none"> • Complexity of intervals • Difficulty in pitching notes
8.	Notation

	<ul style="list-style-type: none"> • Number of accidentals, as works with more accidentals are harder to read • Clefs used • Transition points (fermatas)
9.	<p>Temporal elements</p> <ul style="list-style-type: none"> • Rhythmic complexity <ul style="list-style-type: none"> ○ Polyrhythms ○ Syncopations ○ Cross rhythms ○ In relation to technique (coordination of tongue and fingers) ○ Note values • Tempo <ul style="list-style-type: none"> ○ In relation to keys ○ Tempo modulations ○ Tempo in relation to note values • Length of work <ul style="list-style-type: none"> ○ Effect on endurance • Complexity of note values <ul style="list-style-type: none"> ○ Intensity and amount of shorter note values (semiquavers, demisemiquavers) ○ Complex rhythms (triplets) • Multiple time signatures • Asymmetrical meters • Time signatures <ul style="list-style-type: none"> • Presence of multiple time signatures
10.	<p>Musical expression</p> <ul style="list-style-type: none"> • Articulation <ul style="list-style-type: none"> • Different types of articulation • Changes/alternation of articulation types • Interplay between articulation types • In relation to range • Dynamics <ul style="list-style-type: none"> • In relation to breath and range • Different types and gradations of dynamics • Dynamic changes
Other criteria	
11.	<p>Ornaments</p> <ul style="list-style-type: none"> • Appropriate execution of ornaments of various styles/eras
12.	<p>Performing voices</p> <ul style="list-style-type: none"> • Difficulty of accompaniment • Ensemble challenges
13.	<p>Instrument</p> <ul style="list-style-type: none"> • Pitch and size of the tuba for which the work is written • Instrument used in performance

Addendum 7: The proposed grading system

Proposed grading system						
	Criteria (explanation and guidelines)	Score indicator				Score 0-3
		0 (none/not present)	1 (Easy)	2 (Intermediate)	3 (Advanced)	
1.	Range and tessitura⁷⁴		<ul style="list-style-type: none"> Range: approx. (FF – b). Easy tessitura: density of notes mostly in the middle to lower registers Few notes (1-5) in the higher or extreme low register. Entry level students (pre-college, 1st to 2nd year) 	<ul style="list-style-type: none"> Range: approx. (BBB) CC – f¹ Moderate tessitura: density of notes in both higher and lower registers Few notes (1-5) in the extreme high or lower (e.g. pedal register) 2nd to 3rd year 	<ul style="list-style-type: none"> Range: (CCC) DDD – b¹ (c² and higher); and extreme range Advanced tessitura: considerable number of notes/passages in extreme higher or extreme lower registers Few notes that are outside the normal playable range of the average player (for example, c²; and CCC) 4th year, postgraduate 	
2.	Harmonic language⁷⁴		<ul style="list-style-type: none"> Tonality: standard, major, or minor (harmonic), tonal. Intervals: simple (diatonic – major, minor, perfect, within one octave), few large intervals, jumps limited to an octave Scales: major and minor forms (harmonic), major and minor arpeggios, chromatic, and whole tone. Notes and intervals approached in scalar fashion, or arpeggios with small intervals (>5th). Pitching of notes and intervals are easily achieved 	<ul style="list-style-type: none"> Tonality: standard major and minor plus harmonic, melodic, easy non-standard or manageable non-standard harmonic language (for example, easy modes - Ionian), some dissonance, chromaticism, or 20th century techniques Intervals: intermediate (major, minor, perfect and some disjunct intervals; increased frequency of larger intervals (5ths to 1.5 octaves) Scales: major, minor (harmonic and melodic), major and minor arpeggios, chromatic, whole tone, dominant 7ths, diminished 7ths 	<ul style="list-style-type: none"> Tonality: atonal, 20th century devices: modes, Chromaticism, non-standard harmony (dodecaphonic, serial etc.) Intervals: advanced types (diminished, augmented, tritone, compound), frequent disjunct intervals; frequent octave displacement Scales: advanced, including non-traditional, advanced forms (diminished, augmented, whole tone, octatonic, pentatonic etc.), modal (mixolydian etc.) Notes and intervals approached by any means, large, advanced intervals. Aural skills required: Pitching of notes and intervals requires advanced aural skills 	

				<ul style="list-style-type: none"> Notes and intervals approached in scalar, arpeggiated fashion, or intervals beyond an octave 		
3.	Keys signatures⁷⁴		<ul style="list-style-type: none"> Easy key signatures: up to 3-4 sharps and flats Little to no modulation Modulation into closely related, easy keys (relative major, relative minor, dominant major/minor) Few (if any) accidentals 	<ul style="list-style-type: none"> Moderately difficult key signatures: up to 5 sharps and flats More modulation Modulation into distant, and moderately difficult keys Increased frequency of accidentals 	<ul style="list-style-type: none"> Difficult to very difficult key signatures: more than 5 sharps and flats; non-traditional key signature, or no key signature; Non-conventional – atonal, serial Frequent modulations Relationships of modulation and original keys not obvious, modulation into very difficult keys Frequently occurring and many accidentals 	
4.	Melodic contour and shape		<ul style="list-style-type: none"> Melody is tonal with conjunct, manageable intervals, or scalar 	<ul style="list-style-type: none"> Melody is tonal or atonal, consisting of a few wide leaps, or angular. Mixture of scalar and angular 	<ul style="list-style-type: none"> Melody contains many, frequent wide leaps, and octave displacement, very angular 	
5.	Rhythm and Tempo		<ul style="list-style-type: none"> Basic note durations (for example, crotchets, quavers) Basic rhythms and patterns. Basic syncopations; none or very few (0-2) Tempo: slow – moderate, with no (or few) tempo alterations (0-2). 	<ul style="list-style-type: none"> Moderate/more complex note durations (dotted rhythms, triplets etc.) More complex rhythms and patterns (for example, 16th notes and combinations) Types that are more complex and more occurrences of syncopations (2-5) Tempo: moderate – fast; few tempo changes (3-5). Little demand placed on player to control tempi Very few occurrences of multimetric patterns (1-2) 	<ul style="list-style-type: none"> Advanced note durations (breves, demisemiquavers, hemidemisemiquavers etc.) Advanced rhythmic complexity, and patterns Advanced forms of syncopations and many occurrences thereof (6 and more). Many short note values at Tempo: very fast, very slow, many, and more tempo alterations (5 and more) Considerably greater demand on the player on controlling tempi Polyrhythms (cross rhythms), hemiolas, duplets, ratios, quintuplets, sextuplets, septuplets etc. 	

					<ul style="list-style-type: none"> • Non-classical elements (jazz, swing) 	
6.	Time signatures		<ul style="list-style-type: none"> • Basic simple, duple, and triple meter time signatures • Very few, if any, time signature changes (0-2) • Simple compound 	<ul style="list-style-type: none"> • Moderate, simple, and compound time signatures; few (1-2) irregular, complex time signatures • Presence of more (2-5), and more frequent time signature changes • Very few instances of multimetric patterns (1-2) 	<ul style="list-style-type: none"> • Advanced/Irregular, complex time signatures (polymeter; asymmetrical meter etc.) (>2) • Frequent, and many time signatures shifts (more than 5) • Absence of notated time signature, or free time signature • Frequent occurrences of multimeter 	
7.	Dynamics		<ul style="list-style-type: none"> • Basic dynamics (<i>p, f</i>) • Basic and few crescendos and diminuendos (1-9) • Very few dynamic combinations and contrasts (1-10) • Limited dynamic range and gradation • Poses no challenges to dynamics regarding range 	<ul style="list-style-type: none"> • Moderately difficult dynamics (<i>pp-p-mp-mf-f-ff</i>) • Moderate, increased number of crescendos and diminuendos (10-19) • More combinations and contrasts (11-20) • Increased dynamic range and gradations • Some challenges of dynamics for range 	<ul style="list-style-type: none"> • Advanced dynamics (<i>pppp – ffff, pf, fp</i> etc.) • Advanced, and many different combinations and contrasts (>21) • Presence of extreme dynamics and contrasts thereof (<i>ppp-pp-mp-mf-f-ff-fff</i>) • Large dynamic range, with increased and many gradations • Poses many challenges in dynamic regarding range (for example, loud low notes, soft high notes) 	
8.	Ornaments	none present	<ul style="list-style-type: none"> • Basic types of articulation. • A few occurrences of basic ornamentation types (1-4) 	<ul style="list-style-type: none"> • Ornamentation of moderate difficulty • More frequent occurrences of moderate difficulty ornamentation (5-10) 	<ul style="list-style-type: none"> • Advanced types of ornamentation • Many occurrences of different types of ornaments (>10) 	
9.	Endurance		<ul style="list-style-type: none"> • 2-4 Bar phrase lengths, short and quite manageable: easy • Sufficient places to rest • Limited endurance problems • Good balance of low and mid/high register playing 	<ul style="list-style-type: none"> • 4-6 Bar phrase lengths: moderate • Spaces to rest are fewer and not obvious, or shorter • Increased endurance required • Increased amount of playing in the middle to higher registers 	<ul style="list-style-type: none"> • Longer phrases: advanced • Little to no obvious space to rest (especially in works such as the Bach Cello Suites) • High level of endurance and embouchure fitness required • Lengthy sections of playing in the middle-high-extreme high range 	

10.	Overall length of work or specific movement*		<ul style="list-style-type: none"> • Short (<5 minutes). 	<ul style="list-style-type: none"> • Moderate length (6-14 minutes) 	<ul style="list-style-type: none"> • Long (>15 minutes). 	
11.	Tonguing and Articulation		<ul style="list-style-type: none"> • Single tonguing at slow to moderate tempo (maximum semiquavers at 110 bpm) • No multiple tonguing required • Little to no (<5), simple, very basic articulation types (staccato, legato, basic accents). • Easy combinations and contrasts. • Few occurrences (<10) of combinations and contrasts. • No difficulty of articulation in relation to range 	<ul style="list-style-type: none"> • Increased number (6-10) and more complex articulation types (tenuto, legato tongue, tenuto, forte-piano, sforzando piano). • Moderately difficult combinations and contrasts (for example, moderately difficult articulation in combination with another of similar difficulty). • More combinations and contrasts of moderately difficult articulations (11-20). 	<ul style="list-style-type: none"> • Single tonguing at fast speeds (>120 bpm) • Considerable amount of multiple tongue passages (>6) • Considerably more passages (>6) that require multiple tonguing at fast speeds (double-tonguing semiquavers >130 bpm; triple tonguing triplets >140 bpm). • Many (>10 and more) advanced articulation types (marcato-tenuto, staccato – marcato, portato, détaché, staccato-leggiero, rinforzando). • Advanced combinations and contrasts. • Many different combinations and contrasts (>20). • Contains very difficult demands of articulation in relation to range (extreme high/low registers) 	
12.	Flexibility and dexterity*		<ul style="list-style-type: none"> • Limited demands on finger dexterity • Few passages/sequences (1-5) of shorter note values limited to semiquavers at slow-moderate tempo (maximum 110 bpm) • Limited demands on the player regarding flexibility. Shifts between registers at slow to moderate speeds. • Slurs between partials are limited to those 1-3 partials away in a comfortable range (<1 octave), at slow-moderate speeds. 	<ul style="list-style-type: none"> • Moderate demands on finger dexterity • Moderate number of passages/sequences (6-15) of shorter note values limited to semiquavers at moderate to fast speeds (110-132 bpm) • Moderate amount and speed of lip flexibility required. Moderate speed shifts between registers • Slurs and navigation between partials span up to 3 partials in a moderate range (1-2 octaves), at moderate-fast speeds 	<ul style="list-style-type: none"> • High demands on finger dexterity • Large number of passages/sequences (>16) of shorter note values ranging from semiquavers to smaller values at fast and extremely fast speeds (>132 bpm) • Advanced, many types of, and fast lip flexibility required. Fast shifts between registers • Slurs and navigation between partials span 6 or more partials, in extremities in range • Requires performance of lip trill 	

			<ul style="list-style-type: none"> No lip trill required 	<ul style="list-style-type: none"> No lip trill required 		
13.	Breathing*		<ul style="list-style-type: none"> Short phrases with various places to take manageable breaths throughout the work No major breath control issues or demands 	<ul style="list-style-type: none"> Moderate length phrases and less places to breath. Increased breath control issues and demands 	<ul style="list-style-type: none"> Extended phrases, with little to no obvious places to breathe (for example, in string transcriptions) Great demand on breath control Requires advanced breathing techniques (hitch, sniff etc.) May require circular breathing 	
14.	Overall technique⁷⁴		<ul style="list-style-type: none"> Easy: technically not very demanding, very few basic techniques require (for example, slow single tonguing, no multiple tonguing, very limited flexibility and dexterity, limited range) 	<ul style="list-style-type: none"> Moderate technical demands and combinations (for example, moderate-fast tonguing passages, double tonguing or triple tonguing at moderate-fast speeds, limited flexibility, and dexterity, within comfortable range) 	<ul style="list-style-type: none"> Advanced and high level of technical demands, and in combination with each other (rapid single tonguing, double and triple tonguing, demanding lip flexibility and dexterity, extreme ranges, etc.) 	
15.	Extended techniques⁷⁴	None	<ul style="list-style-type: none"> No (or few) extended techniques (0-1) Limited frequency of same technique (0-1) Easy extended technique (sympathetic vibrations, wind sounds, hand pops, thumping instrument etc.) 	<ul style="list-style-type: none"> Few types of extended techniques (2-3) Increased frequency of techniques (1-4) Intermediate extended techniques (flutter tongue, multiphonics, tongue clicks, slide removal) 	<ul style="list-style-type: none"> Several types of extended techniques (>4) Several occurrences of extended techniques (>5) Advanced forms of extended techniques (glissando, pitch bends, combinations, arpeggiated figures, clusters etc.) 	
16.	Accompaniment⁷⁴	Unaccompanied	<ul style="list-style-type: none"> Easy, no ensemble challenges or difficulty in putting the work together; no challenges in coordinating entries Homophonic texture: simple melodic and accompanimental roles Piano accompaniment One instrument in accompaniment only 	<ul style="list-style-type: none"> Moderate difficulty in putting work together; some manageable ensemble challenges, but not overbearing; some instances where entries might be difficult to coordinate Homophonic and basic polyphony Keyboard or similar type of harmonic instrument 	<ul style="list-style-type: none"> Work is fairly difficult to put together; several, frequent and consistent ensemble challenges; several challenges in entry coordination Canonic and other polyphonic passages Electronic, or other types of accompaniment that are difficult to coordinate with or hear (for example, percussion) 	

74 These criteria/definitions were suggested by respondents.

				<p>accompaniment (organ, harpsichord, marimba)</p> <ul style="list-style-type: none"> • Few instruments in accompaniment (trio, quartet etc.) 	<ul style="list-style-type: none"> • Multiple instrumental accompaniment (band, orchestra etc.) 	
17.	Musical complexity (interpretation and aural skills required)⁷⁴		<ul style="list-style-type: none"> • Easy • Minimal aural skills required • Pitching of notes is easy due to simple intervals • Limited demands on interpretation (all expressions written down); few variants of performance directions – no cadenza 	<ul style="list-style-type: none"> • Moderate • Intermediate/moderate aural skills required • Pitching of certain notes may present a challenge • Moderate demands on interpretation; moderate amount of variation in performance directions/expressions – cadenza with most performance directions written down • More complex performance directions • Fewer character/dynamic performance directions demanding more interpretation (esp. baroque music) 	<ul style="list-style-type: none"> • Difficult • Advanced aural skills required (disjunct intervals, nonstandard harmony) • Advanced challenges in note pitching (e.g., starting very high notes without lead up) • Advanced demands on interpretation; very little performance directions and expressions, e.g. cadenza without directions • Requires mature individual abilities. • Several interpretational decisions and demands • Knowledge and application of historically-informed performance practice expected • Difficult cadenza, with few performance indications 	

Addendum 8: Grading score sheet template

Grading system score sheet						
Work:						
Composer/Arranger:						
Edition (if applicable)						
Criteria		Score /3				
1.	Range and Tessitura	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
2.	Harmonic language	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
6.	Time signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
7.	Dynamics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
8.	Ornaments	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
9.	Endurance	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
13.	Breathing	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
14.	Overall technique	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
15.	Extended techniques	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
16.	Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
17.	Musical complexity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
Total score						
Level Recommendation from score						
UG 1:	UG 2:	UG 3:	UG 4:	PG Hons:	PG M1:	PG M2/D:
15-19 <input type="checkbox"/>	20-24 <input type="checkbox"/>	25-29 <input type="checkbox"/>	30-34 <input type="checkbox"/>	35-38 <input type="checkbox"/>	39-42 <input type="checkbox"/>	43-48 <input type="checkbox"/>
Recommendations:						

Addendum 9: List of graded recital repertoire

Composer: work	Publisher	Medium
1st year		
Bongani Ndodana-Breen: <i>Credoscapes</i>	UNISA	Unaccompanied
Alec Wilder: <i>Effie Goes Folk Dancing</i> from the <i>Effie Suite</i>	Margun	Tuba and piano
2nd year		
Ralph Vaughan Williams: <i>Romanza</i> from <i>Concerto for Bass Tuba and Orchestra</i>	Oxford	Tuba and piano
3rd year		
Alexei Lebedev: Concert Allegro	Hoffmeister	Tuba and piano
4th year		
Paul Hindemith: 2 nd movement from <i>Sonata for Tuba and Piano</i>	Schott	Tuba and piano
Robert Schuman: <i>Fantasiestücke</i>	Tuba Classics	Tuba and piano
Noel Stockton: <i>Scherzo</i>	Well Noted	Unaccompanied
Honours		
William Penn: Capriccio	KPP	Tuba and marimba or tape
Masters 1		
Martin Ellerby: Concerto	Maecanas	Tuba and piano
Paul Hindemith: Sonata (complete)	Schott	Tuba and piano
Allan Stephenson: Suite	Accolade	Unaccompanied
Ralph Vaughan Williams: Concerto	Oxford	Tuba and piano
Masters 2/Doctoral		
J.S. Bach/Cooley: Partita in A minor	Tuba Classics	Unaccompanied
Trygve Madsen: Sonata	Huset	Tuba and piano

Addendum 10: Grading score sheet of *Partita in A Minor* by Bach

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Range: advanced. Extreme high range, with limited low range: D – a¹ <p style="text-align: center;">-Tessitura: concentration of notes is in the mid-high and high register, with very few in the lower range</p>					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: standard major and minor - Intervals: some wider intervals including 12ths, with some octave displacement - Scales: major and minor diatonic - Approach: most notes are approached by step or arpeggio, with some wider intervals and octave displacement 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Difficult - Up to 6 flats and 4 sharps - Frequent accidentals, with quick changes 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Melodies combine scales and arpeggios - Frequent wide leaps and octave displacement 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: standard note durations and rhythms, with frequent patterning - Tempo: moderate difficulty. Tempos are not written down, but outer movements are fast, with a slow middle. The last movement is normally played quite fast (<i>Allegro</i>). 					
6.	Time signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
-Standard time signatures (simple, duple, triple), with no time changes					
7.	Dynamics	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
-Basic dynamics (<i>p</i>-<i>ff</i>) with some crescendos and diminuendos					
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- None written					
9.	Endurance	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced requirements on endurance - As a transcription of a flute work, the work is void of any spaces to rest and recuperate - The work also explores the extreme higher range that can affect endurance 					
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
- Advanced: 13 minutes					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: demanding, single tongue at very fast speeds - Articulation: basic articulation types. Frequent, quick alternation between legato (slurs) and staccato 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: advanced requirements flexibility. Contains octave displacement and other larger intervals, with some slurs between partials - Dexterity: high demands on finger dexterity in faster movements. Challenging not only a result of the tempo, but also because of several accidentals 					
13.	Breathing	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced demands on breath - Breath placements are not obvious, as it is a transcription - Editor provided some breath placement suggestions 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
- Advanced demands on overall technique, including fast single tonguing, advanced flexibility and dexterity, and notes in the extreme high register					
15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- None					
16.	Accompaniment	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

- None								
17.	Musical complexity					1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Difficult - Very complex - Written in both sharps and flats - Requires good understanding of voice leading and harmony to bring out the complex voicings - Advanced demands on interpretation 								
Total score						36		
Level Recommendation from score								
UG 1: 15-19	UG 2: 20-24	UG 3: 25-29	UG 4: 30-34	PG Hons: 35-38	PG M1: 39-42	PG M2/D: 43-48		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Recommendations:								
Although the work is graded at the entry level postgraduate level, it is probably best suited to the advanced Master's or Doctoral student. As the work is a transcription of a flute piece, it demands some advanced techniques including breath control, dexterity, and flexibility.								

Addendum 11: Grading score sheet of the *Concerto* by Ellerby

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Range: advanced: CC - g¹. Pedal range to extreme high range - Tessitura: mainly in the middle-high and higher registers, with some notes in the lower register 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: standard major and minor tonality - Intervals: mostly major and minor intervals, with the frequent use of 4ths. Some octave leaps in quick succession. Some wide leaps - the largest interval is 2 octaves. - Scales: major, minor and chromatic forms in contrast and combination with each other - Approach: notes are approached by scale, manageable arpeggios, with some wide intervals 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - G tonal centre - Advanced - No key signature, so frequently-occurring accidentals. The key centres visited include up to 6 flats and 6 sharps (G^b major/E^b minor – F[#] major/D[#] minor) 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - 1st (slow) melody is predominantly scalar, using adjacent notes - 2nd (fast) section is mostly arpeggiated, with some scales 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: both rhythmic types and patterns are advanced, the latter includes syncopation. Note values: Simple types, as well as triplets, quintuplets, and septuplets - Tempo: 1st section is slow, while 2nd section is very fast (>120 bpm) 					
6.	Time signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - The work incorporates both regular and irregular time signatures such as $\frac{5}{8}$ and $\frac{7}{8}$ - Some metrical displacement - Time signature changes are frequent and occur rapidly 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - The dynamics range from <i>ppp</i> to <i>fff</i> - Dynamic are used in several combinations, and changes are frequent and occur rapidly 					
8.	Ornaments	0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - 2 trills 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on endurance - 1st section is well written, with frequent rests for player to recuperate - 2nd section is faster, with longer phrases 					
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Long: 13 minutes 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: fast single- and double tonguing required in some passages - Articulation: advanced types of articulation and contrasts/combinations. Quick alternation of articulations 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: moderate demands on flexibility, especially since the work requires the player to quickly shift between ranges. There are a number of slurred passages between notes from different partials - Dexterity: the second section, which is fast and characterised by shorter note values (including semiquavers) places considerable demands on finger dexterity. Many different finger combinations at faster tempi 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - The 1st section has manageable phrases, with many places to breathe - The 2nd section has longer phrases, and is quite fast, requiring some careful planning of breathing (these breaths require rapid execution) 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced technique required - Short notes at fast tempi require considerable finger dexterity - Extreme range necessitates considerable flexibility; flexibility is also required in the slurring of notes in fast passages - Rapid single- and double tonguing 					
15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
16.	Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderate difficulty in the co-ordination of ensemble between soloist and pianist 					
17.	Musical complexity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	

- Very complex
- Constant and frequent use of both sharps and flats
- The cadenza requires a considerable degree of interpretation, which presupposes maturity in musical style and taste
- Very detailed and complex performance directions
- The frequent accidentals do necessitate becoming familiar with the appearance of the score in the initial stages

Total score	39
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Level Recommendation from score	UG 1 <input type="checkbox"/>	UG 2 <input type="checkbox"/>	UG3 <input type="checkbox"/>	UG4 <input type="checkbox"/>	PGH <input type="checkbox"/>	PGM1 <input checked="" type="checkbox"/>	PGM 2/D <input type="checkbox"/>
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Recommendations:

Although the grading scale classifies the work on a Master's level, it can be played by the advanced Honours or even 4th year student.

Addendum 12: Grading score sheet of the *Sonata* by Hindemith

Criteria		Score /3			
1.	Range and Tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: intermediate GG – c¹. Playable on both bass and contrabass tubas. Range suitable for advanced high school to early university student. - Tessitura: Notes are concentrated within the staff, less so below, and few above. 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Work is written in non-standard, 20th century harmonic language (atonality and serialism) - Intervals and scales are non-standard, with frequent octave displacement, more suited for advanced students - Intervals include frequent major 9ths, 4ths, 6ths - Some notes approached by scales and arpeggios, but majority by wider intervals (non-standard) - Advanced aural skills required to pitch correct notes 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - No obvious key signature since the work is written with a non-standard tonal system - Frequent usage of accidentals incorporating both sharps and flats that could be challenging to younger students. 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Angular, with frequent wide intervallic leaps that sometimes span more than an octave in first movement. - Melody from Other two movements is approached by step and manageable intervals, however there are frequent shifts in tonality. 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: 1st and 2nd movements have standard rhythms, however, cadenza in 3rd movement is rhythmically complex consisting of syncopations, hemiolas, triplets, demi-semiquavers, and quintuplets. This requires an advanced knowledge of theory and ability to demonstrate subtle differences in rhythms. - Tempo: tempos are manageable in outer movements. 2nd movement is quite fast (152bpm). 					
6.	Time signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Complex usage of time signatures including 6/4, 2/2, 7/8, 9/4, 3/2, and 2/2. - Multimetre between piano and tuba part in movement 1 - Both simple and compound meter. - Frequent modulations of meter requiring advanced theoretical understanding and ability to comprehend and perform the modulations effectively. 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Dynamics are standard types with moderate amount of interplay between them. 					
8.	Ornaments	0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Easily executable grace notes in 1st movement. 					
9.	Endurance	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - No major endurance issues since work is well written with ample rest space and phrases. - Manageable phrase lengths 					
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - If the work is played in entirety, it is one of the lengthier works (13:00), and therefore more suitable to more advanced undergraduate or postgraduate students. 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: aside from a few possible faster tongued notes in the cadenza of the 3rd movement (dependant on tempo chosen), the work does not pose any major tonguing issues. - Articulation: articulations are standard types (slurs, legato, staccato, tenuto, accents) with frequent alterations and combinations. 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: moderate to advanced demands on player's flexibility not only with some legato passages, but to properly perform the wider intervals. A few fast slurs in the second movement. - Dexterity: the second movement is quite fast, and along with the cadenza in the 3rd movement, would require more advanced finger dexterity. 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - The work is well-written for the tubist, since it provides ample possible breath spaces, and no extra length phrases. - 1-2 spots that require some thought about breath. 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Work has a good overall technical demand on the performer regarding tonguing, articulation, flexibility, and dexterity. 					

15. Extended techniques	0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>			
- Only one (sympathetic vibrations) required in the cadenza of the final movement.							
16. Accompaniment:	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>			
- Very challenging to get the piano and tuba part to align into a coherent whole.							
- The piano part is best suited to advanced/professional accompanists.							
17. Musical complexity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>				
- Musically very complex, and therefore better suited to the more advanced student							
Total score	39						
Level Recommendation from score	UG 1 <input type="checkbox"/>	UG 2 <input type="checkbox"/>	UG3 <input type="checkbox"/>	UG4 <input type="checkbox"/>	PGH <input checked="" type="checkbox"/>	PGM1 <input type="checkbox"/>	PGM 2 /D <input type="checkbox"/>
Recommendations:							
Although many factors including range allow the Sonata to be played by the undergraduate student, the theoretical and musical complexity makes it more suitable to the postgraduate student (minimum honours level). However, some individual movements (e.g. 2 nd movement) could be suitable to undergraduate students.							

Addendum 13: Grading score sheet of 2nd movement of the *Sonata* by Hindemith

Criteria		Score /3				
1. Range and tessitura		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Range: moderate: GG-b^{b1} - Tessitura: the majority of notes are concentrated in the mid-high to lower range 						
2. Harmonic language		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> - Tonality: atonal, 20th century, serial - Intervals: non-standard intervals (7th the largest) - Scales: Non-standard, atonal scales - Approach: Combination of scales and arpeggios 						
3. Key signatures		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> - Difficult, non-standard key signatures - Written without key signature, most likely B^b tonality - Uses both sharps and flats, sometimes in the same phrase - Up to 5 flats and 4 sharps 						
4. Melodic contour and shape		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> - Melody is angular, consisting of both scales and arpeggios, with atonal intervals, within the ambit of an octave 						
5. Rhythm and tempo		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> - Rhythm: standard rhythms, with easy syncopation. Standard note values, with quaver the smallest. One triplet - Tempo: very fast (152 bpm) 						
6. Time signatures		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy, $\frac{2}{2}$ throughout - Uses hemiola 						
7. Dynamics		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Moderate difficulty (<i>pp</i>-<i>ff</i>) - Frequent contrasts of dynamics - A number of crescendos 						
8. Ornaments		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
9. Endurance		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy, with no significant challenges due to frequent rests 						
10. Overall length		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Very short, 1'20" 						
11. Tonguing and articulation		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Tonguing: moderate difficulty: single tongue only - Articulation: many moderately difficult articulation types, with frequent and quick contrasts 						
12. Flexibility and dexterity		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Flexibility: limited demands on flexibility - Dexterity: a few bars that require good finger dexterity – mostly in bars with quavers 						
13. Breathing		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Minimal demands on breathing - Work has many frequent spots to take a breath 						
14. Overall technique		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Generally moderate demands on technique, mostly confined to dexterity, articulation, and dynamics 						
15. Extended techniques		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
16. Accompaniment		0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - As with the rest of the sonata, the accompaniment is very difficult - There are moderate challenges of ensemble, particularly in the syncopated passages 						
17. Musical complexity		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
Total score				31		
Level Recommendation from score						
UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input checked="" type="checkbox"/>	PG Hons: 35- 38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-38 <input type="checkbox"/>
Recommendations:						
The 2 nd movement is accurately graded at the 4 th year level. Students will require a good sense of rhythm, and good aural skills to perform the work well.						

Addendum 14: Grading score sheet of the *Concert Allegro* by Lebedev

Criteria		Score /3			
1. Range and tessitura		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: intermediate: EE^b- e^{b1} - Tessitura: Most of the notes are written within the staff, but there are also several notes in the lower register - The work was written for the contrabass Bb tuba, but can be performed on the bass and contrabass tuba 					
2. Harmonic language		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: very tonal, written in the Romantic idiom - Intervals: intervals are diatonic, with nothing larger than an octave - Scales: standard major and minor scales and arpeggios - Approach: Notes are approached by scale and arpeggios (small intervals) 					
3. Key signatures		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - Centered around F major - 6 flats and 5 sharps - 4 written key changes, with some chromaticism and modulations 					
4. Melodic contour and shape		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melody consists of conjunct intervals and diatonic scales, with few wide leaps (the largest is an octave) 					
5. Rhythm and tempo		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: some advanced note durations and rhythms, including triplets, quintuplets, septuplets - Tempo: mix of both slower (<i>Andante</i>), faster (<i>Allegro</i>) and very fast (<i>Presto</i>) tempo indications 					
6. Time signatures		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Simple, predominantly $\frac{4}{4}$ with one change to $\frac{2}{4}$ 					
7. Dynamics		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderately difficult dynamics (<i>pp</i> – <i>ff</i>), with many gradations - A moderate number of crescendos and diminuendos 					
8. Ornaments		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
9. Endurance		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Work is well written, with frequent places to rest - Phrases are 4 bars long 					
10. Overall length		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Very short – 6 minutes 					
11. Tonguing and articulation		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: moderate demands on single tonguing speeds at around 120 bpm, with some shorter note values that may either be single- or double tongued - Articulation: moderate demands. Basic articulation types used in contrast and combination 					
12. Flexibility and dexterity		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: requires some flexibility in the lower and middle registers - Dexterity: There are a number of passages that require dexterity for coordination between tongue and fingers (for example, in septuplet passages) 					
13. Breathing		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands - Work is well written, with sufficient places for performers to take in breaths at phrase endings - Phrase lengths are short - Performers should be comfortable with taking quick breaths to be able to deal with faster tempi 					
14. Overall technique		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate overall technique required 					
15. Extended techniques		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
16. Accompaniment		0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Lyrical piano part - Only challenges would be to coordinate tempo changes 					
17. Musical complexity		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Music is not very complex owing to the diatonic scales and arpeggios, as well as the excellent legibility of the score - Limited interpretation requires, as all performance directions are notated 					
Total score				26	
Level Recommendation from score					

UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input checked="" type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>	PG Hons: 35- 38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
The system has correctly graded this work for the 3 rd year undergraduate student. It can serve as good serious literature written for the tuba in the Romantic idiom. There are a few challenges, but nothing that exceeds the ability of such a student.						

Addendum 15: Grading score sheet of *Aboriginal Voices* by Corwell

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: GG-e¹ - Tessitura: the majority of the notes are written in the staff, with a good concentration of notes in the mid-low to lower register, and a few entrances above the staff - The work is suited to both the contrabass and bass tubas 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: standard major and minor - Intervals: mostly manageable, diatonic intervals with a few larger intervals, largest a 13th. Frequent octave displacement, but manageable since the majority are an octave apart in the middle to lower registers - Scales: standard major and minor scales and arpeggios, with chromatic scales - Approach: approach of notes is manageable, scalar and arpeggiated 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Difficult - Up to 6 flats, but only 1 sharp - Modulation into related keys - 3 modulations 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melodies are tonal, with a few wide leaps - Scalar and arpeggiated 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: rhythmically complex. Some meter displacement and syncopation. - Simple note values, the shortest being semiquavers - Tempo: Slow first section, with a moderate to fast second section. Only one tempo change - Metrical displacement 					
6.	Time signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Simple duple and compound signatures $\frac{4}{4}$, $\frac{6}{8}$ and $\frac{9}{8}$ - Very few changes 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderately difficult dynamics <i>p</i>-<i>ff</i> - A fair number of crescendos and diminuendos (15) 					
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on endurance - Longer phrases, with some rests 					
10.	Overall length	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate length: 7'37" 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: some fast single tonguing required – semiquavers in $\frac{6}{8}$ at 104bpm - Articulation: many advanced articulation types (<i>sffz</i>, <i>fp</i>), some with quick combinations and contrasts 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: Considerable demands on flexibility. Some quick shifts between registers. Note bends required - Dexterity: Considerable dexterity required to play chromatic semiquaver passages at fast tempos 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on breath due to some long phrases - Quick breaths at faster tempos required 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on flexibility - Fast single tonguing, advanced dexterity, moderate flexibility 					
15.	Extended techniques	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderate demands - A number of intermediate-level techniques, including multiphonics, pitch bends, and flutter tonguing 					
16.	Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - mp3 accompaniment - It is challenging to co-ordinate live playing with the electronic accompaniment 					
17.	Musical complexity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on interpretation, considering the opening cadenza, and decisions that have to be made regarding the extended techniques 					

Total score						36
Level Recommendation from score						
UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>	PG Hons: 35-38 <input checked="" type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
The work is accurately graded for the entry level postgraduate student due to challenges regarding dexterity, rhythmic complexity, the presence of extended techniques, and the non-standard accompaniment. The work could be prescribed for the advanced 4 th year student who wishes to play extended techniques.						

Addendum 16: Grading score sheet of the *Sonata* by Madsen

Criteria		Score /3		
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Range: Advanced, with extreme high range: BB^b – g¹ - Tessitura: Most notes are written in the middle-higher to higher tessitura, with limited low range 				
2.	Harmonic language	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Tonality: tonal, with frequent and fast-paced chromaticism - Intervals: advanced intervallic types. Range of intervals limited to a 10th - Scales: advanced scale and arpeggio types. Frequent and fast changes between these scale and arpeggio types - Approach: notes mostly approached by step and manageable arpeggios 				
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Very difficult - No key signature written, but centres around key of B^b - Frequent and quick modulations (sometimes within a bar) between keys - Due to the modes used, the key signature is not always clear - Uses both sharps and flats sometimes within the same phrase - Up to 5 sharps and 6 flats, with some double sharps and flats 				
4.	Melodic contour and shape	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Melody is tonal, consisting of scales and arpeggios mostly within one octave, with a number of occurrences of octave displacement - No angularity 				
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Rhythm: Advanced rhythmical complexity including some advanced note durations, including demisemiquavers and triplets (quaver-, semiquaver-, and demisemiquaver varieties) - Tempo: 1st movement is moderately demanding, ranging from <i>Andante</i> – <i>Allegretto</i> (98-109 bpm), with frequent tempo changes and tempo alterations (<i>ritardando</i> and <i>accelerando</i>). 2nd movement is fast (<i>Allegro energico</i> = +120bpm). 3rd movement ranges from slower (<i>Andante</i>) to very fast (<i>Allegretto</i> in 2) 				
6.	Time signatures	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderate difficulty - Mostly simple time signatures, with 5-time signature changes in the 3rd movement 				
7.	Dynamics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Advanced - Advanced types including <i>fff</i> - Several different combinations and contrasts - Several crescendos and diminuendos - Large dynamic range, often with gradations between extremes - Some challenges in the execution of softer playing in higher register, especially in the 2nd movement 				
8.	Ornaments	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Moderate difficulty - Several trills (5-10), easily executable on the F tuba 				
9.	Endurance	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Endurance is a significant challenge - Requires a player with a strong embouchure, as many passages lie in the mid-high and higher tessitura, with long phrases and little time to rest (this is true particularly of the 1st movement) 				
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Long, approximately 13 minutes 				
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Tonguing: Ranging from slow to fast speeds (latter is 100 bpm. Demands a fast single tongue of the ability to double tongue. Some passages requirement the single tonguing of semiquavers at >120 bpm - Articulation: Several recurring advanced articulation types, with subtle differences at each appearance. Frequent and quick contrasts and combinations of articulation 				
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Flexibility: demanding, especially in the 2nd movement, which requires slurs in the higher register - Dexterity: advanced finger dexterity required, as a number of passages are in a fast tempo and contain short note values; also, notes in the scalar and arpeggio passages must be executed at speed 				
13.	Breathing	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Advanced level of breath control required - The 1st movement consists of extended phrases with very little space to breathe - Requires advanced breathing techniques - Other movements are less demanding in this regard, but there are a number of passages that that require some very quick breaths - Careful planning is needed to place breaths at minimally intrusive point 				

14. Overall technique	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
- Moderate - advanced demands on players' technique regarding fast single tongue, multiple tongue, advanced dexterity, flexibility, and breath control			
15. Extended techniques	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- None			
16. Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>
- Piano accompaniment part of virtuoso standard; however, putting the work together is not very difficult			
- Predominantly melodic and accompaniment (homophonic) texture, with frequent role shifts between melody and accompaniment for both soloist and pianist			
- The work contains a short fugue that requires some ensemble coordination			
17. Musical complexity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
- Moderate musical complexity			
- Requires moderate aural skills, as intervals are relatively difficult to hear, and a number of entrances are in the higher register			
- Well-suited to the more advanced student, due to the omission of key signatures. Additionally, there are several accidentals (with frequent/fast shifts between them), as well as the usage of both sharps and flats in one bar			
- Performance directions are complex and specific, sometimes with subtle gradations between them			
- The piece contains two cadenzas in 1 st movement that requires creative interpretation			
Total score			43
Level Recommendation from score			
UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>
			PG Hons: 35-38 <input type="checkbox"/>
			PG M1: 39-42 <input type="checkbox"/>
			PG M2/D: 43-48 <input checked="" type="checkbox"/>
Recommendations:			
The designation of Master's or Doctoral level is accurate, as the work requires a more mature student, with advanced skills to perform it satisfactorily.			

Addendum 17: Grading score sheet of *Credoscapes* by Ndodana-Breen

Criteria		Score /3				
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Range: moderate: CC – e¹ - Tessitura: easy. Majority of notes are in and just below the bass clef staff, with few (4) passages above the staff - Range and tessitura denote entry-level university undergraduate student 						
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Tonality: tonal, minor - Intervals: not very demanding, largest interval is an octave - Scales: major and minor scales and arpeggios - Approach: notes are approached by either scale or arpeggio or in combination thereof. Some intervals will require some good pitching (6ths) 						
3.	Key signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy - G natural minor (aeolian) throughout - 2 flats, no accidentals 						
4.	Melodic contour and shape	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Melody is tonal, made up of scales and arpeggios that are easily managed 						
5.	Rhythm and tempo	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Rhythm: rhythms are simple. Note durations are mostly crotchets and quavers, with some tied derivatives - Tempo: below moderate (82 bpm) 						
6.	Time signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy, $\frac{6}{8}$ throughout - A few bars that require some good counting 						
7.	Dynamics	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Very easy - Only one, <i>f</i> 						
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
9.	Endurance	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Minimal demands on endurance - Frequent breaks in music - More lower-middle register than higher playing, so no major challenges 						
10.	Overall length	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Very short: 1'20" 						
11.	Tonguing and articulation	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Tonguing: easy, moderate speed single tongue, no multiple tonguing - Articulation: All notes are tongued with some staccato notes 						
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Flexibility: no harmonic or valve slurs across partials. A few passages that require moderate flexibility as notes cover a few partials from below the staff into the higher register - Dexterity: work is fairly slow with no accidentals, so limited demands on dexterity 						
13.	Breathing	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Frequent breaks in the works create ample time for the tubist to breathe, therefore no major breathing challenges 						
14.	Overall technique	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Aside from the few moderate demands on flexibility, the work has limited technical demands 						
15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
16.	Accompaniment	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - No accompaniment 						
17.	Musical complexity	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Limited complexity 						
Total score				17		
Level Recommendation from score						
UG 1: 15-19 <input checked="" type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>	PG Hons: 35-38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
A relatively easy work for unaccompanied tuba classified for undergraduate 1 st year. If the student has the range, 1 st year, otherwise 2 nd year. Good work for introducing unaccompanied works to students.						

Addendum 18: Grading score sheet of *Fantasiestücke* by Schumann

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: intermediate: GG# - d¹. The range is playable by a 2nd or 3rd year undergraduate student - Tessitura: moderate tessitura with notes predominantly in the bass staff, with many notes below the staff, and fewer above the staff - Playable on both bass and contrabass tubas 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: tonal work, standard major and minor modes used - Intervals: some intervallic challenges, including leaps of the 7th, 8^{ve} and 9th - Scales: scales are major and minor, including arpeggios, 7th chords, and a few fast chromatic scales - Approach: notes are approached mostly by scales and arpeggios consisting of intervals smaller than an octave 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Key of A minor (1st movement) and A major (2nd and 3rd movements) - Frequent modulations to related keys – up to 7 sharps and 4 flats - Frequent occurrences of accidentals, including double sharps 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonal melodies, consisting of a few wide leaps - Mixture of scales and arpeggios 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: simple note values and rhythms. Some triplets at fast pace, with semiquavers being the shortest note values. - Tempo: 1st movement is moderate (96 bpm); 2nd is very fast (132 bpm), as is 3rd (132 bpm). Very few written tempo changes. 					
6.	Time signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Standard time signatures with changes 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Extensive use of dynamics of moderate difficulty (<i>pp</i>-<i>ff</i>), including fast and slow crescendos - Some very quick dynamic contrasts and changes, and many different gradations of dynamics requiring secure dynamic control 					
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on endurance, although there are some longer phrases (4-6 bars), which is typical of a clarinet/cello transcription 					
10.	Overall length	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - At 12 minutes, this work is at the upper limit of the 'moderate length' classification 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: the 2nd and 3rd movement require rapid single tonguing, and possibly some double tonguing (depending on chosen tempi) - Articulation: advanced types of articulation, with frequent and rapid alternation and contrasts thereof. 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: considerable demands on flexibility, due to frequent and rapid arpeggiated legato passages (for example, players are required to move quickly through partials within 1.5 octaves) - Dexterity: moderate demands on finger dexterity, particularly in faster movements. Some difficult combinations due to the many accidentals, but dependant on pitch of tuba used 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Breath demands are mostly manageable, although the longer phrases may present some challenges in this regard - Certain phrases allow only limited time for breathing, which is common in transcriptions 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands 					
15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
16.	Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - The accompaniment and solo parts are well integrated, which may present some challenges in ensemble - Melodic and accompanimental roles shift smoothly and quickly between the two instruments 					
17.	Musical complexity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - The interpretational demands are high, as it is necessary to keenly observe the scrupulously-detailed articulation, dynamic and phrase indications - Added to this are the constant tempo changes (<i>rubato</i>) if the correct stylistic approach is sought 					
Total score				34	
Level Recommendation from score					

UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input checked="" type="checkbox"/>	PG Hons: 35-38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
Although the range of the work is limited and playable to the 2 nd -3 rd year undergraduate student, the score classifies the work at the 4 th year undergraduate level. I would recommend that the work is rather well suited to the postgraduate student, or a mature undergraduate since it has high demands regarding proper interpretation.						

Addendum 19: Grading score sheet of *Suite No. 1 “Effe”* by Wilder

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: Moderate/intermediate: FF – e¹ - Tessitura: Moderate tessitura. The majority of notes are within the staff with some notes above and below 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: tonal, major, and minor modes, with some chromaticism - Intervals: intervals are manageable, diatonic, combinations and contrasts of various types, mostly within one octave, but few wider intervals, the largest of which spans 1.5 octaves - Scales: 1st movement characteristic is the chromatic scales, other movements comprised of standard major, minor scales and arpeggios - Approach: notes are approached by step (scalar) and arpeggios 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - Of the 6 movements, only 5 have a written key signature - Up to 6 flats and 6 sharps - Frequent modulations - Many accidentals 					
4.	Melodic contour and shape	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melodies are tonal, and made up of standard scales and arpeggios 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: medium complexity, basic note values, shortest are semiquavers - Tempo: variable; movements 2 and 6 are slow, movements 1 and 4 are fast (120 and 132 bpm), movement 3 and 5 are at moderate speed 					
6.	Time signatures	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate difficulty - Mostly basic simple and compound duple and triple meter - 1st movement consists of complex rhythm $\frac{3}{8}$ - Few time signatures changes 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate - Wide dynamic range, with one extreme (<i>ppp</i> - <i>ff</i>) - Frequently use of crescendos - Several contrasts and combinations of articulation 					
8.	Ornaments	0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Basic - Valve and lip trill - A few grace notes 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Slower movements (2 and 4) present some endurance problems requiring soft playing at slow tempo in the higher register - Some extended phrases - Ample space to rest and recuperate 					
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced: 13 minutes 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: single tongue at fast and very fast speeds (120 and 132 bpm) - Articulation: several different articulation types used individually, in combination, and in alternation 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: highly demanding; slow movements in particular have legato passages over wider intervals, very quick passages that span across the partials require increased flexibility - Dexterity: advanced demands on finger dexterity especially in the 1st movement 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands - A few breathing challenges in slower movements - Faster movements require quick breaths 					

<ul style="list-style-type: none"> - Some breath marks are marked - Performers must be judicious in deciding where breaths places so as not to disturb the music - Some movements have ample space to breathe 						
14.	Overall technique	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>		
<ul style="list-style-type: none"> - Advanced overall technique consisting of some fast single tonguing, extensive dexterity and flexibility including a lip trill (optional) 						
15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
16.	Accompaniment	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderately difficult ensemble challenges 						
17.	Musical complexity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Performance directions are very detailed and complex - Intermediate aural skills required - Moderate difficulty pitching challenges 						
Total score					35	
Level Recommendation from score						
UG 1: 15-19	UG 2: 20-24	UG 3: 25-29	UG 4: 30-34	PG Hons: 35- 38	PG M1: 39-42	PG M2/D: 43-48
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommendations:						
The system grades the work at entry level postgraduate (honours) level; however, single movements can be used for undergraduate.						

Addendum 20: Grading score sheet of *Effie goes folk dancing* from *Suite No. 1 "Effie"* by Wilder

Criteria		Score /3				
1. Range and tessitura		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Range: moderate: FF - B^b 1 - Tessitura: mostly within the staff, with a few notes above and below 						
2. Harmonic language		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Tonality: major, tonal - Intervals: moderate; largest interval is an octave - Scales: diatonic, major - Approach: approach is a mixture of scalar and arpeggios 						
3. Key signatures		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy: in B^b major; very few accidentals, no sharps, 3 flats 						
4. Melodic contour and shape		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Melody is tonal, leaps within an octave, combination of arpeggio and scalar 						
5. Rhythm and tempo		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Rhythm: mostly quavers, with semiquavers as shortest value - Tempo: moderate tempo; accelerando at the end 						
6. Time signatures		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Simple - $\frac{6}{8}$ throughout 						
7. Dynamics		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Moderate demands - Uses wide range (<i>pp</i>-<i>ff</i>), in contrast combination with each other 						
8. Ornaments		0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - A few grace notes 						
9. Endurance		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Limited demands on player's endurance - Many places to rest 						
10. Overall length		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Very short: 2 minutes 						
11. Tonguing and articulation		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Tonguing: single tonguing at moderate tempo - Articulation: a few basic articulation types, with many occurrences of these in combination and contrast 						
12. Flexibility and dexterity		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Flexibility: Limited demands on flexibility since notes move from lower to mid-high register (and vice-versa) at a moderate pace - Dexterity: Very few fast notes, so very limited demands on dexterity 						
13. Breathing		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Ample opportunities in the music to take breaths - Some breaths marked - Few breathing challenges 						
14. Overall technique		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Easy, requiring a few basic techniques including moderate flexibility, single tonguing, and dexterity 						
15. Extended techniques		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - None 						
16. Accompaniment		0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Homophonic texture, with good interplay and exchange between voices 						
17. Musical complexity		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>		
<ul style="list-style-type: none"> - Not very complex - Presence of key signature makes work relatively easy to read - Minimal aural skills required - Limited demands on interpretation – all directions clearly indicated on the score 						
Total score					19	
Level Recommendation from score						
UG 1: 15-19 <input checked="" type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>	PG Hons: 35- 38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
This movement on its own suits the 1 st year undergraduate student very well.						

Addendum 21: Grading score sheet of the *Romanza* from the *Tuba Concerto* by Vaughan Williams

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: Intermediate: BB - e¹ - Tessitura: The density of notes is in the medium-high to higher registers with a few notes lower than the bass clef staff 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: Standard major and minor - Intervals: Diatonic intervals, mostly within one octave, with one large interval (10th) - Scales: Major and minor scales and arpeggios - Pitching: Some difficulty in pitching of notes in the higher register 					
3.	Key signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Simple key signatures - Major and minor keys in relation to the tonic (D major) - A maximum of two sharps - Only four (notated) modulations 					
4.	Melodic contour and shape	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melody is scalar and arpeggiated consisting of 3rds-5ths 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: Advanced note values including basic values, triplets, sextuplets, and hemidemisemiquavers - Tempo: Slow tempo (60 bpm), with a rallentando at the end, making the performance of the advanced rhythms easier 					
6.	Time signatures	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Easy, $\frac{2}{4}$ throughout 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderately difficulty - Basics, with one extreme (<i>ppp</i>) - Majority of the work is soft, so requires good dynamic control, especially in higher register passages - One loud climax (<i>ff</i>) 					
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate to advanced endurance, as the work has extended phrases, and is mostly in the mid-high and higher register 					
10.	Overall length	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - 6 minutes 					
11.	Tonguing and articulation	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: The smaller note values require some moderate single tonguing, no multiple tonguing - Articulation: Minimal demands, either legato or tongued 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: Moderate demands on flexibility especially for slurs in the higher register, some movement between partials - Dexterity: Mostly not very demanding, but some passages on page 2 require significant dexterity 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate breathing challenges in longer phrases, but mostly manageable due to ample space for breath placement 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate demands on technique (flexibility, dexterity) 					

15.	Extended techniques	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- None					
16.	Accompaniment	0 <input type="checkbox"/>	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- No challenges, mostly melody with accompaniment and interchange or transfer of these roles					
17.	Musical complexity	1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	
- Not very complex					
- Instructions clearly written and well-spaced					

Addendum 22: Grading score sheet of the *Tuba Concerto* by Vaughan Williams

Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Range: advanced, Some notes in the extreme range, and pedal range, EE^b - Ab¹ (without ossia); with ossia, the range is EE^b – f¹ - Tessitura: the work exploits the entire range of the F tuba, although it is possible to play on the bass E^b, F and contrabass C and B^b instruments, it is much better suited to the F for which it was originally written. Written mostly in the staff and above (middle-middle higher register), with some note in the lower register 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: standard major and minor tonalities with a significant amount of chromaticism - Intervals: manageable – standard, diatonic intervals mostly within the octave. One interval of a 10th in 2nd movement - Scales: mixture of major and minor scales and arpeggios, as well as pentatonic scale in 3rd movement - Approach: approach of notes are a combination of scalar and arpeggiated, with one large interval 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - Keys containing up to 5 flats, not many sharps - Frequent and quick modulations to related keys - Frequent usage of accidentals using both sharps and flats - Occasional double flats 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melodies are tonal consisting of manageable scales and intervals 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: Advanced note duration including triplets and sextuplets, rhythmically complex, 3rd movements contain short note values at a very fast tempo - Tempo: 1st and 2nd movements are manageable at moderate and slow tempos respectively 3rd is very fast (150 bpm). Tempo modulations occur at cadenzas and endings of the 1st and 3rd movements. Several tempo alterations (for example, ends of 1st (<i>Largamente</i>) and 3rd movements, as well as those in cadenza and ending of 1st movement - Cadenza of 3rd movement leaves much to the player's interpretation 					
6.	Time signatures	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderately difficult time signatures - using hemiolas, rhythmic displacement (2 against 3, and 3 against two) - Frequent shifts between simple and compound meter - Requires a player with strong rhythmic sense and inner pulse to bring out the differences 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Dynamic range is moderate with one extreme (<i>fff</i>) - Frequent and quick alternation/contrast of dynamics - Several crescendos and diminuendos 					
8.	Ornaments	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Both tremolo and trill used - 8 ornaments (6 tremolos, 2 trills) 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate - Work is well-written allowing enough time to rest throughout - 2nd movement provides the biggest challenge regarding endurance, as it contains longer phrases, and range remains in the middle higher to higher register, with a high climax close to the end of the movement 					
10.	Overall length	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced length - Performance times vary between 13 and 17 minutes 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: fast single/double tonguing passages required in 1st movement cadenza, and entire 3rd movement 					

- Articulation: several advanced articulation types and combinations/contrasts thereof. Articulations are very specific and require quick changes									
12.	Flexibility and dexterity					1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
- Flexibility: Moderate flexibility requirements. Quick execution of notes through different ranges. Higher register flexibility required									
- Dexterity: 3 rd movement requires advanced finger dexterity									
13.	Breathing					1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
- Moderate demands on breathing									
- Contains some notated breathing places									
- Some breath challenges in slower movement due to longer phrases, and limited space to place breaths									
- 1 st and 3 rd movements require some quick breathing techniques due to the speed of some passages									
14.	Overall technique					1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
- Overall technical competency required is advanced considering fast tonguing and multiple tonguing									
- Requires good flexibility, as well as dexterity									
15.	Extended techniques					0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
- None									
16.	Accompaniment					0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>
- Moderate accompaniment challenges, especially in the 3 rd movement									
17.	Musical complexity					1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
- Moderately complex especially in 1 st and 3 rd movement cadenzas, requiring a significant degree of interpretation									
- Good variation and combination of performance directions									
- Expressions are for more advanced students since there are many types (articulations, dynamics, and style) and contrasts, sometimes changing very quickly									
Total score							39		
Level Recommendation from score									
UG 1: 15-19	UG 2: 20-24	UG 3: 25-29	UG 4: 30-34	PG Hons: 35- 38	PG M1: 39-42	PG M2/D: 43-48			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Recommendations:									
The work is correctly graded at the Master's level due to range, complexity, dynamics, articulation, and demands on interpretation. Individual movements, however, are within the reach of undergraduate students.									

Addendum 23: Grading score sheet for *Capriccio* by Penn

Grading system score sheet					
Work:		<i>Capriccio</i>			
Composer/Arranger:		William Penn			
Edition (if applicable)		Keyboard Percussion Publications			
Criteria		Score /3			
1.	Range and tessitura	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Range: moderate: FF – e¹ - Although I would recommend that it be played on the bass tubas, the work is also playable on the contrabass tubas - Tessitura: notes are mostly within the bass clef staff, and span the entire range - There are few passages above and below the staff, but for the most part, the tessitura is within the staff 					
2.	Harmonic language	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Tonality: standard major and minor tonality - Intervals: most of the intervals are manageable and do not exceed an octave. However, there are a number of 9ths, and one bar that requires a glissando spanning 2.5 octaves - Scales: Major and minor scales and arpeggios, and chromatic scales - Approach: Notes are approached by a combination of arpeggios and scales, with some wider intervals 					
3.	Key signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - No key signature written, but centres around key of C, with frequent accidentals - Uses both sharps and flats, sometimes in the same passage - Up to 5 sharps and 5 flats - Frequent modulations 					
4.	Melodic contour and shape	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Melodies are a mixture of arpeggios and scales - Arpeggios contain large intervals, the largest being a 9th 					
5.	Rhythm and tempo	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Rhythm: moderate to complex note values. Basic rhythms. Shortest note value is a quaver. There is some occurrences of ratios, as well as hemiola, and rhythmic displacement - Tempo: fast basic tempo (132 bpm), two extreme tempo modulations using <i>ritardando</i> and <i>accelerando</i> 					
6.	Time signatures	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - Some rhythmic displacement – hemiolas - Time signatures include simple and compound ($\frac{12}{8}$, $\frac{6}{8}$, $\frac{9}{8}$ and $\frac{2}{2}$), with frequent and quick time signature changes 					
7.	Dynamics	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Advanced - Includes both basic and extreme dynamics (for example, <i>fff</i>) - Several dynamic gradations, as well as very quick (or even sudden) changes and contrasts 					
8.	Ornaments	0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - No ornaments 					
9.	Endurance	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - The majority of the work is well-written, having ample rest space within phrases and some 3-4 bar sections that allows the player to rest and recover - Moderate endurance challenges are present in the work, especially in the longer phrases 					
10.	Overall length	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate length: 11 minutes 					
11.	Tonguing and articulation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> - Tonguing: requires single tonguing at fast speeds, no multiple tonguing - Articulation: advanced. Many different types used separately and in combination and contrasts with each other. Quick changes between articulations 					
12.	Flexibility and dexterity	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Flexibility: some large intervals that span from lower to higher ranges very quickly, placing moderate demands on flexibility - Dexterity: the faster tempo and scalar/arpeggiated nature of many of the passages requires a moderate degree of finger dexterity 					
13.	Breathing	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - The breath demands of the work are moderate, as there are frequent breaks in the music for breath placement - Some longer phrases and the speed of the music place moderate demands on breathing 					
14.	Overall technique	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Moderate technical demands, including fast single tonguing passages, finger dexterity, and flexibility 					
15.	Extended techniques	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	

- There is only one type (glissandos), of which there are four instances; these must be both quickly and slowly, with the largest spanning over 2 octaves									
16.	Accompaniment					0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderate difficulty - Marimba or tape - Since the options for accompaniment are not the standard accompaniment instrument, there may be challenges in putting the work together. The timbre of the marimba is quite different to that of the piano, and the tuba player would have to listen carefully - In general, the work contains a goodly amount of 'dialogue' between the parts 									
17.	Musical complexity					1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	
<ul style="list-style-type: none"> - Work is of moderate complexity - There are several complex performance directions, and contrasts between these - Very few interpretational decisions are left to the player – everything is well indicated - The pitching of certain notes may pose challenges in the execution of wider intervals 									
Total score								37	
Level Recommendation from score									
UG 1: 15-19	UG 2: 20-24	UG 3: 25-29	UG 4: 30-34	PG Hons: 35- 38	PG M1: 39-42	PG M2/D: 43-48			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Recommendations:									
The level classification of entry-level postgraduate is very accurate. The work is not outside the range of undergraduate performers, however there are certain aspects that are better suit to the postgraduate student including the advanced articulations, rhythmic complexity, and dynamics. This work should only approach once the student has a mastered the technical requirements of the work, has strong sense of inner pulse, and is able to listen carefully and follow/adjust to the accompaniment.									

Addendum 24: Grading score sheet for Suite for Solo Tuba by Stephenson

Criteria		Score /3		
1. Range and tessitura		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Range: moderate: DD – f¹ - Tessitura: well-written, with most of the notes within the bass clef staff and in the middle register. There are a number of notes which exceed the ambit of the staff (both above and below) 				
2. Harmonic language		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Tonality: major and minor, tonal - Intervals: basic types with some larger intervals present (15th) - Scales: diatonic, major, minor - Approach: combination of scalar and arpeggio 				
3. Key signatures		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Difficult - None written, but centres around the key of D - Up to 6 flats and 5 sharps 				
4. Melodic contour and shape		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Scalar and arpeggiated, and in combination - No angularity - Tonal 				
5. Rhythm and tempo		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Rhythm: basic forms of rhythms and patterns. Shortest note value is semiquaver and includes a few triplets. - Tempo: most movements are fast (>120 bpm). There are few tempo changes 				
6. Time signatures		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderately difficult - Basic time signatures - The work contains both simple and compound signatures - There are a number of time signature changes, especially in the 1st movement 				
7. Dynamics		1 <input checked="" type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - No specific dynamics written, but there a number of crescendos 				
8. Ornaments		0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Frequent occurrences of grace notes (acciaccaturas), and a few mordents 				
9. Endurance		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Considerable demands on endurance - Very few places to rest - Phrases of extended length 				
10. Overall length		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Very long: 14 minutes 				
11. Tonguing and articulation		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Tonguing: very fast single tongue required (>120 bpm). Several sequences of semiquavers - Articulation: highly demanding in this regard. Several varied and advanced types are used in combination and contrast, some at fast tempi 				
12. Flexibility and dexterity		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Flexibility: advanced flexibility required. Some slurred and tongued passages spanning almost 2 octaves at fast tempi - Dexterity: advanced demands due to faster tempos (>120 bpm) 				
13. Breathing		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - Advanced demands on breathing - Very few spaces breath placement - Phrases of extended length - Advanced breathing techniques are required 				
14. Overall technique		1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> - High demands on overall technique - Advanced breath techniques, flexibility, tonguing, and articulation 				
15. Extended techniques		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 				
16. Accompaniment		0 <input checked="" type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>
<ul style="list-style-type: none"> - None 				
17. Musical complexity		1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
<ul style="list-style-type: none"> - Moderate; the most significant challenge is musical interpretation 				

Total score						35
Level Recommendation from score						
UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input type="checkbox"/>	PG Hons: 35-38 <input checked="" type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>
Recommendations:						
The grading system grades the work at the entry level postgraduate level. I would recommend it for the Master's student at the minimum, with the exception of the very advanced Honours level student. The motivating factors here include the length, endurance, and demands on interpretation.						

Addendum 25: Grading score sheet of *Scherzo* by Stockton

Criteria		Score /3			
1.	Range and tessitura	1□	2□	3☒	
<ul style="list-style-type: none"> - Range: advanced: GG – $f^{\#1}$ - Tessitura: utilises the entire range. Notes are concentrated mostly in the middle-high registers, with a few below the staff, and a single occurrence in the extreme higher range - Best suited to bass tubas 					
2.	Harmonic language	1□	2□	3☒	
<ul style="list-style-type: none"> - Tonality: advanced, non-standard. Uses Lydian mode. Frequent use of chromaticism - Intervals: frequent use of augmented 4ths, and major and minor 6ths - Intervals generally do not exceed an octave (the exceptions include a number of 11ths, and a 2.5 octave interval before the last note) - Scales: Not very many scales – the work is characteristically arpeggiated consisting of irregular intervals - Approach: Work is very well written, as the majority of notes are approached by scales and arpeggios, with a few exceptions (explained under 'Intervals') 					
3.	Key signatures	1□	2□	3☒	
<ul style="list-style-type: none"> - Very difficult - No key signature written, but work revolves around B^b tonal centre - Utilises both sharps and flats - Fairly rapid shifts between keys and accidentals - Up to 6 flats and 4 sharps 					
4.	Melodic contour and shape	1□	2☒	3□	
<ul style="list-style-type: none"> - Melody is tonal, consisting of arpeggios and scales - Leaps of the melody within one octave, with a few that exceed it - Mixture of scalar and angular melody - Includes octave displacement 					
5.	Rhythm and tempo	1□	2☒	3□	
<ul style="list-style-type: none"> - Rhythms: basic rhythms for the most part, with some complex rhythms (triplets), and odd note groupings - Tempo: not demanding, moderate for the most part (110 bpm), with a slower middle section (65 bpm) - Performer should have a good sense of pulse in order to maintain consistency of tempo, and effectively execute the six tempo changes 					
6.	Time signatures	1□	2☒	3□	
<ul style="list-style-type: none"> - Moderately difficult, with two changes - For most of the work, the time signature is $\frac{5+8}{4}$, with a middle section in $\frac{6}{8}$ 					
7.	Dynamics	1□	2☒	3□	
<ul style="list-style-type: none"> - Moderate difficulty with loudest dynamic <i>ff</i> and softest <i>p</i> - One tricky bar (16) where notes (crotchets) ascend by arpeggio, but under a decrescendo 					
8.	Ornaments	0□	1□	2☒	3□
<ul style="list-style-type: none"> - Moderate difficulty - Only grace notes: eight acciaccaturas and two 3-note gruppettos 					
9.	Endurance	1□	2☒	3□	
<ul style="list-style-type: none"> - Moderate: as there are no breaks in the music, the work may present some endurance issues. 					
10.	Overall length	1☒	2□	3□	
<ul style="list-style-type: none"> - Quite short – 3 minutes 					
11.	Tonguing and articulation	1□	2☒	3□	
<ul style="list-style-type: none"> - Tonguing: moderate single tonguing speeds, no double tonguing - Articulation: moderate difficulty. Many different types of complex articulation types used in combination and contrast with each other 					
12.	Flexibility and dexterity	1□	2☒	3□	
<ul style="list-style-type: none"> - Flexibility: moderate flexibility since work moves quickly through all the registers - Dexterity: moderate demands on dexterity 					
13.	Breathing	1□	2□	3☒	
<ul style="list-style-type: none"> - Extended phrases with few obvious places for breathing - The player would need to be prudent regarding the least obtrusive place for breaths - Some advanced techniques might need to be implemented throughout including the sniff, hitch, and rubato breath 					
14.	Overall technique	1□	2☒	3□	
<ul style="list-style-type: none"> - Moderate technical demands on the player including moderate tonguing, flexibility, and dexterity 					
15.	Extended techniques	0☒	1□	2□	3□
<ul style="list-style-type: none"> - No extended techniques 					
16.	Accompaniment	0☒	1□	2□	3□

- Solo work, no accompaniment								
17.	Musical complexity					1 <input type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
- Moderate complexity								
- Demanding in terms of interpretation (especially regarding breathing)								
Total score						33		
Level Recommendation from score								
UG 1: 15-19 <input type="checkbox"/>	UG 2: 20-24 <input type="checkbox"/>	UG 3: 25-29 <input type="checkbox"/>	UG 4: 30-34 <input checked="" type="checkbox"/>	PG Hons: 35- 38 <input type="checkbox"/>	PG M1: 39-42 <input type="checkbox"/>	PG M2/D: 43-48 <input type="checkbox"/>		
Recommendations:								
Due to the work being unaccompanied, the demands on interpretation, and detail regarding dynamics and articulation, I recommend that this work be prescribed for the advanced 4 th year undergraduate student, and for the postgraduate students (Honours level and higher).								

Addendum 26: Biographical questionnaire template

George Foster																													
PhD Respondent Biographical Questionnaire																													
Ethical Clearance #UFS-HSD2017/0679																													
Respondent title (Prof./Dr./Mr./Mrs.):																													
Respondent name and surname:																													
<i>Please answer the following questions in the space provided. Where necessary, please tick the appropriate response</i>																													
1. What is your current age?		2. What is your highest academic qualification?																											
3. Do you have any other practical (tuba) qualifications aside from the one mentioned above? If yes, please list the qualifications.		<input type="checkbox"/> Yes <input type="checkbox"/> No																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Qualification</th> <th style="width: 30%;">Institution</th> <th style="width: 30%;">Year obtained</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Qualification	Institution	Year obtained																								
Qualification	Institution	Year obtained																											

4. Could you summarise your university tuba teaching career, specifically naming years of teaching spent at specific higher education institutions?																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Institution</th> <th style="width: 30%;">Years at institution</th> <th style="width: 30%;">Period</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Institution	Years at institution	Period																											
Institution	Years at institution	Period																														
5. Do you currently teach tuba at university level?		<input type="checkbox"/> Yes <input type="checkbox"/> No																														

10. How many tuba students are you currently teaching tuba performance studies to?	<input type="text"/>
11. Does your institution have or utilise a syllabus for tuba performance studies in your teaching?	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. Did you compile the syllabus yourself? If no, please elaborate on who compiled the syllabus.	<input type="checkbox"/> YES <input type="checkbox"/> NO _____
13. What does this syllabus consist of? _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	

14. What genres of materials do your students cover in their various years of study (solo repertoire, chamber music, orchestral excerpts etc.)? _____ _____ _____ _____ _____
--

Thank you for completing the biographical questionnaire. If you have any questions, please do not hesitate to contact me. Once completed, you may email the questionnaire to me at the following email address: FosterGR@ufs.ac.za.



George Foster
FosterGR@ufs.ac.za
+27 84 583 9209

Addendum 27: Respondent invitation email template

Dear Respondent

I would like to inform you about an opportunity to participate in my research study entitled "An investigation into a proposed syllabus for tuba performance studies modules at South African universities". The research project concerns the investigation into compilation and implementation of syllabi for tuba studies at local and international tertiary institutions. Through a literature review, questionnaire, and interviews with respondents, I aim to gather enough data to be able to compile a syllabus for tuba performance studies to be used at South African universities.

The decision to include you as one of the respondents is motivated by your reputation as a world-renowned university tuba teacher, with more than (30) years teaching experience, and considerable years' experience as a professional tubist. You have also compiled two syllabi for university tuba studies, this being the central focus of the research project.

Should you be willing to participate in the study, the following will be expected of you:

1. Completion of the attached Consent to Participate form,
2. Completion of the Biographical Questionnaire, and,
3. A Skype interview eliciting responses from you regarding syllabi for tuba performance studies at the university level.

If you would like to partake in this exciting initiative, please complete and return the attached "Consent to Participate" form and the "Biographical Questionnaire" by no later than Friday 15 June 2018. You have the option of completing the necessary documentation (1) electronically, and returned to my email address, or (2) in hard copy, scanned, and returned to me via email.

Included as attachments in this email, you will find the following documents:

1. Informed consent form (please return by June 16, 2018)
2. Biographical questionnaire (please return by June 16, 2018)
3. Participant information sheet
4. Ethical clearance letter
5. Institutional permission letter from your institution

Should you have any concerns, do not hesitate to contact me or my supervisor, Dr. Frelét de Villiers (devilliersamf@ufs.ac.za) at the details below.

Lastly, thank you for considering partaking in the research project.

Yours sincerely,



George Foster
Lecturer in Brass Studies
Odeion School of Music
University of Free State
FosterGR@ufs.ac.za
+27 84 583 9209

Addendum 28: Informed consent form template

An investigation into a proposed syllabus for tuba performance studies modules at South African universities

Principal Investigator: George Foster
Phone number(s): +27 84 583 9209

INFORMED CONSENT:

Dear Participant

I would like to invite you to participate in my PhD research study 'An investigation into a proposed syllabus for tuba performance studies modules at South African universities'.

The aim of this study is to determine the design process and implementation of syllabi for tuba performance studies at leading international institutions. The result is to gain enough information from interviews a thorough literature study to design a syllabus for tuba performance studies modules for use at South African Universities.

You are regarded as a key informant based on your first-hand experience as a university tuba teacher and will therefore be able to purposefully inform an understanding of the research problem of the study. All steps will be taken to uphold your confidentiality during this study.

Interviews will last approximately one hour, utilising ten prepared open-ended questions. The interviews will be conducted via Skype at a date and time suitable to you.

Your participation is entirely voluntary, and you are under no obligation to participate in this study. You will not suffer any consequences or loss for choosing not to participate. Participants will not be rewarded for participating. It is also your right to withdraw at any time with no repercussions, but once the interview is done, you cannot withdraw anymore.

Yours Sincerely



Respondent consent section:

I hereby give free and informed consent to participate in the above-mentioned research study.

- I understand what the study is about, why I am participating and that I can withdraw from the study at any time.
- I give the researcher permission to make use of the data gathered from my participation.

Signature: _____ Date: _____



Addendum 29: Participant information sheet

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA



PARTICIPANT INFORMATION SHEET

DATE:

'An investigation into a proposed syllabus for tuba performance studies modules at South African universities'

Dear Prospective Participant

My name is George Foster and I am doing research with Dr. Frelet De Villiers, a lecturer at the Odeion School of Music towards a PhD at the University of the Free State. We are inviting you to participate in a study entitled **An investigation into a proposed syllabus for tuba performance studies modules at South African universities.**

WHAT IS THE AIM/PURPOSE OF THE STUDY?

The aim of this study is to determine the design process and implementation of syllabi for tuba performance studies at leading local and international institutions. The result is to gain enough information to design a syllabus for tuba performance studies modules for use at South African Universities.

WHY AM I BEING INVITED TO PARTICIPATE?

You are being invited to participate because of your qualifications, reputation and experience as a university tuba lecturer, and representative of a specific geographical area. I received your contact details from _____ and would like you to participate as a leading professional in the field of tuba pedagogy and performance. In total, there are 15-20 envisioned participants including South African and international tuba lecturers.



University of the Free state
205 Nelson Mandela Drive/Ryłaan,
Park West/Parkweg, Bloemfontein 9301, South Africa/Suid Afrika
P.O. Box/Posbus 339, Bloemfontein 9300, South Africa/Suid Afrika

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY / WHAT DOES THE RESEARCH INVOLVE?

Your duties will include the completion of a consent form, a biographical questionnaire, and participate in a Skype interview. The biographical questionnaire and consent forms are included as attachments in this email. The second contact session will be in the form of a recorded Skype interview in which you will be asked ten open-ended, non-leading questions pertaining to syllabi for tuba performance studies at the university level. The expected duration of the Skype interview will not exceed one hour, and if necessary, a follow up interview will be scheduled at your convenience. The consent form and biographical questionnaire will not take longer than 60 minutes to complete.

CAN I WITHDRAW FROM THIS STUDY?

Participation in this study is voluntary, and you are therefore under no obligation to participate. There will also be no penalty or loss of benefit for non-participation. If you do agree to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw without providing a reason. However, once the questionnaire and the interview have been completed, you will not be able to withdraw from taking part in the project.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The resulting syllabus from the research project will greatly assist South African university tuba teachers and students by providing them with a recommended syllabus for tuba performance studies modules to be used at their institutions. The materials included in the syllabus will be selected from leading international sources collected through the data collection procedures (interviews and literature review). Thus, South African tuba students and teachers will have at their disposal a current syllabus on par with leading international trends, allowing students a greater chance of transitioning into further studies both locally and internationally. This will also assist in maximizing their chances of obtaining a performance/pedagogical position internationally.

The syllabus will also alleviate issues including unnecessary time spent researching what materials students should cover in their specific year of study. The progressive nature of the syllabus will alleviate instances of assigning materials that are above or below the students' abilities/grade level, rendering goals more attainable. Further research into grading systems, used to rate repertoire into difficulty levels, will be invaluable in the formation of a rubric with the same purpose. This rubric can be used to grade new or unrated repertoire. The syllabus design procedure followed can be applied to design syllabi for other instruments.

The international tuba community will benefit from this study as it will add to the growing body of academic works. International respondents will have access to a copy of the research thesis, and this will provide them with insight into syllabus compilation at other institutions, should they wish to formulate or revise their own. The syllabus will include compositions from South African composers, and not only will this put the works on an international platform, it will also provide the international audience with more serious compositions for tuba. Since the syllabus will also include works from other geographical areas, teachers and students will have a source for new compositions.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

Every effort will be made to limit any foreseeable inconvenience, by allowing you to complete the biographical questionnaire and interviews at a time and date that is most convenient. The interviews can take place in person, via Skype, telephone, or by email correspondence, according to your preference. The only anticipated inconvenience is the time it would take for you to complete the consent form, questionnaire, and interview.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

Your participation in this study will remain confidential. Your answers will be given a fictitious code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods including conference proceedings. The only persons who will have access to the data will include myself, my internal supervisor, Dr. Frelet De Villiers, and co-promoter research Dr. Phil Golson. Both individuals will be asked to sign a confidentiality agreement to keep your information confidential. Your anonymous data might be used for other purposes outside this research project, for instance, in a report, research/journal article, or presentation at a conference. In this case, your identity will remain confidential.

HOW WILL INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the University of Free State for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There is no payment or financial incentive available for taking part in this study.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received written approval from the Ethics Committee of the Faculty of Humanities of the University of Free State (Ethical clearance number UFS-HSD2017/0679). A copy of the ethical clearance letter, and institutional permission from your institution have been included as attachments along with this document.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS?

If you would like to be informed of the final research findings or require any further information, please contact me on +27 84 583 9209, +27 51 401 3931, or FosterGR@ufs.ac.za. The findings will be accessible from March 2019.

Should you have concerns about the way in which the research has been conducted, you may contact Dr. Frelet De Villiers on +27 71 643 4671, +27 51 401 3151, or DeVilliersAMF@ufs.ac.za

Thank you for taking time to read this information sheet and for participating in this study.
Thank you.



George Richard Foster

Addendum 30: Ethical clearance document 1



Faculty of the Humanities

23-Mar-2018

Dear Mr Foster

Ethics Clearance: An investigation into a proposed syllabus for tuba performance studies modules at South African universities

Principal Investigator: Mr George Foster

Department: Odeion School of Music (Bloemfontein Campus)

APPLICATION APPROVED

With reference to your application for ethical clearance with the Faculty of the Humanities, I am pleased to inform you on behalf of the Research Ethics Committee of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence is: **UFS-HSD2017/0679**

This ethical clearance number is valid for research conducted from 23-Mar-2018 to 23-Mar-2019. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Asta Rau', is written over a large, semi-transparent watermark that says 'APPROVED' diagonally across the page.

Dr. Asta Rau
Chair: Research Ethics Committee
Faculty of the Humanities

Office of the Dean/Kantoor van die Dekaan/Ordeur van die Dina
T: +27 (0)51 481 2243 | F: +27 (0)51 481 7363 | E: humanities@ufs.ac.za
P.O. Box/Postbus 339 | Bloemfontein 9300 | South Africa/Ordeur - Ordeur | www.ufs.ac.za



Addendum 31: Ethical clearance document 2 (renewal)



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

26-Mar-2019

Dear Mr Foster, George GR

Application Approved

Research Project Title:

An investigation into a proposed syllabus for tuba performance studies modules at South African universities

Ethical Clearance number:

UFS-HSD2017/0679/2603

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr. Petrus Nel

Chairperson: General/Human Research Ethics Committee

202 Nelson Mandela Drive/Ryssen
Park West/Parowes
Bloemfontein 9001
South Africa/Suid-Afrika

P.O. Box / Postbus 339
Bloemfontein 9000
South Africa / Suid-Afrika
T+27(0)51 401 2118
F+27(0)51 401 2000
ethics@uaf.ac.za
www.uaf.ac.za



Addendum 32: Institutional permission letter template



19 September 2019

Request for permission to conduct research with ...

An investigation into a proposed syllabus for tuba performance studies modules at South African universities

Dear Professor,

My name is George Foster and I am involved in a research project with Dr. Frelet De Villiers, a senior lecturer in the Department of Music, towards a PhD (Performance) at the University of the Free State. We are inviting your institution to participate in a study entitled '*An investigation into a proposed syllabus for tuba performance studies modules at South African universities*'.

The aim of the study is to investigate the compilation and design of syllabi for tuba performance studies modules at local and international tertiary institutions. Through a thorough literature review, interviews and biographical questionnaires with respondents, I aim to collect enough data to be able to compile a syllabus for tuba performance studies modules to be used at South African Universities.

South African tertiary institutions do not have a comprehensive, completed syllabus for tuba performance studies, therefore these institutions (teachers and students) will directly benefit from the outcomes of the study by having at their disposal, a graded list of materials for tuba students to study at the undergraduate and postgraduate level. This will alleviate any unnecessary time spent on searching for materials, and limit issues with prescribing work that is either above or below the level of the student.

... is one of the respondents due to his reputation as international tuba soloist and his experience in teaching at various levels across many countries.

The involvement of your staff member includes completion of a biographical questionnaire (online or email based), submitting a few forms (consent), and a one hour Skype interview, consisting of ten non-leading, open-ended questions. I would also require access to the tuba syllabus, if one is available.

Odeion Skool vir Musiek
Odeion School of Music
Odeion Sekolo sa Mmino
T: +27(0)51 401 2810
F: +27(0)51 444 5830
E: viljoengj@ufs.ac.za

P.O. Box/Posbus 339
Bloemfontein 9300
South Africa/Suid-Afrika
www.ufs.ac.za



There are no foreseeable risks attached to participation in the research project, and the respondent has the option to remain completely confidential.

Feedback procedure will entail providing a research report, and access to a copy of the thesis upon completion.

I hope I will be able to count on your institution and ... participation in the study, and look forward to our future involvement. In order to grant me permission to undertake research at your institution, please email me an official, signed letter on your institution's letterhead by no later than Friday 27 September 2019. I also attach a response letter template you may utilise in your reply.

Yours sincerely,



George Richard Foster
Lecturer in Brass Studies
Odeion School of Music
University of Free State
+27 51 401 3931
+27 84 583 9209
FosterGR@ufs.ac.za



Addendum 33: Respondent interview questions

Respondent Skype Interview Questions
1. In your own words, could you explain what you understand by a “syllabus” related to tuba performance studies modules at the university level?
2. What considerations do you think need to be taken into account when designing a syllabus for university tuba performance studies?
3. The biographical questionnaire asked whether you make use of a syllabus in your university tuba teaching. If so, who compiled the syllabus?
4. Could you elaborate on the makeup of the syllabus?
5. What are your experiences in using the syllabus for university tuba teaching? E.g. Strengths, limitations, clearer goal for students, etc.
6. What genres would you recommend a syllabus for university tuba performance studies cover (orchestral studies, solo repertoire etc.)?
7. Could you elaborate on your knowledge of methods/systems/tools that grade or classify repertoire into specific levels. For example, different levels of university tuba study.
8. (If the respondent is familiar with grading systems above) Could you elaborate on any limitations you are aware of that these systems have in grading material for specific years of university study?
9. What criteria, would you suggest, should be included in such a grading system?
10. How did you, or how would you decide which materials you include and exclude in your syllabus?
11. Can you name any other syllabi that you are aware of for tuba performance studies that cater for university level tuba studies?
12. Can you elaborate on your experiences (if any) with them, and their limitations/strengths for university level?

Addendum 34: Comprehensive results of analysis of collected syllabi

Syllabus Content Analysis						Technical/musical goals	Scale requirement	Scales list	Practicing information	quick study	scales based exercises	sight reading	Study/Etude requirements	Specific Study/Etudes or books	Tunes	Required materials	Lists/Method Books	Recommended/required Texts	Repertoire requirements	Repertoire List	Chamber music requirement	Ensemble Requirement	Orchestral excerpts	Band excerpts	Graded Orchestral Excerpts list	2nd instrument option	2nd instrument repertoire	2nd instrument Excerpts	Listening requirements	Listening suggestions	non-pedagogical information
Institution	Location/Area	Document Types	Compiler	Year	Document title	Levels																									
1	ABRSM Diploma Syllabus	UK, INT	Graded Examination Syllabus	ABRSM	2019	ABRSM Diplomas: Performance and Teaching	Dip ABRSM, LRSM, FRSM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	ABRSM Grades 1-8	UK, INT	Graded Examination Syllabus	ABRSM	2020	ABRSM Brass Syllabus	Grades 1-8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Angelo State University	USA	University syllabus	Edward Surface	2017	Course Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Arizona State University	USA	University syllabus	Deanna Swoboda	2020	Tuba Euphonium Applied Lesson Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Berklee College of Music	USA	University syllabus	Scott Roeder	2019	Module overview for Bachelor of Music - Tuba	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Berlin University of the Arts	Germany	Module overview	Sebastian Wage mann	2019	Module Overview for the Course of Study: Bachelor of Music in Tuba	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Bundesakademie für musikalische Jugendbildung Trossingen (Trossingen Federal Academy for Youth Music Education)	Germany	Graded Examination Syllabus	N/A	2020	Tuba: Overview of Studies	n/a	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Carnegie Mellon University	USA	Repertoire List	Craig Knox	2017	Literature and Repertoire Syllabus (Tuba)	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Guildhall School of Music and Drama	UK	University syllabus	Patrick Harrild	2006-2007	Guildhall School of Music and Drama Tuba Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	Illinois Valley Community College	USA	University syllabus	Brandon Czabachowski	2012	Syllabus Brass Lessons - Tuba	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	Iowa State University	USA	University syllabus	Christian Carichner	2016	ISU Tuba-Euphonium Studio Course Syllabus and Curriculum	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	Indiana University of Pennsylvania	USA	University syllabus	Zach Collins	2018	Syllabus for Applied Tuba and Euphonium Students Fall 2014	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Jacksonville State University	USA	University syllabus	Chris Hosmer	2018	Spring 2018 Applied Tuba and Euphonium Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	Mississippi State University	USA	Repertoire List	Micah Everett	2019	Literature and Repertoire Syllabus (tuba)	All university levels	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Mississippi State University	USA	University syllabus	Micah Everett	2015	Department of Music Course Syllabus (MUA 1550)	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Mozarteum University Salzburg	Austria	University syllabus	Andreas Hofmeir	2019	Curriculum for the Bachelors and Masters Degree in Instrumental Studies	All university levels	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Nelson Mandela University	SA	University Module Guide	Erik Albertyn	2018	Practical Studies Module Information	Postgraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	Nelson Mandela University	SA	University Module Guide	Erik Albertyn	2018	Practical Studies Module Information	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	New Zealand School of Music	NZ	Repertoire List	Andrew Jarvis	2012	Brass Syllabus: Tuba Repertoire	all university levels	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	New Zealand School of Music	NZ	University syllabus	Andrew Jarvis	2012	Brass Programme: Handbook and Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	North West University	SA	University Module Guide	Justin Sassaman	2018	Study Guide for MUSU 177, 277 and 377	Diploma of Music	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	Northern Arizona University	USA	University syllabus	Alexander Lapins	2010	Syllabus Applied Tuba Lessons	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	Northwestern University	USA	University syllabus	Rex Martin	2007	Tuba and Euphonium Syllabus	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	Peabody Institute	USA	University syllabus	Velvet Brown	2017	Tuba Requirements	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	Royal Academy of Music	UK	University syllabus	N/A	2017	UG Brass Handbook	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
26	Royal Academy of Music	UK	University syllabus	N/A	2019	PG Brass Handbook	Postgraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
27	Royal Conservatory of Music Developmental Program	Canada /USA	Graded Examination Syllabus	N/A	2003	Royal Conservatory Music Developmental Program Tuba Syllabus 2003	Level 1 - 10; Teacher's Associate Diploma	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
28	Royal Irish Academy of Music	Ireland	University syllabus	N/A	2015-2018	Syllabus for Woodwind, Brass and Percussion Instruments 2015-2018	Grade 1-7; Senior Certificate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	Stephen F. Austin University	USA	University syllabus	Jorge Salas	2019	Tuba-Euphonium Studies Curriculum	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30	Stephen F. Austin University	USA	University syllabus	Jorge Salas	2018	Syllabus for Tuba and Euphonium Private Lessons (Guideline for the Study of Tuba and Euphonium)	Undergraduate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Addendum 35: Analysis of collected repertoire lists – Solo Repertoire

Solo repertoire from collected syllabi/repertoire lists, alphabetical by title (815)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	24 Preludes	Jacobsen	2012	Digital Victrola	UMPAG (Masters)	Tuba and piano	1
A (60)							
1)	A Cat and Mouse Chase Down Haworth Main Street! No.4 from A Haworth Suite	Duncan	2001	Lewis Music Press	T6	Tuba and piano	1
2)	A Delaware Rhapsody	Uber	1981	Kendor	VBODA (6); VCE; UMPAG	Tuba and piano	3
3)	A Hornpipe	Lotzenhizer	1957	Belwin	Bailey (G2)	Tuba and piano	1
4)	A Prayer	Schlemuller/Hugo	1937	Carl Fischer	Bailey (G1)	Tuba and piano	1
5)	A Song for Susie	Sparke	1951	Anglo Music	ABRSM (7: B)	Tuba and piano	1
6)	A time for...	Winteregg	2014	Manduca	VBODA (6)	Unaccompanied	1
7)	A Touch of Tuba	Dedrick	1959	Kendor Music	Trossingen (ED 11/12); GTTB (3-4); NYSSMA (4)	Tuba and Concert Band (and piano)	3
8)	A Variation of East African Calls	Stroud	1981	Eureka	UNCP	Unaccompanied	1
9)	Aboriginal Voices	Corwell	1995	Nicolai	CM; ZER (2);	Tuba and tape	2
10)	Adagio	Bach/Hilgers	1990	EMR	SCMMDF (UG 1); Trossingen (ED 11/12)	Tuba and piano	2
11)	Adagio and Allegro	Telemann/Chidester/Norman	1973	Southern Music	UNTSS (1,2); Whitehead (I); Perantoni (FUS;1); NZSM (1-2); UNISA (6; A); SCMMDF (Initial 2); TAMK; ZC (4)	Tuba and piano	8
12)	Adagio and Allegro (Concerto in D)	Telemann/Friedman	1977	Southern Music	UNTSS (1,2); GTTB (3-4); NYSSMA (5)	Tuba and piano	3
13)	Adagio and Allegro	Schumann/Cooley	1994	Tuba Classics	VBODA (5); ZER (3);	Tuba and piano	2
14)	Adagio from the Limpid Stream	Shostakovich/ Miettunen	1995	Encore Music	Whitehead (IV); NZSM (1-2); RCDP (10 - A); UNCP; FTS; CM; ZER (2); UKM (J&S); UCLA (S);	Tuba and piano	8
15)	Aeolus	Máson	2003	BIM	Whitener	Unaccompanied	1
16)	Ain't Misbehavin' (Big Chillers for Tuba)	Waller/Ledburry	2005	Brass Wind	T6; ABRSM (6; B)	Tuba and piano	2
17)	Air and Bourrée	J.S.Bach/Bell	1937	Carl Fischer	ZER (1); UI, UNTSS (3,4), Whitehead (I); Meyer (pre-college); Gray (on entering college); Perantoni (FUS;1); NZSM (1-2); GTTB (5-6); GTTB (3-4); RCDP (ADTP – 8 – A); VBODA (6); UNISA (PA; C); VCE; CM; SCMMDF (Initial 1); PI; TAMK; UMIS (1); ZC (3-4); NYSSMA (5)	Tuba and Piano	21
18)	Air and Galumph (Op. 53)	Jacob, G	1985	Vanderbeek & Imrie	RAM (UG 1); VCE	Tuba and Piano	2
19)	Air from Judas Maccabeus	Handel/Hall	1962	Brodt Music Company	Bailey (G2); GTTB (1-2); ADTP – 8 – A)	Tuba and piano	3
20)	Air Gai (Concert and Contest Collection)	Berlioz/Voxman	1972	Rubank	ABRSM (6; A)	Tuba and piano	1
21)	Air Varie	Klose	n/a	Bill	VBODA (6: omit Andante)	Tuba and piano	1
22)	Ajax	Buchtel	1948	Kjos Music	Bailey (G1)	Tuba and piano	1

23)	Alarum	Gregson	1994	Intrada	UI, UWL (LLCM); UNCP; FTS; CM; Whitener (D); Trinity (FTCL); Trinity (FTCL, '19); Whitehead (V); NZSM (2+); UWL (LLCM); UWL (FLCM); UNCP; VCE; CM; ZER (2); UWLD (LLCM); UWLD (FLCM); UMPAG (Masters)	Unaccompanied	19
24)	Aldebaran	Martin	1994	TP	VBODA (6)	Unaccompanied	1
25)	All' Antica	Goeyens/Buchtel	1975	Kjos	VBODA (5); NYSSMA (4)	Tuba and piano	2
26)	Allegro et Finale	Bozza	1953	Leduc	Trinity (LTCL, '19); UMPAG (Masters)	Tuba and piano	2
27)	Allegro from Concerto in F	Handel/Barr	1968	Ludwig	GTTB (3-4)	Tuba and piano	1
28)	Allegro from Flute Sonata	Telemann/Marlatt	2006	Eighth Note	NYSSMA (5)	Tuba and piano	1
29)	Allegro from Sonata No. 3	Vivaldi/Swanson	1971	Belwin	T6; RIAM (G6; List B); UWL (6 – B); ABRSM (6; A); UNISA (6; A)	Tuba and piano	5
30)	Allegro in F minor	Handel/Barr	1968	Ludwig	NZSM (1-2); VBODA (5)	Tuba and piano	2
31)	Allegro Moderato	Capuzzi/Werden	2006	Cimarron	NYSSMA (5)	Tuba and piano	1
32)	Allegro Spiritoso	Senaille/Thurston	1992	Southern	NYSSMA (4)	Tuba and piano	1
33)	Alleluia	Mozart/Coldren	2014	Cimarron	NYSSMA (4)	Tuba and piano	1
34)	Alleluia, Exultate	Mozart/Mathews	1989	Wingert Jones Music	VBODA (5); NYSSMA (4)	Tuba and piano	2
35)	And then there were six	Brown	1978	Seesaw Music	UNTSS (5,6)	Tuba and piano	1
36)	And what rough beast...?	Satterwhite	1995	Composer	Whitehead (V)	Tuba and percussion	1
37)	Andante	Rojker	1974	Imundico Musikforlaget	Whitehead (IV); Perantoni (FUS;4)	Tuba and piano	2
38)	Andante	Tcherepnin	1950	Belaieff	Bailey (G5); NZSM (1-2); GTTB (3-4); RCDP (ADTP – 9 – List B); UWL (DiplCM); ABRSM (7: A); UNISA (PA; C); CM; Trossingen (ED 11/12); ZER (1); UMIS (1); UKM (F&S); UWLD (DiplCM)	Tuba and piano	13
39)	Andante and Allegro	Scott	1984	Queen City Brass Publications	Whitehead (I); Perantoni (FUS;1)	Tuba and piano	2
40)	Andante and Allegro (The Thomass Wyss Tuba Collection)	Handel/Wyss		Kirkles Music	ABRSM (7: A)	Tuba and piano	1
41)	Andante and Rondo from Concerto for Double Bass	Capuzzi/Catelinet	1967	Hinrichsen	UMIS (2); ZER (1); TAMK; UI; UCT (b1,c/d2-c/d; b2,a1,c/d3-4); UNTSS (3,4); Whitehead (III); Perantoni (FUS;3); T6 (Andante); T7 (Rondo); NZSM (1-2); GTTB (5-6); GTTB (3-4); RIAM (G7; List B); UWL (8 – C); UWL (7 – B; Rondo); UWL (6 – B: Andante); ABRSM (8:A); UNCP; UNISA (PA; B); UNISA (7; A); UNISA (6; A: Andante); VCE; FTS; CM; Trossingen (ED 11/12); ZC (4);	Tuba and Piano	27
42)	Andante Cantabile (from Concerto; Concert and Contest Collection)	Korsakov/Voxman	1972	Rubank	ABRSM (6; A); VBODA (5)	Tuba and piano	2

43)	Andante tranquillo	McKimm	1997	Yarra Yarra Music/Australian Music Centre	VCE (or any ½ movts from tuba concerto)	Tuba and piano	1
44)	Apollo	Buchtel	1945	Mills Music	Bailey (G3)	Tuba and piano	1
45)	Après une lecture de Goldinin for Tuba	Margoni	1964	Leduc	UWL (FLCM); ABRSM (FRSM); UWLD (FLCM)	Tuba and piano	3
46)	Are you Experienced?	Lang	1987	Red Poppy	FTS	Tuba, narrator, ensemble	1
47)	Aria	Hartley	1968	Elkan-Vogel	Bailey (G5); Whitehead (I); Perantoni (FUS;1); GTTB (3-4); ABRSM (6; B)	Tuba and piano	5
48)	Aria con Variazioni	Stevens, T	2006	BIM	NZSM (2+)	Tuba and keyboard	1
49)	Aria con Variazoni	Handel/Ruske	2006	Cimarron	NYSSMA (6)	Tuba and piano	1
50)	Arioso	Benson	1959	Hal Leonard	Bailey (G3); GTTB (1-2); TAMK	Tuba and piano	3
51)	Arioso and Caprice	Barnes	1961	Robbins	GTTB (1-2)	Tuba and piano	1
52)	Arise ye subterranean winds	Purcell/Ostrander	1959	Edition Musicus	GTTB (3-4); GTTB (1-2); VBODA (5)	Tuba and piano	3
53)	Arm ye brave	Handel/Ostrander	1959	Editions Musicus	GTTB (1-2)	Tuba and Piano	1
54)	Asleep in the Deep	Petree/Wekselblatt	1972	Schirmer	Bailey (G1); UNCW (1/4)	Tuba and piano	2
55)	At the Ball	Buchtel	1954	Kjos	Bailey (G1)	Tuba and piano	1
56)	Attila	Buchtel	1948	Kjos	Bailey (G1)	Tuba and piano	1
57)	Auld Lang Syne: air and variations	De Lamater	1948	Rubank	Trossingen (ED 11/12)	Tuba and piano	1
58)	Au temps de la cour (At the time of the heart)	Brouquières	1982	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
59)	Autumn Afternoon	Uber	1992	Kendor	VBODA (4)	Tuba and piano	1
60)	Azure etude: light blues	Ross	1986	Leverkusen: Tezak	Trossingen (ED 11/12)	Tuba and piano	1

B (33)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Badinerie	Bach/Fletcher	2006	Emerson	Trinity (ATCL, '19)	Tuba and piano	1
2)	Bagatelles	Jacob, G	1980	Emerson	GTTB (5-6); VBODA (4 any two)	Tuba and piano	2
3)	Baladins	Gotkovsk	1959	Editions Salabert	Trossingen (ED 11/12)	Tuba and piano	1
4)	Ballad	Buss	2004	Brixton	NYSSMA (5)	Tuba and piano	1
5)	Ballad and Presto Dance	Smith, C	1986	Wingert-Jones	ZER (2);	Tuba and orchestra	1
6)	Ballad of Enob Mort	Uber	1979	Southern Music	VBODA (5: either movt); Trossingen (ED 11/12); NYSSMA (6)	Tuba and piano	3
7)	Ballade	Krzywicki	1984	Heilman Music	Whitehead (I)	Tuba and piano	1
8)	Ballade	Szentpali	2002	BIM	NZSM (Moderately advanced-advanced)	Tuba and piano	1
9)	Ballade "du moine que Nostre Dame délivra dou dyable"	Joubert	1991	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
10)	Ballad for Tuba	Christensen, J	1963	Kendor	Bailey (G3); Trossingen (ED 11/12)	Tuba and piano	2
11)	Barbarossa	Lloyd/Buchtel	1935	Barnhouse	VBODA (4); Bailey (G4); GTTB (3-4); NYSSMA (4)	Tuba and piano	3
12)	Barcarolle et chanson bacjique	Semler	1953	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
13)	Barockes Konzert	Hlouschek	1993	Speath and Schmidt	Trossingen (ED 11/12)	Tuba and piano	1

14)	Baroque and Classical Duets	Singleton	1981	Peer Music	UNCP	Tuba duets	1
15)	Bass in the Ballroom	Newsome	1972	Studio Music	RIAM (G6); VCE	Tuba and piano	2
16)	Basso Brazilio	Newsome	1998	Obrasso Verlag	VCE	Tuba and piano	1
17)	Bayou Legend	Uber	1992	Manuscript	VBODA (4)	Tuba and piano	1
18)	Beelzebub	Catozzi/Seredy	1932	Carl Fischer	Whitehead (I); NZSM (1-2); GTTB (5-6); GTTB (3-4); VCE; UNCW (2/4); Trossingen (ED 11/12); ZER (1); NYSSMA (5)	Tuba and piano	9
19)	Believe me if all those endearing young charms	Mantia/Werden	1983	Whaling Music	UNCW (3/4)	Tuba solo with brass quintet	1
20)	Belle Province-Hauterive	Ameller	1973	Leduc	VBODA (4); Trossingen (ED 11/12)	Tub and piano	2
21)	Berceuse from The Firebird	Stravinsky/Maganini	1945	Editions Musicus	VBODA (5)	n/a	1
22)	Bill's Tune	Constantino	1985	Kendor	VBODA (5)	Tuba and piano	1
23)	Blow the man down	Walters	1959	Rubank	GTTB (3-4); VBODA (4)	Tuba and piano	2
24)	Blue	Edwards	n/a	Brassworks	Trinity (LTCL, '19)	Unaccompanied	1
25)	Blue Bells of Scotland	Arthur Pryor/Lourens	2006	Cimmaron	UNCP	Tuba and piano	1
26)	Blue Bombazine	Johns	2018	Superbrass	T8	Tuba and band	1
27)	Blues Basso Profundo	Biegel	1952	From composer	Bailey (G4)	Tuba and band	1
28)	Boast for solo tuba	Colding-Jørgensen	1980	Swedish Music Information Centre	Whitehead (V)	Unaccompanied	1
29)	Boreas	Máson	1999	Editions BIM	Whitener	Unaccompanied	1
30)	Bourrée from 6 th Flute Sonata from Concert Album for Tuba	Handel/Ostrander	n/a	Editions Musicus	VBODA (4)	n/a	1
31)	Bourrée 1 (Solos for the Tuba Player)	Bach/Wekselblatt	1972	Schirmer	UNISA (6; A)	Tuba and piano	1
32)	Brass Talk	Pethel	1992	Kendor	VBODA (4)	Tuba and piano	1
33)	Burlesque	Kulesha	1984	Sonante	RCDP (ADTP – 9 – List B)	Tub and piano	1

C (135)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	
1)	Cadence VI	Lazarov	1974	Bote and Bock	Whitehead (IV); Perantoni (FUS;4); ZER (3);	Tuba and tape	3
2)	Call of the River	Harmon	1994	Nichols Music	ZER (1);	Tuba and piano	1
3)	Canonic Sonatas	Telemann	n/a	n/a	UNCP	Tuba/euphonium duet	1
4)	Canto VII	Adler	1974	Boosey and Hawkes	UI, Perantoni (FUS;5); UNISA (PA; D); FTS; Whitener (D); Whitehead (V)	Unaccompanied	6
5)	Canzona	Pergolesi	1965	Jack Spratt	VBODA (4)	Tuba and piano	1
6)	Canzonet	Baker	1973	Southern Music	VBODA (6); FTS	Unaccompanied	2
7)	Capriccio	Forbes		Kendor	NYSSMA (6)	Tuba and piano	1
8)	Capriccio	Penderecki	1987	B. Schitt Söhne Mainz	UMIS (4); ZER (2); UI, Whitehead (V); GTTB (5-6); RCDP (ADTP - C); VBODA (6); Whitener; Trinity (ftcl); UNTSS (pg); Trinity (FTCL, '19); Whitehead (V); Perantoni (FUS;5); NZSM (2+); RAM (PG	Unaccompanied	30

					1); RCDP (ADTP - C); UWL (LLCM); UWL (FLCM); UNCP; VBODA (6); UNISA (PA; D); MOZ 5/M; VCE; FTS; Guil (3); CM; Trossingen (ED 01/02); UWLD (LLCM); UWLD (FLCM); UMPAG (Masters)		
9)	Capriccio	Schuller	1969	Mentor	UNCP	Tuba and orchestra/piano	1
10)	Capriccio	Roikjer	1974	Musikforlaget Imundico	Whitener (V); Perantoni (FUS;5); GTTB (5-6)	Tuba and orchestra/piano	3
11)	Caprice for tuba	Dubrovay	2001	Budapest Akkord	Whitener (D)	Unaccompanied	1
12)	Caprice in Bb Minor	Geib	1941	Mills Music	Bailey (G3)	Tuba and piano	1
13)	Caprice 1	Szentpali	1993	Editions BIM	NZSM (2+); Whitener	Unaccompanied	2
14)	Caprice 2	Szentpali	1997	Editions BIM	NZSM (2+); Whitener	Unaccompanied	2
15)	Caprice 3	Szentpali	2003	Editions BIM	NZSM (2+); Whitener	Unaccompanied	2
16)	Capriccio	Presser	1970	Tenuto	UNTSS (3,4); GTTB (5-6); ABRSM (8:B); NYSSMA (6)	Tuba and band/piano	4
17)	Capriccio	Newton	1991	Rosehill	UNTSS (7); T8 ; NZSM (2+); RCDP (10 - B); RIAM (Sen Cert A); RIAM (G8, List A; cut K to R); UWL (FLCM); UWL (8 - C) ; ABRSM (FRSM); VCE; FTS; UWLD (FLCM)	Tuba and brass band/piano	12
18)	Capriccio	Penn	1992	Keyboard Percussion Publications	Whitehead (V)	Tuba and marimba	1
19)	Carmen Excerpts	Bizet/Bell	1985	Belwin	VBODA (4)	Tuba and piano	1
20)	Carnival of Venice	Arban/Domek	1981	Marc Reift	Trinity (FTCL); Whitehead (V); UNCP; UNISA (PA; B); FTS	Tuba and piano	5
21)	Carnival of Venice: Fantasia	Arban/Holmes	1980	Rubank	VBODA (5); Trossingen (ED 11/12); NYSSMA (4)	Tuba and piano	3
22)	Carnival of Venice	Le Clair	1994	Marc Reift	Trossingen (ED 11/12)	Tuba and piano	1
23)	Carnival of Venice (First solos for the tuba player)	Arban/Wekselblatt	1997	Schirmer	RIAM (G6; List A); ABRSM (6; A)	Tuba and piano	2
24)	Carry me back to Old Virginny	Guy/Holmes	1935	Rubank	VBODA (4); Trossingen (ED 11/12)	Tuba and piano	2
25)	Cavatina	Geib	1941	Mills Music	Bailey (G4)	Tuba and piano	1
26)	Cavatina and Variations	Arban/Moren	2014	Marc Reift	UNCP	Tuba and piano	1
27)	Caverns	Wiley	1982	Ludwig	VBODA (6: any mvts)	Unaccompanied	1
28)	Cello Suites (any edition)	Bach/various	n/a	various	PI; RAM (UG 2; two minuets and Courante from Suite No. 1); NAU; UNCP; UNISA (PA; A: any 3 movts); CM; ZER (3);	Unaccompanied	7
29)	Cello Suites	Bach/Becker	1946	International	UMIS (4);	Unaccompanied	1
30)	Cello Suites	Bach/Foumier	1983	International	Meyer (pre college); NZSM (2+)	Unaccompanied	2
31)	Cello Suites	Bach/Barbez	1982	Leduc	T7 (Suite no. 1 in G, Minuetto, or Minuetto 2); T8 (Suite No. 5 Gigue)	Unaccompanied	2
32)	Cello suites (any 3 movements)	Bach	n/a	Any edition	Trinity (ltd)	Unaccompanied	1
33)	Cello Suite No. 1 in G	Bach	n/a	n/a	UCLA (Sen)	Unaccompanied	1
34)	Centone "Buffo Concertante"	Jaffe	1973	Southern Music	VBODA (5)	Tuba and piano	1

35)	Cerberus	Pala	1963	Molenaar	VCE	Tuba and piano	1
36)	Chanson du Toréador (from Savoir Faire for Tuba)	Bizet/Mowat	n/a	Brass Wind	T6	Tuba and piano	1
37)	Chausson De nuit	Elgar/Fischer	2000	Tuba-Euphonium Press	UNTSS (5,6)	Tuba and piano	1
38)	Chanson De Matin	Elgar/Fischer	2000	Tuba-Euphonium Press	UNTSS (PG)	Tuba and piano	1
39)	Chaconne	Rogers	1974	Editions BIM	Bailey (G5); VBODA (5)	Tuba and piano	2
40)	Chaconne	Sowerby	1938	Carl Fischer	VBODA (4)	Tuba and piano	1
41)	Chaconne	Hayden	1938	Carl Fischer	CM	Tuba and piano	1
42)	Choralfantasie über "Est ist ein Schnitter..."	Koetsier	1983	Donemus	Trossingen (ED 11/12)	Tuba and organ	1
43)	Circle Line Dance (Take the Tube)	Proctor	n/a	Brass Wind	T6; ABRSM (6; B)	Tuba and piano	2
44)	Classical Festival Solos	Lamb	1992	Warner Brothers	GTTB (3-4)	Tuba and piano	1
45)	Columbia	Rollinson/Buchtel	1958	Kjos	VBODA (5)	Tuba and piano	1
46)	Collosus	Vandercook	1941	Rubank	NYSSMA (4)	Tuba and piano	1
47)	Come sweet Death	Bach	n/a	n/a	UNCW (1/4)	n/a	1
48)	Commodore, the	Chambers/Buchtel	1985	Kjos	VBODA (4)	Tuba and piano	1
49)	Compositae	Amos	1985	Boosey	UCT (a4); UWL (6 – C)	Tuba and piano	2
50)	Concert Allegro	Lebedev	1962	Hofmeister	Trinity (atcl); Trinity (ATCL, '19); UWL (ALCM); UNISA (PA; C); CM; Trossingen (ED 11/12); UMIS (2); UWLD (LLCM)	Tuba and piano	8
51)	Concert Etude	Dragonetti	1975	Music Evergreen	Whitener (D); Trossingen (ED 01/02)	Unaccompanied	2
52)	Concert Etude	Goedicke/Emilson	2000	Kendor	NZSM (1-2); NYSSMA (6)	Tuba and piano	2
53)	Concert Etude	Krotof/Blazevich	1962	Southern Music	VBODA (6); NYSSMA (6)	Tuba and piano	2
54)	Concert Etudes for Solo Tuba Vol.2	Osmon	1991	Southern Music	VBODA (6; 6&9,7,8,or,10); VBODA (5: any two)	Unaccompanied (study collection)	2
55)	Concert Piece	Dillon	1971		Bailey (G5)	Tuba and piano	1
56)	Concert Piece	Larson	1995	Oxford University Press	UNCP; CM	Tuba and piano	2
57)	Concert Piece	Nelhybel	1973	Kerby	GTTB (3-4); VBODA (5)	Tuba and band (piano)	2
58)	Concert Piece	Painpare/Voxman	1941	Rubank	VBODA (6)	Tuba and piano	1
59)	Concert Piece in fugal style	Ostrander	1960	Edition Musicus	GTTB (3-4); VBODA (5)	Tuba and piano	2
60)	Concertpiece No. 1	Vaughan	1970	Fema Music Publications	UNTSS (1,2); Whitehead (I); Perantoni (FUS;1); GTTB (3-4); RCDP (ADTP – 8 – List B); VBODA (5); CM; NYSSMA (5)	Tuba and piano	8
61)	Concertpiece No. 2	Vaughan	1994	Wingert Jones	VBODA (4)	Tuba and piano	1
62)	Concertstück	Murguir	1961	Editions Musicales Transatlantiques	Whitehead (V); Perantoni (FUS;5)	Tuba and piano	2
63)	Concert Sketch No. 5	Blazevich/Atkinson	2014	Tuba-Euphonium Press	RCDP (ADTP – 9 – List A)	Tuba and piano	1
64)	Concertante	Walters	1960	Rubank	VBODA (4)	Tuba and piano	1
65)	Concertinetto	Kastel	1996	RM- TP	VBODA (4)	Tuba and piano	1

66)	Concertino	Bencriscutto	1969	Shawnee	Bailey (G5); Meyer (Pre-college); Perantoni (FUS;1); NZSM (1-2); GTTB (3-4); RCDP (ADTP – 9 – List B); CM; SCMMDF (UG 1); UNTSS(1,2); Whitehead (I); Trossingen (ED 11/12); ZER (1); NYSSMA (6)	Tuba and orchestra/piano	10
67)	Concertino	Bozza	1967	Leduc	Trinity (ftcl); Trinity (FTCL, '19); Bailey (G6); Whitehead (V); Perantoni (FUS;5); GTTB (5-6); UWL (FLCM); UNISA (PA; D); MOZ 5/M; FTS; CM; Trossingen (ED 11/12); UI; UNTSS (pg); NZSM (2+); UMIS (3); UCLA (Sen); UWLD (FLCM); UMPAG (Masters)	Tuba and orchestra/piano	18
68)	Concertino	Cumow	1980	Tuba Press	NZSM (1-2); Trossingen (ED 11/12); ZER (1); UMIS (2);	Tuba and band (piano)	4
69)	Concertino	George	1984	By composer	UNTSS (pg)	Tuba and wind ensemble	1
70)	Concertino	Hartley	1969	Theodore Presser	VBODA (6); Trossingen (ED 11/12); NYSSMA (6)	Tuba and band/piano	3
71)	Concertino	Frackenpohl	1967	Robert King; Shawnee	UNTSS (1,2); Whitehead (I); Perantoni (FUS;1); NZSM (1-2); GTTB (5-6); GTTB (3-4); RIAM (G6; List A; 2 and 3); RIAM (G5; List B; movt. 1); UWL (6 – A: 3 rd movt); VBODA (6; any two movts); UNISA (7; B); VCE (any movts), T6; Trossingen (ED 11/12); NYSSMA (5)	Tuba and strings/piano	15
72)	Concertino	Koetsier	1990	Marc Reift	UMIS (3); Trinity (ftcl); UNTSS (pg); Trinity (LTCL, '19); Whitehead (IV); Perantoni (FUS;4); NZSM (2+); RCDP (ADTP - A); UWL (LLCM); UNISA (PA; B); VCE (any movt); FTS; CM; UWLD (LLCM); NYSSMA (6)	Tuba and orchestra/piano	15
73)	Concertino	Sachse/Ostrander	1957	International Music Company	UCT (b2,a1,c/d3-4)	Tuba and piano	1
74)	Concertino	Shaughnessy	1969	Peer-Southern Organisation	VBODA (6: 1 st and 2 nd , or last)	Tuba and string orchestra/piano	1
75)	Concertino	Sparke	1988	Studio Music	ABRSM (FRSM); UWLD (FLCM)	Tuba and brass band/piano	2
76)	Concertino	Wilhelm	1983	Strubeverlag GmbH	UNTSS (pg); Trinity (ATCL, '19); Whitehead (IV); Perantoni (FUS;4); NZSM (2+); CM; Trossingen (ED 11/12); UMIS (3);	Tuba and band/ piano	8
77)	Concertino in F	Kalke	1997	Musikverlag Bruno Uets	Trossingen (ED 11/12)	Tuba and orchestra/piano	1
78)	Concerto	Albinoni	n/a	EMR	SCMMDF (UG 2, 3, 4)	n/a	1

79)	Concerto	Aratunian	1992	Editions BIM	UI, Trinity (Itcl); UNTSS (pg); Trinity (LTCL, '19); UWL (LLCM); UNISA (PA; B); FTS; CM; UMIS (4); UWLD (LLCM)	Tuba and orchestra/piano	10
80)	Concerto	Baker	1998	Composer	Whitehead (V)	Tuba and orchestra/piano	1
81)	Concerto	Barnes	1997	Southern Music	UNTSS (PG); NZSM (2+); RCDP (ADTP - A); CM; ZER (2);	Tuba and orchestra/piano	5
82)	Concerto	Bourgeois	1972	Brass Wind	Trinity (Ftcl); Trinity (FTCL, '19); RAM (UG 3); UWL (DipLCM); UWL (FLCM); ABRSM (FRSM any four movts); UWLD (DipLCM); UWLD (FLCM)	Tuba and orchestra/piano	8
83)	Concerto	Cohen	n/a	Norsk	Trinity (LTCL, '19)	Tuba and orchestra/piano	1
84)	Concerto	D'Almeida	1970	AVA Editions	CM	Tuba and orchestra/piano	1
85)	Concerto	Ellerby	1988	Maecenas	ZER (3); Trinity (ATCL); Trinity ATCL, '19); T8 (N to end); NZSM (2+); UWL (ALCM "at least last two movements); UNISA (PA; B); VCE (1/2); FTS; CM; UMIS (5); UCLA (S); UWLD (LLCM)	Tuba and orchestra/piano	13
86)	Concerto	Ely	n/a	Bandleader	Trinity (atcl); Trinity (ATCL, '19); UWL (ALCM); UWLD (LLCM)	Tuba and piano	4
87)	Concerto (Sonata)	Ewazen	1998	Southern	UNTSS (pg); Trinity (FTCL, '19); NZSM (2+); RCDP (ADTP - A); UNCP; UNISA (PA; B); FTS; CM; Trossingen (ED 11/12); ZER (2); UMIS (4); ZER (2);	Tuba and orchestra/piano	11
88)	Concerto	Fleming	1966	Canadian Music Centre	RCDP (ADTP - A)	Tuba and orchestra/piano	1
89)	Concerto	Gregson	1976	Novello Publications	UKM (F&S); ZC (4-5); UMIS (4); ZER (2); TAMK; UI, UCT (b4, a3), trinity (atcl); UNTSS (3,4); Trinity; (ATCL, '19); Whitehead (IV); Gray (arrival at college); Perantoni (FUS;4); T8 (1 st or 3 rd mvt.); NZSM (1-2); GTTB (5-6); RAM UG (3); RCDP (ADTP - A); RIAM (Sen Cert B – 3 rd mvt); RIAM (G8; List B; 1 st movement); UWL (DipLCM); UWL (LLCM); UWL (8 – B - ; 1 st /3 rd); UWL (7 – C: 2 nd movt); ABRSM (DipABRSM); ABRSM (LRSM); ABRSM (8:B 3 rd); UNCP; UNISA (PA; B); UNISA 8 (C: 1 st movt); VCE (any ½ movts); FTS; CM; Trossingen (ED 11/12); UCLA (S); UWLD (DipLCM); UWLD (LLCM); UMPAG; NYSSMA (6)	Tuba and brass band/piano	39
90)	Concerto	Heiden	1979	Southern Music	ZER (2); UCT (a4); Whitehead (III), UI; Perantoni (FUS;3); RAM (UG 3); RCDP (ADTP - A); UWL (ALCM); UWL (8 – B - ; 1 st / 3 rd); ABRSM (DipABRSM) (1 st and 2 nd	Tuba and orchestra/piano	15

					/ 2 nd or 3 rd); ABRSM (LRSM); UNCP; VBODA (6: any two movts); UNISA (PA; B); UNISA 8 (B: 1&2); UWLD (LLCM)		
91)	Concerto	Horovitz	1989	Studio music	Trinity (atcl); Trinity (ATCL, '19); RAM (3 rd year); RIAM (Sen Cert B; 1 st mvt.); RIAM (G8; List B; 1 st mvt.); UWL (8 – B - ; 1 st); ABRSM (7: B: 2 nd movt.); ABRSM (8:B: 1 st); UNISA (PA; B)	Tuba and brass band/piano	9
92)	Concerto	Jager	1978	Belwin Mills	Whitehead (IV); Perantoni (FUS;4); RCDP (ADTP - A); UNCP; FTS; ZER (3)	Tuba and band/piano	6
93)	Concerto	Kulesha	1979	Canadian Music Centre	RCDP (ADTP - A)	Tuba and orchestra/piano	1
94)	Concerto	Lovelock	1965	Allens Publishing	Whitehead (IV)	Tuba and orchestra/piano	1
95)	Concerto	Madsen	1986	Musikk-Huset A/S Norway	Whitehead (IV); Perantoni (FUS;4); UMIS (5);	Tuba and orchestra/piano	3
96)	Concerto	McKimm	1983	Yarra Yarra Music	Trinity (FTCL, '19); VCE (any ½ movts or Andante Tranquillo); ZER (2);	Tuba and orchestra/piano	3
97)	Concerto	Plog	1997	Editions BIM	UNCP; FTS; CM	Tuba and orchestra/piano	3
98)	Concerto	Premru	1992	TUBA	Trinity (LTCL, '19); NZSM (2+); ZER (3)	Tuba and orchestra/piano	3
99)	Concerto	Presser	n/a	Tenuto	GTTB (3-4); UMPAG (Masters)	Tuba and strings/piano	2
100)	Concerto	Ramskill	2000	Warwick	Trinity (ftcl); Trinity (FTCL, '19); UWL (FLCM); UWL (7 – C: 1 st movt.); U; UNTSS (pg); NZSM (2+); UWLD (FLCM)	Tuba and orchestra/piano	8
101)	Concerto	Ridout	1988	Emerson	UCT (b2, a1, c/d3-4; a4), trinity (atcl); Trinity (ATCL, '19); T7 (any two movts.); RIAM (G7; List A; any two movts.); UWL (DipLCM); UWL (7 – C: any two movts); UWLD (DipLCM)	Tuba and strings/piano	8
102)	Concerto	Schmidt	1976	Wilhelm Hansen Edition	Trinity (ftcl); Trinity (FTCL, '19); Whitehead (V); Perantoni (FUS;5); NZSM (2+); RAM (UG 3); UWL (FLCM); UWLD (FLCM)	Tuba and orchestra/piano	8
103)	Concerto	Sparke	2006	Rundel	Trinity (ATCL, '19); T8 (2 nd mvt.); UWL (FLCM); ABRSM (8:B: 2nd)	Tuba and orchestra/piano	4
104)	Concerto (bass trombone)	Spillman	1962	Editions Musicus	Whitehead (IV); GTTB (5-6); UNCP; UMIS (4);	Tuba and piano	4
105)	Concerto	Steptoe	1983	Stainer	Trinity (LTCL); Trinity (LTCL, '19); UWL (DipLCM: 1 and 3); DipABRSM (1 st and 3 rd); LRSM; FTS; UWLD (DipLCM)	Tuba and strings/piano	7
106)	Concerto	Strukov	1990	BIM	Trinity (FTCL); Trinity (FTCL, '19); UWL (FLCM); UWLD (FLCM); UMPAG (Masters)	Tuba and orchestra/piano	5
107)	Concerto	Szentpali	2002	BIM	UNCP; CM	Tuba and orchestra/piano	2
108)	Concerto	Werner	1980	By composer	VBODA (6: any movt)	Tuba and orchestra/piano	1
109)	Concerto	Wilder	1968	Margun	VBODA (6: any movt)	Tuba and orchestra/piano	1

110)	Concerto	Williams, RV	1954	Oxford University Press	UCLA (F); UKM (F&S); UMIS (4); ZER (3);; PI; UI, UCT (a4), Trinity (LTCL); UNTSS (7); Trinity (LTCL, '19); Bailey (g6); Whitehead (IV); Perantoni (FUS;4); T8 (any mvt.); NZSM (2+); GTTB (5-6); RAM (3 rd year); RCDP (ADTP - A); RIAM (Sen Cert A – 1 st mvt); RIAM (G8; List B; 1 st movement); RIAM (G7; List B; Romanza); UWL (DipLCM: 1 and 2); UWL (LLCM); UWL (8 – B - ; 1 st); UWL (7 – C: 2 nd movement); ABRSM (DipABRSM) (1 st and 2 nd); LRSM, FRSM, ABRSM (7: A: Romanza); ABRSM (8:A 3 rd); UNCP; VBODA (6: any movt); UNISA (PA; B); MOZ (3); VCE (any ½ movts); FTS; Guil (3 Orchestral audition); CM; UNCW (4/4); UNTCS (3); Trossingen (ED 11/12); TAMK; UWLD (DipLCM); UWLD (LLCM); UWLD (FLCM); UMPAG (Masters); NYSSMA (6)	Tuba and orchestra/piano	44
111)	Concerto	Woodward	2000	Tuba Euphonium Press	CM	Tuba and orchestra/piano	1
112)	Concerto	York	2007	Cimmaron Music	CM	Tuba and orchestra/piano	1
113)	Concerto for Double Bass in F	Capuzzi	n/a	n/a	UCLA (J);	Tuba and piano	1
114)	Concertos	Teleman	n/a	n/a	UNCP	n/a	1
115)	Concertos (violin concertos)	de Saint Georges	n/a	n/a	UNCP	n/a	1
116)	Concerto Burlesco	Stephenson	1982	Accolade	UNISA (PA; D)	Tuba and piano	1
117)	“Concerto Euphonique”	Hopkinson	1978	Kirklees	UWL (ALCM: 2 and 3 movts); UWL (LLCM); DipABRSM (2 nd and 3 rd movts); LRSM; ABRSM (8:A: 1 st /3 rd); UWLD (LLCM); UWLD (LLCM)	Tuba and orchestra/piano	7
118)	Concerto for Tuba	Chappot	1999	Marc Reift	ABRSM (8:A: 2 nd and 3 rd)	Tuba and brass band/piano	1
119)	Concerto for Tuba	Saglietti	1985	Editions BIM	ABRSM (8:B: 2 nd and 3 rd)	Tuba and four horns/piano	1
120)	Concerto for tuba an Orchestra	Jones	2006	Carl Fischer	NZSM (2+); FTS	Tuba and orchestra/piano	2
121)	Concerto for tuba and strings	Plau	1990	Music information Center Norway	NZSM (2+); FTS; CM	Tuba and strings/piano	3
122)	Concerto for two violins	Bach/Self	1979	Wimbledon	UNCP	Two tubas	1
123)	Concerto in A minor	Vivaldi/Ostrander	1958	Edition Musicus	Whitehead (II); Perantoni (FUS;2); GTTB (3-4); RCDP (ADTP – 9 – List A); UNISA (PA; B)	Tuba and piano	5
124)	Concerto in one movement “Concerto No. 1”	Lebedev/Ostrander	1960	Editions Musicus; Hofmeister	TAMK; UI, UCT (ba,a3), UNTSS (5,6); Bailey (G6); Whitehead (I); Perantoni (FUS;1); T8; GTTB (5-6); GTTB (3-4);	Tuba and piano	22

					RCDP (10 - A); UWL (DipLCM); VBODA (6); VCE; FTS; CM; SCMMDF (Initial 1, 2, Advanced); Trossingen (ED 11/12); ZER (2); UMIS (2); UCLA (F); UWLD (DipLCM)		
125)	Concerto No. 2	Lebedev	1986	Hofmeister	Trinity (LTCL, '19); UMPAG	Tuba and piano	2
126)	Concerto No. 2	Williams, E	1937	Charles Colin	UNTSS (7); VBODA (6); CM	Tuba and orchestra/piano; UMIS (4); NYSSMA (6)	5
127)	Concerto No. 4 (excerpts from)	Golterman/Bell	1937	Carl Fischer	GTTB (5-6), GTTB (3-4); (ADTP – 8 – A), VBODA (5); Trossingen (ED 11/12)	Tuba and piano	4
128)	Confliction	Morris	2005	Warwick	T8	Unaccompanied	1
129)	Conjectures for Tuba	Sauter	1968	Mentor Music	VBODA (6: any movt.)	Tuba and piano (optional percussion)	1
130)	Convalescence Suite	Wilder	1982	Margun Music	UI; UMPAG (Masters)	Unaccompanied	2
131)	Convent Window	Hersey	2015	Cimarron Music	UNCP	Unaccompanied	1
132)	Commuse	Dubois	2002	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
133)	Cradle Song	Schlemmuller/Price	1937	Fischer	Bailey (G1)	Tuba and piano	1
134)	Credoscapes	Ndodana-Breen	2014	UNISA	UNISA (7; A)	Unaccompanied	1
135)	Czardas	Monti/various	n/a	n/a	UCT (b4,a3); T8; UWL (8 – C); UNCP; UNISA (PA; C), ABRSM (8:B); UNCP	Tuba and piano	7

D (39)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Dance of the Blessed Spirits (Classics for Tuba)	Gluck/Death and Woods	1999	Studio	T8; UWL (8 – C); UNISA 8 C	Tuba and piano	3
2)	Dance of the Ocean Breeze	Kellaway	1990	Editions BIM	ZER (2);	Tuba, hom, piano	1
3)	Dance Movements for Tuba (6 cello suites)	Bach/Torchinsky	1974	Schirmer	VBODA (5); UNISA (PA; A: Gigue or Gavotte 1 and 2; Suite No. 4; or Minuet ½, or Gigue Suite No. 2); UNISA 8 (A: Gavotte 1 and 2, Suite No. 5); VCE any (any ½ movts from any suite)	Unaccompanied	4
4)	Dancing Rhythm	Lischka	2018	Lischka	Trossingen (ED 11/12)	Tuba and piano	1
5)	Daniel in the Lion's Den	McBeth	1992	Southern Music	Whitehead (V)	Tuba and piano	1
6)	Dans Profundo	Strobel	2010	Cimarron	CM	Tuba and piano	1
7)	Dans van de beren	Nerijnen	1991	Brunssum	Trossingen (ED 11/12)	Tuba and piano	1
8)	Danse de l'éléphant	Delguidice	1981	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
9)	Danse Macabre (Savoir Faire)	Saint – Saens/Mowat	n/a	Brass Wind	T7; ABRSM (6; A)	Tuba and piano	2
10)	Danse profanes et sacrées	Tomasi	1960	Leduc/UMP	UWL (DipLCM); DipABRSM; UNISA (PA; D)	Tuba and piano	3
11)	Danza Espagnola	Uber	1987	Virgo Music	VBODA (6)	Tuba and piano	1
12)	Dashing Away with the Smoothing Iron	Steadman-Allen	1991	Winwood	ABRSM (7: A)	Tuba and piano	1
13)	Day in the City – 7 Vignettes	Buss	1986	Brixton	NYSSMA (5)	Unaccompanied	1
14)	Deep River	Uber	n/a	Kendor	VBODA (4)	Tuba and piano	1

15)	Demetrius	Merle	1939	Out of print	Bailey (G2)	Tuba and piano	1
16)	Der Erkennende	Mahler, A	2010	Hersey	UNCP	Tuba and piano	1
17)	Der Lindenbaum (Tuba Solo's Vol. 1)	Schubert/Fletcher	1982	Chester	UWL (6 – B)	Tuba and piano	1
18)	Deux Danses	Defaye/Whitehead	1997	Arranger	Whitehead (IV)	Tuba and piano	1
19)	Deux Miniatures	Lacour	1997	Billaudot	VBODA (5:play both)	Tuba and piano	1
20)	Dialogues	Dobbins	1994	Advance Music	Trossingen (ED 11/12)	Tuba and piano	1
21)	Dies Irae	Langgaard	1948	Danish Brass Publications	Trossingen (ED 11/12)	Tuba and piano	1
22)	Diptych	Brown	1970	Western International	VBODA (5; either movt); Trossingen (ED 11/12)	Tuba and piano	2
23)	Directions	York	2006	Cimarron	CM	Tuba and piano	1
24)	Diversive Elements	Gillingham	1996	Tuba-Euphonium Press	UNCP; ZER (3);	Euphonium, tuba and piano	2
25)	Diverse Moments #1	Jager	1978	Wingert Jones	NZSM (1-2); VBODA (6; omit 3 rd or 4 th movts.)	Unaccompanied	2
26)	Divertimento for horn, tuba and piano	Gillingham	2013	C. Alan	ZER (3);	Horn, tuba and piano	1
27)	Divertimento No. 8	Weinzweig	1980	CMC	RCDP (10 - B)	Tuba and orchestra	1
28)	Divertimento: 10 Miniatures for tuba and piano	Ziv	1991	Forberg	Trossingen (ED 11/12)	Tuba and piano	1
29)	Divertissement for Tuba	Beach	1975	Tenuto	UI, Whitehead (I); VBODA (6: omit #2); NYSSMA (6)	Unaccompanied	4
30)	Double Concerto	Hartley	1969	Presser	GTTB (5-6)	Saxophone, tuba and wind octet	1
31)	Down in the Deep Cellar (Eb)	Kroepsch	1898	Carl Fischer	VBODA (6)	Tuba and piano	1
32)	Drei Bagtellen	Hummel	1993	Hoffmeister	Trossingen (ED 11/12)	Tuba and piano	1
33)	Drei Leichte stücke	Hindemith	n/a	n/a	UNCP	Tuba and piano	1
34)	Drei Lyrische Szenen	Grunelius	2000	Franz Biersack	MOZ 5/M	Tuba and piano	1
35)	Drei Romanzen	Schumann/Cooley	1994	Tuba Classics	UI; Whitehead (IV); RCDP (10 - A); VCE (or <i>Adagio and Allegro</i>); CM	Tuba and piano	5
36)	Drei Skizzen	Lischka	1969	Hofmeister	Trossingen (ED 11/12)	Tuba and piano	1
37)	Drei Stücke: fürTuba und Orgel	Ehmann	1982	Schmidt, M	Trossingen (ED 11/12)	Tuba and organ	1
38)	Duke Orsino – “If Music Be The Food Of Love...” No. 1 (Comedie)	Evans	n/a	Warwick	T6	Tuba and piano	1
39)	Duo	Hailstork	1981	Fema	VBODA (6)	Tuba and piano	1

E (25)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Eccentric Dances	Agrell	1997	BIM	Whitener (D)	Unaccompanied	1
2)	Echanges für einen Blechbläser.	Globokar	1975	Peters	Whitener (D)	Unaccompanied	1
3)	Echoes	Slavicky	1981	BIM	Whitener	Unaccompanied	1
4)	Eclipse	McPherson	2008	Imagine	NYSSMA (4)	Unaccompanied	1

5)	Egotistical Elephant	Hartzell	1967	Shawnee	GTTB (1-2)	Tuba and piano	1
6)	Eight Bel Canto Songs	Phillips	1967	Shawnee	UNTSS (1,2); Bailey (G3)	Tuba and piano	2
7)	Eight Easy Pieces	Voxman/Block	1993	Southern Music	UNCW (2/4)	Tuba and piano	1
8)	Eight Episodes	Presser	1999	Presser	Whitener	Unaccompanied	1
9)	Élégie	Khoudovan	n/a	BIM	Whitener	Unaccompanied	1
10)	Élegié	Proust	1991	Billaudot	VBODA (5); UNISA (PA; C)	Tuba and piano	2
11)	Elegy	Zinos	1968	Kjos	VBODA (5); CM	Tuba and piano	2
12)	Elegy for a whale	Wilder	1982	Margun	UNTSS (7); VBODA (6)	Tuba and orchestra/piano	2
13)	Elegy for an angel	York	2006	Cimarron	CM	Tuba and piano	1
14)	Emmett's Lullaby	Holmes	1933	Rubank	RCDP (ADTP – 8 – List B); VBODA (6); NYSSMA (5)	Tuba and band/piano	3
15)	Encore Piece	Wilder	1981	Margun	VBODA (6)	Tuba and piano	1
16)	Encounters II	Kraft	1971	MCA Music/Editions BIM	UI; UNTSS (pg) Whitener, Trinity (FTCL); Trinity (FTCL, '19); Whitehead (V); Perantoni (FUS;5); NZSM (2+); GTTB (5-6); RCDP (ADTP – C); UWL (ALCM); UWL (FLCM); UNCP; VBODA (6); VCE; FTS; CM; ZER (2); UMIS (5); UCLA (Sen); UWLD (LLCM); UWLD (FLCM)	Unaccompanied	22
17)	Entr'acte from "Rosamunde"	Schubert/Masso	1967	Kendor	VBODA (4)	Tuba and piano	1
18)	Escenas Latinas	Crespo	1992	Lydke Verlag	VCE (1/2/3)	Tuba and piano	1
19)	Escher's Sketches	Ross	1986	Marc Tezac	VCE (1/2/3); Trossingen (ED 01/02)	Tuba and piano	2
20)	Essai	Gartenlaub	1970	Éditions Rideau Rouge	VBODA (6)	Tuba and piano	1
21)	Essay for Tuba	Galloway	1970	Kendor	Bailey (G4); VBODA (4)	Tuba and piano	2
22)	Etre ou ne pas Etre	Tomasi	1963	Alphonse Leduc	UNTSS (7); Whitehead (III); GTTB (3-4); ABRSM (8-B); VBODA (6); VCE; FTS; PI; ZER (2); UMIS (4); UWLD (DipLCM)	Tuba and three trombones;	11
23)	Etude	Concone/Ostrander	1954	Editions Musicus	VBODA (4)	Tuba and piano	1
24)	Evensong	Uber	1980	Kendor	VBODA (5)	Tuba and piano	1
25)	Exchange for Tuba and Piano	Knight, M	1976	Woodsum	VBODA (5)	Tuba and piano	1

F (32)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Falstaff Concerto	Krol	1990	Bernard Krol	Whitehead (IV); Perantoni (FUS;4); NZSM (2+); Trossingen (ED 11/12)	Tuba and strings/piano	4
2)	Fantasia	Cumow	1984	TUBA Press	Whitehead (III); Perantoni (FUS;3); NZSM (2+); ABRSM (8:A); UMIS (2);	Tuba and concert band; tuba and piano	5
3)	Fantasia	Hartley	1991	Wingert-Jones	UNCW (1/4)	Tuba and chamber orchestra/piano	
4)	Fantasia	Tuthill	1970	Ensemble	RIAM (G6; List B.); UWL (6 – C)	Tuba and band/piano	2
5)	Fantasia a due	Reed	1979	Belwin Mills	UNTSS (7); Whitehead (IV); Perantoni (FUS;4); GTTB (3-4); VBODA (6)	Tuba and piano	5

6)	Fantaisie	Petit	1953	Leduc/UMP	UWL (DipLCM); LRSM; UNISA (PA; D); UWLD (DipLCM)	Tuba and piano	4
7)	Fantasia	Schroen-Spencer	1938	Fischer	GTTB (3-4); VBODA (5)	Tuba and piano	2
8)	Fantaisie Concertante	Casterede	1960	Leduc	NZSM (2+); FTS	Tuba and piano	2
9)	Fantasies (Flute)	Telemann	n/a	n/a	UNCP; ZER (3);	Unaccompanied	2
10)	Fantasiestücke	Schumann/Cooley	1997	Tuba Classics	UI, Trinity (LTCL); Trinity (LTCL, '19 any two mvts); UWL (LLCM any two mvts); UNISA (PA; B); CM; UWLD (LLCM)	Tuba and Piano	7
11)	Fantasy	Arnold	1969	Faber Music	ZER (1); TAMK; UI, UNTSS (7); Bailey (g5); Whitehead (II); Whitener (D); Perantoni (FUS;2); RAM (UG 1); RIAM (G8, List A); UWL (DipLCM); UWL (LLCM); UWL (8 - C); ABRSM (DipABRSM, LRSM); ABRSM (8:C); UNCP; UNISA (PA; A); VCE; Whitener; T8; GTTB (1-2); RIAM (Sen Cert A) FTS; CM; Trossingen (ED 01/02); UKM (F&S); UWLD (DipLCM); UWLD (LLCM); UMPAG; UNCP; NYSSMA (6)	Unaccompanied	31
12)	Fantasy	Crozier	1997	Composer	Whitehead (V)	Unaccompanied	1
13)	Fantasy	Krzywicki	1964	Composer	Whitehead (II)	Tuba and strings/piano	1
14)	Fighting Windmills from Sketches from Don Quixotte	Clarke	n/a	Brass Wind	T6; UWL (DipLCM); ABRSM (6; B)	Tuba and piano	3
15)	First piece for bass	Nerijnen	1989	Bronsheim	Trossingen (ED 11/12)	Tuba and piano	1
16)	Five Extemporisations	Danburg	1985	Kendor	VBODA (6: any 3 including 2)	Unaccompanied	1
17)	Five Pieces	Lawes	1981	Queen City Brass	VBODA (5)	Unaccompanied	1
18)	Five Pieces in Folk Style	Schumann/Droste	1977	Ludwig	UNCP	Tuba and piano	1
19)	Five songs	Brahms/Little	n/a	Southern	UNTSS (3,4); VBODA; UKM (F&S);	Tuba and piano	3
20)	Five studies	Reck	1968	Edition Peters	UI; UNTSS (pg); Whitener; Whitehead (IV); Perantoni (FUS;4)	Unaccompanied	5
21)	Flight	Meechan	2018	Meechan Music	UNCP	Tuba and wind band	1
22)	Floating Dreams	Meechan	2007	Meechan Music	UNCP	Tuba and cd	1
23)	Fnugg	Baadsvik	2002	Ovation	Trinity (LTCL, '19); NZSM (2+); UNCP; FTS; CM	Unaccompanied	5
24)	For Knulp	Carr	2016	Warwick	T8 (2. Old Friends); Trinity (ATCL, '19)	Tuba and piano	2
25)	Four Bagtelles	Fodi	1979	Canadian Music Centre	RCDP (ADTP - C)	Unaccompanied	1
26)	Four Greek Preludes	Spillman	1969	Editions Musicus	Whitehead (II); NZSM (2+); FTS; CM; ZER (2);	Unaccompanied	5
27)	Four Pieces for Tuba	Ziffrin	1982	Music Graphics Press	UNCP	Unaccompanied	1
28)	Four Segments	Barnet	1974	Fema Music	VBODA (5)	Tuba and keyboard	1
29)	Four Variants for Tuba: Chaconne in Bb (Tubaphonics)	Sarcich	1994	Currency Press	VCE	Tuba and piano, and unaccompanied	1
30)	Fractured Mambos	Ruggeiro	1990	Ruggeiro	ZER (3)	Tuba and tape	1

31)	Fruhlingsglaube	Schubert/Fischer	2000	Tuba-Euphonium Press	FTS; UCLA (S);	Tuba and piano	2
32)	Fünf Charakterstücke: nach Motiven Eines eigenen Themas	Meyer-Seib, Horst	2002	Hofmeister	Trossingen (ED 11/12)	Tuba and piano	1

G (12)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Galgendlieder	Koetsier	1992	Marc Reift	UMPAG (Masters)	Soprano/tenor, tuba and harp	1
2)	Gargantua	Delguidice	1991	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
3)	Gavotte	Bell	1935	Fischer	Bailey (G2); GTTB (1-2); Trossingen (ED 11/12)	Tuba and piano	3
4)	Gavotte and Hornpipe	Purcell/Dishinger	1983	Medici	UNCW (2/4)	Tuba and piano	1
5)	Gavotte from Symphony No. 4	Boyce/Vedesky	1982	Medici	VBODA (4)	Tuba and piano	1
6)	General Levine-eccentric	Debussy/Whitehead	2002	From arranger	Whitehead (III)	Tuba and piano	1
7)	Get Down	Lloyd	2001	Musos Media	VCE	Tuba and brass band/piano	1
8)	Gigue	Corelli/Maganini	1949	Editions Musicus	VBODA (4)	Tuba and piano	1
9)	Gladiator	Buchtel	1945	Kjos	Bailey (G1)	Tuba and piano	1
10)	Golden Glow	Buchtel	1958	Mills	Bailey (G1)	Tuba and piano	1
11)	Grand Air from "The Masked Ball"	Verdi/Ostrander	1965	Editions Musicus	GTTB (1-2)	Tuba and piano	1
12)	Grave	Petit	1952	UMP	UWL (ALCM); Trossingen (ED 11/12); UWLD (LLCM)	Tuba and piano	3

H (22)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Hailstorm for Tuba	Frith	2011	Warwick Music	ABRSM (8:B)	Tuba and piano	1
2)	Happy Farmer (First Solos for the Tuba Player)	Schumann/Wekselblatt	1972	Schirmer	ABRSM (6; A)	Tuba and piano	1
3)	Harmonious Blacksmith	Handel/Hume	1999	Molenaar	VCE	Tuba and piano	1
4)	Hauterive from Belle Provence	Ameller	1973	Leduc	RIAM (G5; List A)	Tuba and piano	1
5)	Haworth Suite	Duncan	2001	The Music Company	ABRSM (7: B: A Cat and Mouse Chase Down Haworth Main Street!)	Tuba and piano	1
6)	Helix	Benson	1976	Carl Fischer	Whitehead (III); Perantoni (FUS;3); GTTB (5-6); VBODA (6: 1 st mvt);	Tuba and concert band; tuba and piano	4
7)	Hero's Prayer	Sowash	n/a	Wiltshire/Cor	NYSSMA (4)	Tuba and piano	1
8)	Hijazker longa	Anon/Buttery	1978	Whaling	Whitener (D)	Unaccompanied	1
9)	His Majesty the Tuba (Solo sounds for tuba, 1, level 3-5)	Dowling	1978	Belwin	RCDP (ADTP – 8 – List B); VBODA (4); Trossingen (ED 11/12); UMPAG; NYSSMA (5)	Tuba and piano	5
10)	Holy City	Adams/Buchtel	1958	Kjos	Whitener (I)	Tuba and piano	1

11)	Honor and Arms	Handel/Harvey	1940	G. Schirmer	Whitener (I); GTTB (3-4); GTTB (1-2); VBODA (4); VCE, ZC (2-3); NYSSMA (4)	Tuba and piano	8
12)	Horn concerto no. 1	Strauss/James	1991	TUBA Press/Schirmer	Whitener (IV); Perantoni (FUS;4); NZSM (2+); RCDP (10 - A); FTS; PI; ZER (2); UMIS (4); UCLA (S);	Tuba and piano	9
13)	Horn Concerto No. 4 from Classics for Tuba	Mozart	n/a	Studio	T6 (Rondo or Romanza); UWL (6 – A: Romanza or Rondo); ABRSM (6; A Romanza); ABRSM (7: A: Rondo)	Tuba and piano	4
14)	Horn Concerto No. 4 in E flat (Concert Music for Tuba)	Mozart/Graham	1991	Tuba Press	RCDP (10 - A)	Tuba and piano	1
15)	Horn Concerto's 1-4	Mozart/James	1991	TUBA Press	Whitener (IV); NZSM (2+; 3 and 4); PI; ZER (2);	Tuba and piano	4
16)	Hornpipe (First Solos for the Tuba player)	Anon./Wekselblatt	1964	Schirmer	UWL (7 – A); UNISA (7; A)	Tuba and piano	2
17)	How Beautiful	York	2009	Cimarron	UNCP	Tuba and piano	1
18)	Humoreske	Kühmstedt	1985	Bauer	Trossingen (ED 11/12)	Tuba and piano	1
19)	Humoreske in F	Kulesha	1978	Sonante	RCDP (ADTP – 9 – List B)	Tuba and piano	1
20)	Human Nature	Njoku	2016	n/a	UNCP	n/a	1
21)	Humour	Lancen	n/a	Molenaar	Trossingen (ED 01/02)	Unaccompanied	1
22)	Hungarian Dance No. 5 (Classics for Tuba)	Brahms	n/a	Studio	T8 ; UWL (8 – C); ABRSM (8:A); UNISA (PA; C)	Tuba and piano	4

I (19)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Il Penseroso E l'allegro	Buchtel	1939	Filmore	Bailey (G3)	Tuba and piano	1
2)	Im tiefsten walde	Schmidt/Bacon	1995	Southern	VBODA (5)	Tuba and piano	1
3)	Incantation and Dance	Still	n/a	n/a	UNCP	Tuba and piano	1
4)	In Cellar Cool	Rimmer, W	n/a	Marc Reift	VCE	Tuba and piano	1
5)	In the 90% (Sturgeon's Law)	Rozen	1998	Tuba-Euphonium Press	FTS	Unaccompanied	1
6)	In the Garden	Monroe/Isaac	1939	Fischer	Bailey (G1)	Tuba and piano	1
7)	In the hall of the mountain king	Grieg/Holmes	1939	Rubank	GTTB (1-2); Trossingen (ED 11/12)	Tuba and piano	2
8)	In the hall of the mountain king (Solos for the Tuba Player)	Grieg/Wekselblatt	1972	Schirmer	RIAM (G5; List A)	Tuba and piano	1
9)	In the Lowlands	Alan Richardson	1975	Braydeston	RIAM (G6; List B); UWL (6 – C); UNISA (6; B)	Tuba and piano	2
10)	Introduction and Allegro Spiritoso	Senaille/Catelinet	1967	Hinrichsen	UCT (b1, c/d2-c/d3); T7; NZSM (1-2); RIAM (G7; List B); UWL (7 – B); ABRSM (7: A); UNISA (7; A); VCE; CM	Tuba and piano	9
11)	Introduction and Blues (Master Solos, Intermediate Level)	Perantoni	1976	Hal Leonard	VBODA (5); VCE	Tuba and piano	2
12)	Introduction and Dance	Barat/Smith	1973	Southern Music	TAMK; UI; UNT SS(3,4); Whitehead (IV); Perantoni (FUS;4); NZSM (A);	Tuba and Piano	19

					GTTB (5-6); GTTB (3-4); VBODA (6); UNISA (PA; C); VCE; FTS; CM; UNTCS (2); PI; UMIS (1); ZC (4); UKM (F&S); UCLA (F);		
13)	Introduction and Dance	Bilik	1969	RBC Publishers	Bailey (G4)	Tuba and piano	1
14)	Introduction and Dance	Scarmolin	1960	Ludwig	Bailey (G3)	Tuba and piano	1
15)	Introduction and Rondo	Buchtel	1937	Barnhouse	Bailey (G4); VBODA (4); GTTB (3-4); NYSSMA (4)	Tuba and piano	3
16)	Introduction, Aria and Rondo	Koch	1992	Southern	VBODA (5:omit Aria); NZSM (1-2)	Tuba and piano	2
17)	Introduction et Rondo	Faillenot	1996	Martin	VBODA (4)	Tuba and piano	1
18)	Introduction et Serenade	Barat	1963	Leduc	FTS	Tuba and piano	1
19)	It is enough from Elijah	Mendellsohn/Ostrander	1965	Edition Musicus	GTTB (1-2)	Tuba and piano	1

J (7)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Jabberwocky	Gillingham	2012	Alan	UNCP	Tuba and piano	1
2)	Jig Elephantine	Bell	1935	Carl Fischer	Bailey	Tuba and piano	1
3)	Jimbo's Lullaby	Debussy/Davis	1984	Western International	VBODA (4)Joll	Tuba and piano	1
4)	Jolly Coppersmith	Peter/Bell	1964	Belwin	GTTB (1-2)	Tuba and piano	1
5)	Jolly Farmer goes to town	Schumann/Bell	1938	Fischer	GTTB (3-4); GTTB (1-2); VBODA (4)	Tuba and piano	3
6)	Journey	Stevens, J	2001	Editions BIM	Trinity (FTCL, '19); FTS; CM	Tuba and piano	3
7)	Journeys by Tuba	Elvin	2018	Superbrass	T6 (Pushed to the Limit; Stealthy Approach); T7 The Line or Fascination with Rhythms); T8 (Mr. P comes to Town, Reel groovy);	Unaccompanied	3

K (4)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Konsertstück	Dumitru	1960	Editions BIM	NZSM (1-2)	Tuba and string orchestra	1
2)	Konzertmusikstück für Tuba und Klavier	Denhof	1996	Laggenbeck	Trossingen (ED 11/12)	Tuba and piano	1
3)	Konzert für Bass-Tuba und Orkester	Koerppen	1997	ADU Verlag	Trossingen (ED 11/12)	Tuba and piano	1
4)	Kryptos	Ameller	1958	Hinrichsen	UNISA (PA; D)	Tuba and piano	1

L (30)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	L'antre de Polypheme	Delguidice	2016	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
2)	La Chantar (2 Medieval Songs)	Contessa de Dia/Hersey	2017	Cimmaron Music Press	UNCP	unaccompanied	1
3)	Lamento	Beach	1961	Southern	VBODA (4); Bailey (G3); Whitehead (1); GTTB (3-4)	Tuba and piano	4
4)	Lamento	Gubaidulina	1991	Hal Leonard	FTS; Trossingen (ED 11/12)	Tuba and piano	2

5)	Landskap	Lundquist	1978	Swedish Music Information Centre	Whitehead (V); Perantoni (FUS;5); CM; UMIS (5); UMPAG (Mastes)	tuba and string orchestra	5
6)	Larghetto and Allegro	Handel/Little	1978	Belwin	GTTB (3-4); GTTB (1-2); VBODA (5)	Tuba and piano	3
7)	Largo and Allegro (Concert and Contest Collection)	Marcello/Voxman	1972	Rubank	ABRSM (6; A); VBODA (4)	Tuba and piano	2
8)	Largo and Presto	Marcello/Little	1978	Belwin	VBODA (4)	Tuba and piano	1
9)	Legend	Catelinet	1980	ABRSM	RIAM (G5; List A); VCE	Tuba and piano	2
10)	Legend of the Purple Hills	Uber	1980	Southern Music	UNTSS (5,6); VBODA (6); UNISA (PA; D); VCE	Tuba and piano	4
11)	Legend of the Sleeping Bear	Uber	1986	Kendor	VBODA (5)	Tuba and piano	1
12)	Legend of St. Catherine	Uber	1996	Kendor	VBODA (5)	Tuba and piano	1
13)	Lento	Holmes	1961	Shawnee Press	ZER (1); TAMK; Bailey (G5); Whitener (I); GTTB (3-4); VBODA (5), UNTSS (1,2); Perantoni (FUS;1); NZSM (1-2); NYSSMA (6)	Tuba and piano	10
14)	Le Chene-Chat	Proust	1993	Bilaudot	VBODA (4)	Tuba and piano	1
15)	Le petit Boabab	Delguidice	1981	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
16)	Le petit mammoth	Delguidice	1981	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
17)	Liberation of Sisyphus	Stevens, J	1990	Editions BIM	Whitehead (V); NZSM (2+); FTS	Tuba and 8-part tuba/euph ensemble	3
18)	Lieder (various)	Schumann, C	n/a	n/a	UNCP	n/a	1
19)	Lieder (Various)	Mendelssohn, F	n/a	n/a	UNCP	n/a	1
20)	Lieder Eines Fahrenden Gesellen	Mahler/Perantoni	1972	Encore music	Whitehead (IV); Perantoni (FUS;4); UNCP; FTS; CM (Carlson edition)	Tuba and piano	5
21)	Lifepoints	Wyat, S	1992	Media Press	UKM (J&S);	Tuba, percussion, tape	1
22)	Line Drawings	Schudel	1985	Canadian Music Centre	RCDP (ADTP - C)	Unaccompanied	1
23)	Little Suite	Kinney	1973	Studio	VBODA (6: omit 3)	Unaccompanied	1
24)	Little Suite for Winter	Schikele	2018	Elkan-Vogel	ZER (2);	Tuba and clarinet	1
25)	Little Suite no. 5 (solo serpent)	Cummings	2006	Brassworks 4 Publishing	VCE (Three Moods, complete, or Little Suite No. 5)	Unaccompanied	1
26)	Logos	Ameller	1982	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
27)	Londonderry Air	Buchtel	1979	Kjos Music Co.	GTTB (1-2)	Tuba and piano	1
28)	Lord Preserve Me	Rossini/Ostrander	1959	Editions Musicus	VBODA (4)	Tuba and piano	1
29)	Low Down Bass	Bell	1935	Fischer	Bailey (G1)	Tuba and piano	1
30)	Lyri –Tech 1	Anderson	1991	Anderson's Arizona Originals	CM; UMPAG	Unaccompanied	2

M (39)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Magnolia	Vandercook/Buchtel	1952	Kjos	NYSSMA (4)	Tuba and piano	1
2)	Mamminga Rag	Zaninelli	1991	Presser	VBODA (4)	Tuba and piano	1
3)	March of a Marionette	Gounod/Walters	1965	Hal Leonard	VBODA (4); Trossingen (ED 11/12)	Tuba and piano	2
4)	Marchenbilder	Schumann/Cooley	1997	Tuba Classics	UI; Trinity (FTCL); Trinity (FTCL, '19); UWL (FLCM); UWLD (FLCM)	Tuba and Piano	5

5)	Mardi-Gras	Faillenot	1995	Robert Martin	VBODA (4)	Tuba and piano	1
6)	Marine's Hymn from Soloist folio	Phillips, L	1939	Rubank	VBODA (4)	Tuba and piano	1
7)	Mary's Idea	Childs	1972	Seesaw	Whitehead (I)	Tuba and Harpsichord	1
8)	Me and my tuba	Uber	n/a	Wehr	NYSSMA (4)	Tuba and piano	1
9)	Meditation from <i>Thais</i>	Massenet Arr. Meador	2009	Warwick Music	ABRSM (7: A)	Tuba and piano	1
10)	Melodie Romanza	Frangkiser	1946	Belwin	VBODA (5)	Tuba and piano	1
11)	Melody	Geib/Moprse	1940	Fischer	VBODA (5)	Tuba and piano	1
12)	Mevagissey Tales	Kalke, Ernst-Thilo	2000	Halberstadt Bruno	Trossingen (ED 11/12)	Tuba and piano	1
13)	Midnight Realities	Powell	1974	BIM	Whitener; Bailey (G6); Whitener (V); VCE; CM; Trossingen (ED 01/02)	Unaccompanied	6
14)	Midnight Variations	Ross	1971	Muncie	Bailey (G6)	Tuba and tape	1
15)	Millennium concerto	Newton	2000	Studio Music	Trinity (atcl); Trinity (ATCL, '19); UWL (ALCM); UWLD (LLCM)	Tuba and band/piano	4
16)	Miniature Suite for tuba and piano	Heinz	1986	Glenn Zinneberg	Trossingen (ED 11/12)	Tuba and piano	1
17)	Miniaturen-Suite	Benker	1986	Zinneberg Musikverlag	Whitehead (III); Perantoni (FUS;3)	Tuba and piano	2
18)	Minuet and Badinerie (Classics for Tuba)	Bach/Woods and Death	1999	Studio Music	ABRSM (8:A); UNISA (PA; A)	Tuba and piano	2
19)	Minuetto Profondo	Krol	1983	Hofmeister	Trossingen (ED 11/12)	Tuba and piano	1
20)	Mirum for tuba	Kagel	1974	Universal Edition	Whitehead (V); Whitener; UMPAG (Masters)	Unaccompanied	3
21)	Modern Lullaby	Newton	1965	Boosey and Hawkes	GTTB (1-2)	Tuba and piano	1
22)	Monoceros (Creatures of the Deep)	Wilson-Dickson	2012	Brass Wind	T6	Tuba and piano	1
23)	Monolog No. 9	Koch	1977	Carl Gehrmans Musikförlag	UI, UNTSS (5,6); Whitehead (IV); Perantoni (FUS;4); NZSM (2+); ZER (2);	Unaccompanied	6
24)	Monument	Stevens	2007	Vuamarens	Trinity (ATCL, '19)	Tuba and strings/piano	1
25)	Morceau de concours (Concert and Contest Collection)	Alary/Voxman	1972	Rubank	(ADTP – 8 – A); VBODA (5)	Tuba and piano	2
26)	Morceau de Concours I	Jean Defaye	1990	Leduc	VBODA (5); Trossingen (ED 11/12)	Tuba and piano	2
27)	Morceau de Concours II	Jean Defaye	1990	Leduc	VBODA (6); Trossingen (ED 11/12)	Tuba and piano	2
28)	Morceau de Concours III	Jean Defaye	1990	Leduc	VBODA (6); CM; Trossingen (ED 11/12)	Tuba and piano	3
29)	Morceau Vivant	Marteau/Barnes	1958	Jack Spratt	VBODA (5); NYSSMA (5)	Tuba and piano	2
30)	Morgendammerung	Kanda	2009	Lami Musicworks	UNCP	Tuba and piano	1
31)	Mosaïques	Badian	1990	Lucian Badan	RCDP (ADTP - C)	Unaccompanied	1
32)	"Mr Tuba" on Broadway	Uber	1987	Kendor	VCE; Trossingen (ED 11/12); VBODA (5)	Tuba and piano	3
33)	Mulberry Street Tarantella	Briegel	1963	Rubank	Bailey (G2)	Tuba and piano	1
34)	Multiple Personalities	Archer	2005	Alan	UNCP; NYSSMA (6)	Tuba and piano	2
35)	Mummers	Merle	1939	Fischer	Bailey (G2)	Tuba and piano	1

36)	Music for Tuba	Hartley	1973	Philharmonica Corporation	Whitehead (IV); UNCW (4/4)	Unaccompanied	2
37)	Musizierbuch für Bass tuba	Meschke	1986	Pro Musica Verlag	Trossingen (ED 11/12)	Tuba and piano	1
38)	Mystique	Crockett	1989	TUBA Press	Whitehead (III); Perantoni (FUS;3)	Tuba and piano	2
39)	My Johann	Grieg/Corwell	1988	Ken	VBODA (4)	Tuba and piano	1

N (8)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	New England Reveries	Corwell	1990	Nicolai	UNCP; ZER (1);	Tuba and tape	2
2)	New Orleans	Bozza	2000	Leduc	FTS; Trossingen (ED 11/12)	Tuba and piano	1
3)	Nine Miniatures for E flat Tuba (John Ridgeon Brass Wind Series)	Gregson	1980	Belwin	RIAM (G5; List B; Habanera and Ragtime)	Tuba and piano	1
4)	Neutron Star	Belden/Little	1978	Belwin	VBODA (5)	Tuba and piano	1
5)	Nocturnal Serenade	Morra	1964	Fischer	Bailey (G2)	Tuba and piano	1
6)	Nocturne	F. Strauss/Fischer	2001	Tuba-Euphonium Press	UNTSS (7); CM; NYSSMA (6)	Tuba and piano	3
7)	Nocturne	Plog	2004	Vuumamens	UNCP; CM	Tuba and strings/piano	2
8)	Nostalgia	Stoeckart/Tombey	1978	Molenaar	Trossingen (ED 11/12)	Tuba and piano	1

O (13)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	O Greening Branch	Von Bingen/Hersey	n/a	Joannahersey.com	UNCP	Tuba and electronic track	1
2)	O Isis and Osiris	Mozart/Morris	1974	Brass Press	VBODA (4); GTTB (3-4); ZER (1)	Tuba and piano	2
3)	O Mensch, beweine dein' Sunde gross	Bach/Hilgers	1990	Editions Marc Reift	NZSM (2+)	Tuba and organ	1
4)	O virga ac diadema (3 Medieval Songs)	Von Bingen/Hersey	n/a	Cimmaron Press	UNCP	Tuba and piano	1
5)	O Quam Mirabilis (3 Medieval Songs)	Von Bingen/Hersey	2000	Cimmaron Press	UNCP	Tuba and piano	1
6)	Oca (or Ulloco from Tuber Music)	Proctor	2003	Brass Wind	UWL (7 – C: Oca or Ulloco); ABRSM (7: B Ulloco or Oca); UNISA (7; C)	Tuba and piano	3
7)	Oh! Had I Jubal's Lyre	Handel/Marlatt	2009	Eight Note	NYSSMA (4)	Tuba and piano	1
8)	Oh, Never Sing to Me Again op. 4 no. 4	Rachmaninov/Russel	n.d.	Available from transcriber	Whitehead (II)	Tuba and piano	1
9)	Old home down on the farm	Buchtel/Harlow	1958	Kjos	Bailey (g4)	Tuba and piano	1
10)	One clear call	Powell	2006	Warwick	Trinity (FTCL, '19);	Tuba and piano	1
11)	One Sweet Dream	Meechan	2016	From composer	UNCP	Tuba and piano	1
12)	Ordner Seg	Baadsvik	2010	Ovation	UNCP; FTS	Tuba and piano	2
13)	Öt darab: tubára és zongorára	Zsolt	1979	Editio Musica	Trossingen (ED 11/12)	Tuba and piano	1

P (37)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Parable	Siekman	1994	Barnhouse	NYSSMA (4)	Tuba and piano	1
2)	Parable XXII	Persichetti	1983	Elkan Vogel	UI; UNTSS (pg); Whitehead (V); NZSM (2+); RCDP (ADTP - C); UWL (FLCM); UNCP; Whitener; Trinity (FTCL, '19); GTTB (5-6); RCDP (ADTP - C); UNCP; FTS; ZER (2); UMPAG	Unaccompanied	15
3)	Partita in a minor	Bach/Cooley	1994	Tuba classics	Trinity (LTCL, '19); Whitehead (V); UWL (LLCM); VCE any (any ½ movts); FTS; CM ; UCLA (J); UWLD (LLCM);	Unaccompanied	8
4)	Patron of the wind from "Phoebus and Pan"	Bach/Ostrander	1959	Editions Musicus	GTTB (1-2); GTTB (3-4); VBODA (4)	Tuba and piano	3
5)	Pavane pour une Infante Défunte	Ravel/Whitehead	1998	Arranger	Whitehead (IV)	Tuba and piano	1
6)	Pearls III	Szentpali	2010	Editions BIM	FTS	Tuba, and piano (optional three background tubas)	1
7)	Per Questa Bella Mano	Mozart/Barnes	1990	Jack Spratt Music Co.	VBODA (4)	Tuba and piano	1
8)	Pershing Concerto	Raum	1997	Tuba Euphonium Press	RCDP (ADTP - A)	Tuba and orchestra/piano	1
9)	Persiflage	Koepke	1972	Rubank	NZSM (1-2); VBODA (5)	Tuba and piano	2
10)	Petite Interlude	Dalbavie	1992	Gerard Billaudot (TP)	VBODA (6); UNISA (PA; D)	Unaccompanied tuba	2
11)	Petite Valse Européenne	Francaix	1979	Schott – (EA)	VBODA (6: play to or from Fine)	Tuba and double woodwinds/piano	1
12)	Per tuba ad Astram	Woolf	n/a	From composer	Bailey (G6)	Tuba and orchestra/piano	1
13)	Picadilly Poker (Take the Tube)	Proctor	2005	Brass Wind	T7; UWL (7 – C)	Tuba and piano	2
14)	Piccolo Suite	Dubois	2002	Leduc/UMP	UWL (LLCM); LRSM; UNISA (PA; C); UWLD (DipLCM); UWLD (LLCM)	Tuba and piano	5
15)	Pieces Classique Vol. 2	Various	n/a	Gerard Billaudot	VBODA (4: any page)	Tuba and piano	1
16)	Piece from Masters Solos Intermediate Level	Lawrence	1999	Hal Leonard	VBODA (5)	Tuba and piano	1
17)	Pièce Lyrique	Clérisse	2002	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
18)	Pied Paper	Buchtel	1985	Kjos Music company	Bailey (G1)	Tuba and piano	1
19)	Pink Panther	Mancini/Frackenpohl	1983	Kendor	VCE	Tuba and piano	1
20)	Pliikonamu: voor koperinstrumenten en piano	Goeyvaerts	1979	Bruxelles	Trossingen (ED 11/12)	Tuba and piano	1
21)	Polka from the Age of gold from Solos for the Tuba Player	Shostakovich/Wekselblatt	1986	Schirmer	VBODA (6); VCE	Tuba and piano	2
22)	Polka Giocosa	Scarmolin	1953	Barnhouse	NYSSMA (4)	Tuba and piano	1
23)	Praeludium and Fughetta	Stoutamire	1976	Ludwig	VBODA (5)	Tuba and piano	1

24)	Praeludium, Chorale Variations and Fugue	Muller	1959	Editions Musicus	VBODA (5: imt Var. 1)	Tuba and piano	1
25)	Praeludium und Scherzo	Shekov	1984	Schulz	Trossingen (ED 11/12)	Tuba and piano	1
26)	Prélude et Jeu	Proust	1993	Billadaudot	VBODA (4: either one)	Tuba and piano	1
27)	Preludes from Chopin for the tuba	Chopin/Davis	n/a	WIM	VBODA (5: omit 3 and 2); Trossingen (ED 11/12)	Tuba and piano	2
28)	Prelude, waltz and Finale	Glass	1996	Emerson	Trinity (Itcl); Trinity (LTCL, '19); UWL (LLCM); UWL (FLCM); ABRSM (LRSM; FRSM); UNISA 8 (C); UWLD (LLCM); UWLD (FLCM)	Tuba and piano	9
29)	Prelude and Allegretto	Telemann/Chidester	1966	Southern	UNTSS (1,2); GTTB (3-4); RIAM (G5; List A); VBODA (4)	Tuba and piano	4
30)	Prelude and Allegro	Bozza	1979	Leduc/UMP	UWL (LLCM); UWLD (LLCM)	Tuba and piano	2
31)	Prelude and Allegro from Sonata No. 10, Op. 5	Corelli/Graham	1991	TUBA press	Bailey (G3)	Tuba and piano	1
32)	Prelude and Scherzo	Brown	1969	Seesaw Music	Bailey (G5)	Tuba and piano	1
33)	Prelude et Allegro	Charpentier	1959	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
34)	Preludes for tuba and piano	Barcos	1993	Editions Marc Reift	Trossingen (ED 11/12)	Tuba and piano	1
35)	Prelude a L' apres d'un Faune	Debussy/Whitehead	2002	Arranger	Whitehead (F)	Tuba and piano	1
36)	Promenade	Koeck	n.d	Dehaske Muziekuitgave BV	Whitehead (V); Perantoni (FUS;5)	Tuba and piano	2
37)	Puissance 4	Delguidice	2008	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1

Q (1)

1)	Quintessence	Clews	2005	Paterson Publications	VCE	Tuba and piano	1
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R (28)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Recercada on the "Passamezzo Moderno"	Oritz	1981	QCBP	VBODA (5)	Tuba and piano	1
2)	Récit & Thème Varié	Busser/ Ballarin	1999	International	NYSSMA (6)	Tuba and piano	1
3)	Recitative und Burla	Krol	1987	Hofmeister	Trossingen (ED 11/12)	Tuba and piano	1
4)	Reflections on the Mississippi	Daugherty	2013	Faber	FTS	Tuba and orchestra/piano	1
5)	Remembrance	Stevens	1995	BIM	Whitener	Unaccompanied	1
6)	Revenge! Timotheus Cries!	Handel/Morris	1970	Ludwig	GTTB (1-2); VBODA (5)	Tuba and piano	2
7)	Ricercar	D. Gabrielli/Morris	1974	Shawnee Press	ZER (2); TAMK; UNTSS (3,4); Whitehead (I); Perantoni (FUS;1); NZSM (1-2); RCDP (ADTP – 9 – List A); VCE ; FTS; Trossingen (ED 01/02); UMIS (3); ZC (3-4);	Unaccompanied	12
8)	Ricercar	Kinney	1973	SPR Belwin	VBODA (5)	Unaccompanied	1
9)	Ricercata Quarta	Antonij/Kinney	1981	QCBP	VBODA (5: any two movts)	Unaccompanied	1
10)	Riguadon	Rameau/Maganini	1954	Editions Musicus	VBODA (4)	Tuba and piano	1
11)	Ritmico Ed Arioso	Louël	1980	CeBeDeM	Trossingen (ED 11/12)	Tuba and piano	1

12)	Rocked in the cradle of the deep	De Lamarter	1937	Rubank	GTTB (1-2); Trossingen (ED 11/12)	Tuba and piano	2
13)	Romance	Bourgeois	1981	Vanderbeek	Trinity (ATCL, '19); UNISA (PA; C)	Tuba and piano	2
14)	Romance	Hanson	1972	Australian Music Centre	VCE	Tuba and piano	1
15)	Romance	Raum	2001	Tuba and Euphonium Press	UNCP	Tuba and piano	1
16)	Romance	Still/Yeo	n/a	n/a	UNCP	n/a	1
17)	Romance and Rondo from (Solos for the Tuba Player)	Mozart, Arr. Wekselblatt	1972	Schirmer	RCDP (ADTP – 9 – List A); VBODA (6); UNISA (6; A: Rondo or Romanza)	Tuba and piano	3
18)	Romance and Scherzo	Cohen	1941	CPP/Belwin	Bailey (G4)	Tuba and piano	1
19)	Romance No. 2	Schumann/Werden	1993	Whaling	UNCW (3/4)	Tuba and piano	1
20)	Romance No.3	Schumann/Perantoni	1976	Hal Leonard	VBODA (4)	Tuba and piano	1
21)	Romances for Susie	York	2006	Cimarron	NYSSMA (6)	Tuba and piano	1
22)	Romanian Dance	Dumitru Ionel, arr. Frank Berry	1993	Editions BIM	Whitehead (IV); NZSM (1-2)	Tuba and band/piano	2
23)	Rondo	Jenne	1968	Theodore Presser	Bailey (G5)	Tuba and piano	1
24)	Rondo	Presser	1968	Barnhouse	Bailey (G3); GTTB (1-2); VBODA (4)	Tuba and piano	3
25)	Rondo	Kriesler	1985	Southern Music	Bailey (G3); GTTB (1-2)	Tuba and piano	2
26)	Rondo alla Scherzo from Clarinet Concerto in Eflat major (Solos for the Tuba Player)	Stamitz/Wekselblatt	1972	Schirmer	RCDP (ADTP – 8 – List A); VBODA (6)	Tuba and piano	2
27)	Round Dance	Pappas	n/a	JPM	NYSSMA (4)	Tuba and piano	1
28)	Ruderal	Joubert, Claude-Henry	1980	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1

S (175)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Sad Song No. 2 or Duel No. 3	Evans	2017	Warwick	T7	Tuba and piano	1
2)	Sailor's Song	Schumann/Little	1978	Belwin	VBODA (4);	Tuba and piano	1
3)	Salut d'Amour	Elgar/Fischer	2000	Tuba-Euphonium press	UNTSS (5,6)	Tuba and piano	1
4)	Salve venere, salve marte	Stevens, J	1995	BIM	Whitener; Whitehead (V); NZSM (2+); UNCP; UNISA (PA; A); VCE (or Triumph of the Demon Gods); FTS; CM	Unaccompanied	8
5)	Sarabande	Bach/Hilgers	1998	Marc Reift	T7; UWL (7 – B); UNISA (7; A); SCMMDF (UG2)	Tuba and piano	3
6)	Sarabande from Concerto in f minor	Handel/Hilgers	1995	Ludwig	GTTB (3-4); VBODA (4);	Tuba and piano	2
7)	Scherzino	Haddad	1990	Southern Music	VBODA (4)	Tuba and piano	1
8)	Scherzo	Golland	1983	Hallamshire	VCE	Tuba and piano	1
9)	Scherzo for tuba	Bartles	1970	Sam Fix	Bailey (G6); VBODA (6)	Tuba and wind band /piano	2
10)	Short Suite	Haddad	1975	Seesaw	Whitener (D)	Unaccompanied	1
11)	Sea Dreams	York	2009	Cimarron	NYSSMA (5)	Tuba and piano	1
12)	Sea Gong	Desmond	1942	Belwin	VBODA (5)	Tuba and piano	1
13)	Sea Satire (Creatures of the deep)	Wilson-Dickson	n/a	Brass Wind	T7	Tuba and piano	1

14)	Serenade	Lawrence	1989	Southern Music	VBODA (6)	Tuba and piano	1
15)	Serenade	Mozart/Morris	1982	Shawnee	GTTB (3-4); NYSSMA (6)	Tuba and piano	2
16)	Serenade	Rae	1991	CMC	RCDP (10 - B)	Tuba and piano	1
17)	Serenade	Schmidt	1962	Western International Music Inc./Avant Publications	ZER (2); Whitehead (II); Perantoni (FUS;2); GTTB (5-6); GTTB (3-4); RCDP (ADTP – 9 – List B); UNCP; VBODA (6: omit 2 nd and 3 rd movt.); VCE (at least 2 movts)	Tuba and piano	9
18)	Serenade and Scherzo (Concert and Contest Collection)	Ostransky/Voxman	1972	Rubank	ABRSM (7: B); VBODA (4)	Tuba and piano	2
19)	Serenade no. 12	Persichetti	1963	Elkan vogel	UMIS (3); Trinity (atcl); UNTSS (7); Trinity (ATCL, '19); Gray (arrival at college); Perantoni (FUS;4); T8 (1. Intrada and 4. Capriccio); RCDP (ADTP - C); UWL (8 – C); ABRSM (DipABRSM); UNCP; VBODA (6: any two movts); UNISA (PA; D); UNCW (2/4); Whitener; NZSM (1-2); GTTB (5-6); RAM (PG 1); RCDP (ADTP - C); UWL (DipLCM); VBODA (6: any two movts); UNISA (PA; D); UNISA 8 (A: 1&3/2&4/5&6); VCE (any 3 contrasting movements); FTS; CM; Trossingen (ED 01/02); UI, RCDP (ADTP - B); ZER (2); UCLA (J); UWLD (DipLCM); UWLD (FLCM); NYSSMA (6)	Unaccompanied	34
20)	Serenata	Schooley, J	1976	Gloucester press	VBODA (6); NYSSMA (5)	Tuba and piano	2
21)	Set of Three	Smolanoff, M	1973	Southern music	VBODA (6)	Tuba and piano	1
22)	Shatterdome	Joanna Hersey	2018	Joannahersey.com	UNCP	Tuba and electronics	1
23)	Shenandoah Fantasy	Whitener	2017	Resonata	T8	Tuba and piano	1
24)	Siciliano and Chorale (Master Solo's Intermediate Level)	Bach/Perantoni	1976	Hal Leonard	VBODA (4); VCE	Tuba and piano	2
25)	Siciliano from Sonata no.2	Bach/Hall	1962	Brodts	GTTB (3-4)	Tuba and piano	1
26)	Sicilienne	von Paradis	n/a	n/a	UNCP	Tuba and piano	1
27)	Sinfonia	Pergolesi	n/a	n/a	UCT (b2, a1, c/d3-4)	Tuba and piano	1
28)	Six Pack	Meador	2008	Warwick	Trinity (FTCL, '19); FTS	Unaccompanied	2
29)	Six Likes for solo tuba	Antoniou	1968	Bärenreiter-Verlag	Whitehead (V)	Unaccompanied	1
30)	Six Little Tuba Pieces	Jacob, G	1978	Emerson	RCDP (ADTP – 8 – List B); RIAM (G5; List B; Hungarian); VBODA (5: any 3); VCE (at least 3)	Tuba and piano	4
31)	Six short solo suites	Bach/King	1990	Robert King	UCT (b3,a2); Whitener (D)	Unaccompanied	2
32)	Six Studies in English Folksong	Vaughan Williams, RV/Wagner	1927	Galaxy Music	ZC (4-5); ZER (1)TAMK; UI, UCT (b2,a1,c/d3-4); UNTSS (3,4); Whitehead (II); Perantoni (FUS;2); NZSM (1-2); GTTB (5-6); GTTB (3-4); RCDP (ADTP – 9 – List A); UWL (6 – C: No. 4); UNCP;	Tuba and Piano	20

					VBODA (4: any two 1-4, or 5-6); VBODA (4: any two 1-4; 5&6); UNISA (PA; A); FTS; CM; UMIS (2);		
33)	Sizzl	Denham	2014	Cimmaron	FTS	Tuba and piano	1
34)	Sketches	McFarland	1979	Theodore Presser	Whitehead (II); Perantoni (FUS;2); VBODA (6: any two); ZER (1);	Tuba and Piano	4
35)	Sketches from Don Quixote	Clarke, N	1993	Brass Wind	UWLD (DipLCM)	Tuba and piano	1
36)	Smoke gets in your eyes (Let's face the music for tuba Eb bass)	Ker/Iveson	n/a	Brass Wind	T6	Tuba and piano	1
37)	Soliloquy X for Solo Tuba	Wiggins	1997	Studio Music	UWL (LLCM); UWL (FLCM); ABRSM (LRSM; FRSM); UNISA (PA; A); UWLD (LLCM); UWLD (FLCM)	Unaccompanied	7
38)	Solitude	Lotzenhizer	1958	Belwin	Bailey (G2)	Tuba and piano	1
39)	Solo Pomposo	Fillmore	1911	Fischer	GTTB (3-4); Trossingen (ED 11/12)	Tuba and band/piano	2
40)	Solo No. 3 from 15 Solos	Dubrovay	2010	Hungaroton	UMPAG (Masters)	Unaccompanied	1
41)	Sonata	Anderson	1985	Southern Music	VBODA (6: 1/3); VBODA (5)	Tuba and piano	2
42)	Sonata	Benjamin	1991	Southern Music	VBODA (5: any movt.); PI	Tuba and piano	2
43)	Sonata	Bardwell	1974	Leduc/King	RCDP (ADTP - B); VBODA (6: any movt); UNISA (PA; B)	Tuba and piano	3
44)	Sonata	Beversdorf	1962	Southern Music	ZER (1); TAMK; UNTSS (2,3); Whitehead (I); Meyer (pre-college); Perantoni (FUS;1); NZSM (1-2); GTTB (5-6); GTTB (3-4); RCDP (ADTP – 9 – List B); VBODA (6: any two movts); UNCW (3/4); Trossingen (ED 11/12); UMPAG; NYSSMA (5)	Tuba and piano	15
45)	Sonata	Bourgeois	1972	Brass Wind	T8 (3 rd movement); UWL (ALCM); UWL (8 – B - ; 3 rd); UNISA 8 (C: 3 rd movt); UWLD (LLCM)	Tuba and piano	5
46)	Sonata	Bowers	2006	Queen's Temple	Trinity (FTCL, '19)	Tuba and piano	1
47)	Sonata (Concerto)	Broughton	1976	Edwin F. Kalmus/MMP/Ludwig	UI; UNTSS (7); Trinity (ATCL, '19); Whitehead (IV); Perantoni (FUS;4); T8 (any movement); NZSM (2+); GTTB (5-6); RCDP (10 - B); UNCP; FTS; CM; UNCW (4/4); TAMK; ZER (3); UKM (J&S); UCLA (Sen)	Tuba and Orchestra/Piano	17
48)	Sonata	Cheetham	2000	Booneslick	UMIS (3);	Tuba and piano	1
49)	Sonata	Dilorenzo	2012	Arts of sound	FTS	Tuba and piano	1
50)	Sonata	Filas	1993	Editions BIM	FTS	Tuba and piano	1
51)	Sonata	Frackenpohl	1982/1974	Kendor Music; available from composer	UI, UCT (b4, a3); UNTSS (7); Whitehead (IV); NZSM (1-2); GTTB (5-6); UNCP; VBODA (6: any movt); UNISA 8 (B)	Tuba and Piano	9
52)	Sonata Breve	Gallagher	1983	Brass Press	UI, Whitener (D); VBODA (6: 1&3 or 2&4); ZER (1); NYSSMA (6)	Unaccompanied	5
53)	Sonata	Gárdonyi	1998	Frans Biesack/Walhall	NZSM (2+); CM; Trossingen (ED 11/12); Whitehead (V)	Tuba and piano	4

54)	Sonata	George	1974	From composer	Whitehead (IV); Perantoni (FUS;4); GTTB (5-6)	Tuba and piano	3
55)	Sonata	Gower	1979	Brass Press	VBODA (6: omit 2 nd movt); Trossingen (ED 11/12)	Tuba and piano	2
56)	Sonata	Hindemith	1955	European American – Schott	UCLA (S); UKM (F&S); UMIS (3); ZER (2); TAMK; UI, UCT (b4,a3), Trinity (atcl); UNTSS (5,6); Trinity (ATCL, '19); Bailey (G6); Whitehead (III); Meyer (pre-college); Gray (arrival at college); Perantoni (FUS;3); T7 (1/2 nd movement); T8 (3 rd movement); NZSM (1-2); NZSM (2+); GTTB (5-6); RAM (UG 2); RAM (PG 1); RCDP (ADTP - B); RIAM (Sen Cert B; 3 rd mvt.); RIAM (G8; List B, 3 rd movement); RIAM (G7; List A; 1 st mvt.); UWL (DipLCM); UWL (8 – B - ; 3rd); UWL (7 – B; 1 st movement); UWL (6 – A: Allegro Assai – 2 nd movt.); ABRSM (DipABRSM; LRSM); ABRSM (6; B: 2 Allegro Assai); ABRSM (7: B: 1 st); ABRSM (8: B 3 rd); UNCP; VBODA (6: 1/3); VBODA (5: 2 nd movt); UNISA (PA; B); UNISA 8 (B: any 3 movts); FTS; UNISA 8 (C: 3 rd movt); UNISA (7; B: 1st); UNISA (6; B: 2); VCE (any); CM; UNCW (4/4); SCMMDF (UG2); Trossingen (ED 11/12); PI; UWLD (DipLCM); UMPAG; NYSSMA (6)	Tuba and Piano	50
57)	Sonata	Krazanovski	n/a	n/a	UMPAG (Masters)	Unaccompanied	1
58)	Sonata	Kulesha	1972	CMC	RCDP (10 - B)	Tuba and piano	1
59)	Sonata	Madsen	1980	Musikk-Huset A/S Norway	Whitehead (IV); Perantoni (FUS;4); NZSM (2+); MOZ 5/M; CM; UMIS (5); UKM (J&S);	Tuba and piano	7
60)	Sonata	McIntyre	1996	Canadian Music Centre	RCDP (ADTP - B)	Tuba and piano	1
61)	Sonata	Morawetz	1984	Aeneas Music	RCDP (ADTP - B)	Tuba and piano	1
62)	Sonata	Payne	1979	Shawnee Press	Whitehead (IV); Perantoni (FUS;4)	Tuba and Piano	2
63)	Sonata	Reynolds	1969	Carl Fischer	Whitehead (IV); Perantoni (FUS;4); ZER (3);	Tuba and piano	3
64)	Sonata	Roikjer	1981	Imundico Musikforlaget	Whitehead (IV); Perantoni (FUS;4)	Tuba and piano	2
65)	Sonata	Salzedo	1944	Chester	UCT (a4), Trinity (ftcl); Trinity (ftcl); Trinity (FTCL, '19); NZSM (1-2); RAM (UG 2); RAM (PG 1); RCDP (ADTP - B); RIAM (Sen Cert A – all movts); RIAM (G8; List A; 2 and 3); UWL (ALCM); UWL (8 – B); ABRSM (DipABRSM; LRSM); UNISA (PA; B); Guil (3); CM; UWLD (LLCM)	Tuba and piano	18

66)	Sonata	Schmidt	1984	Western International	UCT (B4,a3); Whitehead (IV); Perantoni (FUS;4); VBODA (6: any movt)	Tuba and piano	4
67)	Sonata	Sear	1974	Western International Music	VBODA (6); Trossingen (ED 01/02)	Unaccompanied	2
68)	Sonata	Sibbing	1973	Theodore Presser	UNTSS (5,6); Bailey (G6); Perantoni (FUS;2); Perantoni (FUS;3); UKM (F&S); NYSSMA (6)	Tuba and piano	6
69)	Sonata	Sivelov	2014	Ovation	UMIS (5);	Tuba and piano	1
70)	Sonata	Stabile	1970	Western International	Perantoni (FUS;2); TAMK	Tuba and piano	2
71)	Sonata	Stanley	1998	Haas	Trossingen (ED 11/12)	Tuba and piano	1
72)	Sonata	Uber	1978	Editions Musicus	Whitehead (I); Perantoni (FUS;1); ABRSM (DipABRSM) (2 nd and 3 rd movts.) (LRSM); VBODA (6)	Tuba and piano	5
73)	Sonata	White	1979	Ludwig Music	UI; GTTB (5-6); UNTSS (pg); Whitehead (IV); Perantoni (FUS;4); VBODA (6: omit 2nd movt.); UMIS (3);	Tuba and Piano	7
74)	Sonatas	Galliard	Various	Various	PI, UMIS (2);	Tuba and piano	2
75)	Sonata Capricciosa	Takacs	1967	Ludwig Doblinger	Bailey (G6); Whitehead (III); Perantoni (FUS;3); RCDP (10 - B); Trossingen (ED 11/12); UMPAG	Tuba and piano	6
76)	Sonata Classica	Troje-Miller	1941	Belwin	RCDP (ADTP – 8 – List B); NYSSMA (5)	Tuba and piano	2
77)	Sonata for flute in F Major	von Preussen	n/a	n/a	UNCP	n/a	1
78)	Sonata for tuba and string quartet	Baker	1982	MMB Music	Whitehead (V)	Tuba and string quartet	1
79)	Sonata in 6 minutes 30	Pascal	1958	Durand/UMP	UWL (DipLCM); UNISA (PA; D); UWLD (DipLCM)	Tuba and piano	3
80)	Sonata in Bb	Telemann/Olt	2007	Cimarron	NYSSMA (6)	Tuba and piano	1
81)	Sonata in B-dur	Besozzi/Meyer	n/a	Marc Reift	UKM (J&S);	Tuba and piano/organ	1
82)	Sonata in C	Handel/Hilgers	1990	BIM	Trinity (atcl); Trinity (ATCL, '19); UWL (ALCM); T6 (1st movement); T7 (3 rd and 4 th movement); UWL (7 – B: 3 rd and 4 th); UNISA (PA; C); UNISA 8 (B: any 3); UNISA (7; A: 3/4); UWLD (LLCM)	Tuba and piano	10
83)	Sonata in C Minor Op. 1 No. 8	Handel/Foster	2007	Warwick Music	ABRSM (8:A: 1 and 2)	Tuba and piano	1
84)	Sonata in G major	Handel/Sands and Simple	1997	Available from arrangers	Whitehead (II)	Tuba and piano	1
85)	Sonata in G minor	Telemann/Everett	2007	Cimarron	UMIS (2);	Tuba and piano	1
86)	Sonata No.1	Galliard	n/a	n/a	UCT (b2,a1,c/d3-4); UNCP	Tuba and keyboard	2
87)	Sonata No. 1	Hartley	1967	Tenuto	Trinity (Itcl); UNTSS (3,4); Trinity (LTCL, '19); Bailey (g6); Whitehead (II); Meyer (pre-college); Perantoni (FUS;2); NZSM (1-2); UNCP; Trossingen (ED 11/12); ZER (2); UMIS (2); NYSSMA (6)	Tuba and Piano	13

88)	Sonata No. 1	Little	1984	Southern Music	UI; UNTSS (1,2); Whitehead (I); Perantoni (FUS;1); Perantoni (FUS;2); GTTB (3-4); (ADTP – 8 – A); UNCP; VBODA (6); VCE (or No.5); FTS; CM; UNTCS (1); SCMMDF (Initial 1, 2)	Tuba and Piano	13
89)	Sonata No. 1	Marcello/Little	1984	Southern Music	TAMK; ZER (1); UMIS (1); ZC (4); UKM (F&S); UCLA (F); NYSSMA (5)	Tuba and Piano	7
90)	Sonata no.1	Wilder	1963	Margun Music	UMIS (3); Trinity (atcl); UNTSS (7); Trinity (ATCL, '19); Bailey (G6); Whitener (III); Perantoni (FUS;3); NZSM (1-2); GTTB (5-6); RAM (2 nd year); RCDP (10 - B); RIAM (G7; List B; 1 st mvt.); UWL (ALCM); UWL (LLCM); UNCP.; VBODA (6: any two); UNISA (PA; B); UNISA 8 (B: any 3); FTS; CM; ZER (2); UCLA (Sen); UWLD (LLCM); UWLD (LLCM)	Tuba and piano	23
91)	Sonata No. 2	Bach/ Cooley	1994	Floyd Cooley	ZER (2); Trinity (atcl); Trinity (atcl, '19); Whitehead (III); UI, UNTSS, Trinity; Whitehead (III); UWL (ALCM); FTS; UMPAG (Masters); NYSSMA (6)	Tuba and Piano	12
92)	Sonata No. 2	Bach/ Jacobs	n/a	ENC	RCDP (10 - A); NYSSMA (6)	Tuba and piano	2
93)	Sonata No. 2	Bach	n/a	Editions BIM	UWLD (LLCM)	Tuba and piano	1
94)	Sonata No. 2	Galliard	n/a	n/a	UCT (b3,a2); UNCP	Tuba and keyboard	2
95)	Sonata No. 2	Hartley	1993	Masters	Trinity (atcl); UNTSS (3,4); Trinity (ATCL, '19); VBODA (6: any)	Tuba and piano	4
96)	Sonata No. 2	Marcello/Blostein	1998	Southern	Trinity (ATCL, '19); UNCP; CM; UKM (F&S); NYSSMA (4)	Tuba and piano	4
97)	Sonata No. 2	Vivaldi/Cooley	n/a	Tuba Classics	UI; RCDP (10 - A); UMPAG; NYSSMA (6)	Tuba and Piano	4
98)	Sonata No. 2	Wilder	1976	Margun Music	Whitehead (III)	Tuba and piano	1
99)	Sonata No. 3	Hartley	2004	Tenuto publications	NZSM (1-2)	Tuba and Piano	1
100)	Sonata No. 3	Marcello	n/a	n/a	Trinity (ATCL, '19); UNCP; CM; UKM (F&S);	n/a	3
101)	Sonata No. 3	Vivaldi/Morris	1982	Shawnee Press	UNTSS (3,4); Whitehead (II); NZSM (1-2); GTTB (3-4); ZER (1); NYSSMA (6)	Tuba and piano	6
102)	Sonata No. 4	Marcello	n/a	n/a	Trinity (ATCL, '19); UNCP; CM; UKM (F&S);	n/a	3
103)	Sonata No. 5	Galliard/Jacobs	1981	Encore Music Publications	Whitehead (II); Meyer (pre-college); RCDP (10 - A); UNCP; NYSSMA (6)	Tuba and piano	4
104)	Sonata No. 5	Marcello/Little	1983	Southern Music	UI; UNTSS (1,2); Whitehead (I); Perantoni (FUS;1); Perantoni (FUS;2); RCDP (ADTP – 9 – List A); UNCP; VBODA (6: omit Adagio or Largo); or No.1; FTS; CM; PI; TAMK; UMIS (1); ZC (4); UKM (F&S); UCLA (J); NYSSMA (5)	Tuba and Piano	18

105)	Sonata No. 6	Galliard/Jacobs	1989	Encore Music Publishers	Whitehead (II); Perantoni ; UNCP(FUS;2); RCDP (ADTP – 8 – A) ; NYSSMA (5)	Tuba and Piano	5
106)	Sonata No. 6	Handel/Morris	1982	Ludwig	UNTSS (3,4); Perantoni (FUS;1); ZER (2); NYSSMA (6)	Tuba and piano	4
107)	Sonata No. 6	Marcello	n/a	n/a	UKM (F&S);	Tuba and piano	1
108)	Sonata "Shamanic Journey"	York	2007	Cimmaron	NZSM (2+); UNCP; CM	Tuba and piano	3
109)	Sonatas (Flute)	Bon	n/a	n/a	UNCP	n/a	1
110)	Sonate	Deutschmann	n/a	Accolade	Trossingen (ED 11/12)	n/a	1
111)	Sonate	Eccles/Lelong	2011	Billaudot/Fischer	UMIS (3); RIAM (Sen Cert A); RIAM (G7; List B; 3 and 2); RIAM (G6; List B: Mvt. 1); VCE (any movts); UMPAG	Tuba and piano	6
112)	Sonatina	Boda	1968	Robert King; Kjos Music Co.	UNTSS (3,4); Whitehead (I); Perantoni (FUS;1); GTTB (3-4); TAMK; UMIS (1);	Tuba and piano	5
113)	Sonatina	Casterede	1963	Leduc	Trinity (ftcl); UNTSS (pg); Trinity (FTCL, '19); UWL (FLCM); UNISA (PA; D); FTS; CM; UMIS (5); UWLD (FLCM)	Tuba and piano	9
114)	Sonatina	Danburg	2007	Wingert Jones	VBODA (5: omit 2 nd movt.)	Tuba and piano	1
115)	Sonatina	East	1990	Ricordi/Hal Leonard	UCT (a4); trinity (ftcl); Trinity (ATCL, '19); RCDP (ADTP - B); UWL (DipLCM: 1,2); UWL (8 – C: 2 nd and 3 rd); UWL (7 – C: 1 st movt); ABRSM (DipABRSM) (1 st and 2 nd); LRSM; UNISA (PA; B); Guil (3); UWLD (DipLCM)	Tuba and piano	12
116)	Sonatina	Glass	1979	Emerson	Trinity (ftcl); Trinity (LTCL, '19); Whitehead (III); Perantoni (FUS;3); RCDP (ADTP - B); RIAM (Sen Cert A); RIAM (G8; List A; mvts. 1,2 and 3); RIAM (G7; List A; 3 and 4); UWL (DipLCM; 1,2); UWL (LLCM); ABRSM (DipABRSM) (1 st and 2 nd / 3 rd and 4 th); LRSM; UNCP; UNISA (PA; D); FTS ; UWLD (DipLCM); UWLD (LLCM)	Tuba and piano	17
117)	Sonatina	Hartley	1961	Fema Music	Bailey (G5); Whitehead (I); Perantoni (FUS;1); NZSM (1-2); RCDP (ADTP – 8 – List B); UNCP; VBODA (6); TAMK; UMPAG; NYSSMA (5)	Tuba and piano	9
118)	Sonatina	Hogg	1967	Lyceum Press	UNTSS (3,4); RIAM (G7; List A;); UWL (7 – C); UNISA (7; B); NYSSMA (5)	Tuba and piano	6
119)	Sonatina	Joseph	2016	Warwick	Trinity (LTCL, '19); T8 (1 st and 2 nd ; or 3 rd and 4 th mvts.)	Tuba and piano	2
120)	Sonatina	Koetsier	1990	Editions Bim	UI; UNTSS (7); Bailey (G6); Whitehead (III); Perantoni (FUS;3); T7 (Allegro); T8 (2 nd /3 rd mvts.); NZSM (2+); RCDP (10 - B); UWL (7 – C; Allegro); LRSM; UNCP; UNISA (7; B: 1 st movt); Guil (3); CM; SCMMDF (Initial 2; UG 1); TAMK; ZER (2);	Tuba and Piano	17

121)	Sonatina	Presser, W	1973	Presser	GTTB (3-4)	Tuba and piano	1
122)	Sonatina	Sear	1974	Cor Publishers	UCT (b3,a2); Bailey (G3); GTTB (3-4); Trossingen (ED 11/12); NYSSMA (4)	Tuba and piano	5
123)	Sonatina	Stevens, H	1968	Peer International; Southern	UKM (J&S); TAMK; UI; Bailey (G6); UNTSS (7); Whitehead (III); Perantoni (FUS;3); NZSM (2+); GTTB (5-6); RAM (UG 2); RAM (PG 1); RCDP (ADTP - B); UNCP; UNISA (PA; C); VCE (any movt); FTS; CM; ZER (2); ZER (3); UCLA (J);	Tuba and Piano	19
124)	Sonatina Classica	Troje	1941	CPP/Belwin	VBODA (4)	Tuba and piano	1
125)	Sonatina No. 2	Presser, W	1975	Tenuto	NYSSMA (5)	Tuba and piano	1
126)	Sonatine	Castérede	1963	Alphonse Leduc	UI	Tuba and Piano	1
127)	Sonatine	Hummel	1989	Hofmeister	Whitehead (IV); Perantoni (FUS;4); RCDP (ADTP - B); Trossingen (ED 11/12)		4
128)	Sonatine	Werner	1993	Hoffheim	Trossingen (ED 11/12)	Tuba and piano	1
129)	Song of the East	Korsakov/Agounoff	1950	Edition Musicus	VBODA (4)	Tuba and Piano	1
130)	Song of the Flea	Mussorgsky/Ostrander	1959	Editions Musicus	VBODA (5)	Tuba and Piano	1
131)	Song Without Words	Geib	1939	Editions Musicis	VBODA (4); Bailey (G5)	Tuba and Piano	2
132)	Soldier, Soldier (Music of Jim Parker for Tuba/Eb Bass)	Parker	n/a	Brass Wind	ABRSM (6; B)	Tuba and piano	1
133)	Song for Carol	Wilder	1981	Margun Music	Whitehead (II)	Tuba and piano	1
134)	Songs of ascent	Kellaway	1988/8 9	Editions BIM	Trossingen (ED 11/12)	Tuba and piano	1
135)	Sound an Alarm from Judas Maccabeus	Handel/Barnes	1965	Jack Spratt	Whitehead (I); VBODA (4)	Tuba and piano	2
136)	Statements	Plog	1992	Editions BIM	VCE; CM	Tuba and piano	2
137) S	Static Motion	Langenfeld	n/a	JPM	NYSSMA (5)	Tuba and piano	1
138)	Stixis III	Terzakis	1974	Breitkopf	Trossingen (ED 01/02); UMPAG	Unaccompanied	2
139)	Studies on Christmas Carols	Frackenpohl	1981	Kendor	Whitener (D)	Unaccompanied	1
140)	Stuff for Unaccompanied Tuba	Grant	2001	James Grant Music	NZSM (2+)	Unaccompanied	1
141)	Suite Concertante	Russel	1961	Accura Music	Bailey (G6); Whitehead (IV); Perantoni (FUS;4); GTTB (5-6); VBODA (6; any 2 movts); ZER (3);	Tuba and wind quintet	6
142)	Suite Concertante	Schoonenbeck	1990	Den Haske	RCDP (ADTP – 9 – List B); VCE (any movt)	Tuba and piano	2
143)	Suite for bass clef instruments	McKay	1958	University Music Press	GTTB (3-4)	Tuba and Piano	1
144)	Suite for Cello	Cassado	1926	n/a	UNCP	Unaccompanied	1
145)	Suite for Horn, Tuba and Piano	Wilder	1971	Margun Music	Bailey (G6); Whitehead (IV); ZER (2);	Tuba, horn, piano	3
146)	Suite for Louise	Masso	1966	Kendor	GTTB (1-2); VBODA (5)	Tuba and Piano	2
147)	Suite for Tuba	Haddad	1966	Shawnee Press	UKM (F&S); ZC (3); ZER (1); UI; Bailey (G5); Whitehead (I); Meyer (pre-college); Perantoni (FUS;1); NZSM (1-2); GTTB (3-4); RCDP (ADTP – 9 – List B); UNCP; VBODA (6 omit 2 nd movt); VCE (any ½	Tuba and Piano	22

					movts); FTS; CM; Trossingen (ED 11/12); TAMK; UMIS (1); UCLA (F); NYSSMA (5)		
148)	Suite for tuba	Jacob, G	1973	Boosey and Hawkes	UMIS (2); ZER (2); UCT (b4,a3; a4); UNTSS (3,4); Whitehead (II); Perantoni (FUS;2) T6 (Hompipe or Sarabande); T8 (Galop with Cadenza); NZSM (1-2); GTTB (5-6); RAM (1 st year, any 3 movements); RIAM (G6; List A; Hompipe); RIAM (G5; List B; Mazurka); UWL (LLCM); UWL (8 – C: Galop); UWL (6 – C: Hompipe or Bourree); ABRSM (6; A: Hompipe or Bourree); UNCP; UNISA (PA; B); UNISA (6; B: Hompipe or Bourree); VCE (any 2/3 except 5); Trossingen (ED 11/12); UWLD (LLCM)	Tuba and piano	23
149)	Suite for tuba	Presser, W	1967	Ensemble	NYSSMA (6)	Unaccompanied	1
150)	Suite for tuba	Rodger	1976	Joseph Boonin	Bailey (G5); RCDP (ADTP – 9 – List B)	Tuba and piano	2
151)	Suite for tuba and piano	Nelhybel	1966	General Music Publishing	UNTSS (1,2); UI; Bailey (G5); Whitehead (I); Perantoni (FUS;1); NZSM (1-2); VBODA (6: omit 2nd or 4th movt); VCE (any movt/s); NYSSMA (5)	Tuba and piano	9
152)	Suite for Tuba	Butts	1978	Kjos	VBODA (4: either movt); UNTSS (1,2); NYSSMA (5)	Tuba and piano	3
153)	Suite for Unaccompanied Tuba	Hartley	1964	Elkan -Vogel	ZC (4); UMIS (2); TAMK; UI, Meyer (pre-college); Perantoni (FUS;1); T6 (any 2 movements); GTTB (5-6); RCDP (ADTP – 9 – List B); RIAM (G7; List A; 1,2, and 4); RIAM (G6; List A; 3 and 4); UWL (DipLCM); ABRSM (DipABRSM); UNCP; VBODA (6); UNISA (PA; A); VCE (any two movts); FTS; CM; Trossingen (ED 01/02); Whitener, UCT (a4), UNTSS (1,2); Bailey (g6); Whitehead (I); Trossingen (ED 01/02); ZER (1); UWLD (DipLCM); NYSSMA (5); NYSSMA (5)	Unaccompanied	29
154)	Suite für tuba und orgel	Graap	1933	Spaneth and Schmidt	Trossingen (ED 11/12)	Tuba and organ	1
155)	Suite Konservant	Danielsson	1977	Gehmans Musikforlag	NZSM (2+); Whitehead (V); ZER (2);	Tuba and 4 horns/trumpets	3
156)	Suite Marine	Defaye	1989	Leduc	UNTSS (5,6); NZSM (1-2); VBODA (5: any 3); UNISA (7; B: 2/3); UNISA (6; B: 1/4); ZER (1);	Tuba and piano	6
157)	Suite No. 1	Haspiel	n/a	JPM	NYSSMA (4)	Tuba and piano	1
158)	Suite No. 1	Stevens	1997	Manduca	NZSM (1-2); UNCP; CM; Trossingen (ED 01/02)	Unaccompanied	4

159)	Suite No.1 "Effie"	Wilder	1968	Margun Music	UCLA (S); UMIS (3); ZER (2);TAMK; PI; UI, trinity (atcl – 3 movts.); UNTSS (7); Trinity (ATCL any 4 mvts); Bailey (G6); Whitehead (III); Perantoni (FUS;3); T6 (No. 5); T7 (Effie Joins the Carnival No. 4); NZSM (1-2); GTTB (5-6); RCDP (ADTP - C); RIAM (Sen Cert A: any four movements); RIAM (G8; List A; 1,2 and 4); RIAM (G6; List B: Folk Dancing); UWL (ALCM: any 4 movements); UWL (7 – C: Effie Joins the Carnival); UWL (6 – C: Folk dancing); ABRSM (7: B: Monkey and Love); UNCP; VBODA (6: any 3 movts); UNISA (PA; B); UNISA (7; C: Carnival); UNISA (6; C: Folk Dancing); VCE (no more than four movts); FTS; CM; UNCW (4/4); UWLD (LLCM); UMPAG; NYSSMA (6)	Tuba and Piano	35
160)	Suite No. 2 "Magic Flute"	Mozart/Frackenpohl	1989	Schirmer	RCDP (ADTP – 8 – List A); VCE (any one movement)	Tuba and piano	2
161)	Suite No. 2 "Jesse"	Wilder	1964	Margun Music	Whitehead (III)	Tuba and Piano	1
162)	Suite No.2 for Horn, tuba and piano	Wilder	1971	Margun Music	Whitehead (IV)	Tuba, horn, piano	1
163)	Suite No. 3 "Little Harvey"	Wilder	1980	Margun Music	Whitehead (III); VBODA (6: any movt.)	Tuba and piano	2
164)	Suite No. 4 "Thomas"	Wilder	1982	Margun Music	Whitehead (III); GTTB (5-6)	Tuba and piano	1
165)	Suite No. 5"Ethan Ayer"	Wilder	1976	Margun Music	Whitehead (III)	Tuba and piano	1
166)	Suite of Old Nautical Airs	Adams	2004	Editions BIM	ABRSM (7: A: Hompipe)	Tuba and piano	1
167)	Suite Syncopation	Cliff	1994	Winwood Music	ABRSM (6; B: Low-Down Blues or Demented Waltz)	Tuba and piano	1
168)	Summer Nocturne	Uber	1983	Southern Music	VBODA (5); GTTB (3-4); VCE; NYSSMA (5)	Tuba and piano	4
169)	Superman	Delguidice	1991	Robert Martin	Trossingen (ED 11/12)	Tuba and piano	1
170)	Sweet Dances	Raum	2002	Tuba Euph Press	UNCP	Unaccompanied	1
171)	Swiss Air	Newsome	1986	Studio Music company	UNISA (PA; D); VCE	Tuba and piano	2
172)	"Swing that Yam" from Tuber Music	Proctor	n/a	Brass Wind	T6; UWL (6 – C); UNISA (6; C)	Tuba and piano	2
173)	Swan Song	Schubert/Ostrander	1959	Editions Musicus	GTTB (1-2)	Tuba and piano	1
174)	Symphonic Variants	Cumow	1984	Tuba Press	ZER (3);	Tuba and band	1
175)	Syrinx	Debussy/Sauer	n/a	Cherry Music Classics	FTS	Unaccompanied	1

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	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	T for Tuba	Raum	1991	Virgo Music	RCDP (ADTP – 8 – List B); NYSSMA (5)	Tuba and piano	2
2)	Tabu for Tuba	Downey	1970	Mentor Music	Bailey (G6); Whitehead (III); Perantoni (FUS;3); VBODA (6)	Tuba and piano	4

3)	Tangos	Piazzolla/Baadsvik	2000	Ovation	UNCP; NZSM (2+); VCE (any movt)	Tuba and piano	3
4)	Tapestries	Forbes	2015	Carl Fischer	NYSSMA (6)	Tuba and piano	1
5)	Tarantelle (from Dordogne Dances)	Kelly	1995	Emerson	UWL (6 – C)	Tuba and piano	1
6)	Tarantelle	Walters	1955	Ludwig	VBODA (4)	Tuba and piano	1
7)	Tempesta Polka	Harris	1896	Fischer	Trossingen (ED 11/12)	Tuba and piano	1
8)	Temporal Landscape No. 4	Vogel	1980	Presser	VBODA (6)	Tuba and piano	1
9)	Thème Varié	Bozza	1957	Leduc	RIAM (G7; List A); UWL (ALCM); UWL (7 – C); Trossingen (ED 11/12); UWLD (LLCM)	Tuba and piano	5
10)	The Fallen Woman	Augustus	n/a	n/a	UNCP	n/a	1
11)	The Grumpy Troll	Forbes	2013	Vuumamens	FTS	Unaccompanied	1
12)	The Harvest of Sorrow op. 4 no. 5	Rachmaninov/Russel	n/a	Available from transcriber	Whitehead (II)	n/a	1
13)	The Kraken's One Days is as Another	Denham	2009	Cimarron	FTS	Tuba and piano	1
14)	The Legend of Heimdall	Raum	1998	CMC	RCDP (ADTP - A)	Tuba and orchestra/piano	1
15)	The Message	Brooks	1952	Kjos	Bailey (G3)	Tuba and piano	1
16)	The Monarch	Augustus	n/a	n/a	UNCP	n/a	1
17)	The Morning Song	Kellaway	1980	Editions BIM	UNTSS (pg); Whitehead (IV); Perantoni (FUS;4); NZSM (2+); GTTB (5-6); FTS; CM	Tuba and piano	7
18)	The Octopus and the Mermaid	King	1923	Barnhouse	Bailey (G3)	Tuba and piano	1
19)	The Pied Piper op. 4 no. 6	Rachmaninov/Russel	n.d.	Available from transcriber	Whitehead (II)	Tuba and piano	1
20)	The Smuggler	Beresford	1989	JTL	VBODA (5)	Tuba and piano	1
21)	The Swan from Savoie Faire	Saint – Saens/Mowat	n/a	Brass Wind	T6	Tuba and piano	1
22)	The Tubaman	Bell/Weber	1962	Belwin	Bailey (G1)	Tuba and piano	1
23)	The Westwood Song	Kellaway	1982/1989	Editions BIM	Whitehead (IV)	Tuba and piano	1
24)	Thoughts of Suraysia (Tubaphonics)	Gross	1990	Currency	VCE	Tuba and piano	1
25)	Three Essays	Penn	1975	Seesaw	Whitener; GTTB (5-6)	Unaccompanied	2
26)	Three for Barton	Three for Barton	1974	Associated Music Publishers	Trossingen (ED 01/02)	Unaccompanied	
27)	Three for One	Wyatt	1998	Tuba-Euphonium Press/Cimmaron	Perantoni (FUS;5)	Tuba and tape	1
28)	Three Furies	Grant	1993	Grantwood Music Press	UNTSS (pg); Whitehead (V); NZSM (2+); FTS; CM; ZER (3); UCLA (J);	Unaccompanied	7
29)	Three Miniatures	Plog	1991	Editions BIM	UI; UNTSS (pg); Whitener (V); Perantoni (FUS;5); NZSM (2+); GTTB (5-6); RCDP (ADTP - C); UWL (LLCM); UNCP; Guil (3); CM; SCMMDF (UG 1, 2); Trinity (LTCL, '19); UNCP; UNISA (PA; C); FTS;	Tuba and Piano	23

					CM; Trossingen (ED 11/12); UMIS (4); UKM (J&S); UCLA (J); UWLD (LLCM); UMPAG (Masters); NYSSMA (6)		
30)	Three Miniatures	Presser	n/a	n/a	UNTSS (5,6)	n/a	1
31)	Three Moods	Cummings	1975	Philhamusica	VCE (complete, or Little Suite No. 5)	Unaccompanied	1
32)	Three More Furies	Grant	2014	Potenza	FTS	Unaccompanied	1
33)	Three Easy Pieces (cello and piano)	Boulanger/Hersey	n/a	n/a	UNCP; ZER (2);	n/a	2
34)	Three Renaissance Duets	Singleton	1976	Peer International	UNCP	Two tubas	1
35)	Three Rituals	Adkins	2016	Warwick	Trinity (LTCL, '19); T8 (1. Moderato or 3. Allegro Scherzando)	Tuba and piano	2
36)	Three Tuba Rags	Jackman	1989	Novello	VCE	Tuba and piano	1
37)	Three Tuba Solos	Howe	1965	Wallen	Bailey (G4)	Tuba and Piano	1
38)	Thrice Happy the Monarch	Handel/Morris	1970	Ludwig	GTTB (3-4); VBODA (5); TAMK; ZC (3);	Tuba and piano	4
39)	Toreador's Song	Bizet/Holmes	1966	Rubank	Trossingen (ED 11/12)	Tuba and piano	1
40)	Tramp! Tramp! Tramp!: Air and Variations	De Lamater	1948	Rubank	Trossingen (ED 11/12)	Tuba and band/piano	1
41)	Triangles	John Stevens	2006	Editions BIM	ZER (3);	Horn, trombone, tuba	1
42)	Trigon	Earl Zindars	1975	Alpheus	UI; UNTSS (pg)	Unaccompanied	2
43)	Trilogy	Kistler	2000	Alliance	NYSSMA (5)	Tuba and piano	1
44)	Trio 48	Haydn	1987	PP Music	VBODA (4: any movt.)	Tuba and piano	1
45)	Trio for horn, trombone and tuba	Reynolds	1978	Margun Music	ZER (3);	Tuba, horn and trombone	1
46)	Triptych	Weeks	1964	Robert King/UMP	UWL (ALCM); VBODA (5); UWLD (LLCM)	Tuba and strings	3
47)	Triumph of the Demon Gods	John Stevens	1981	Queen City Brass Publications	UI; UNTSS (pg); Whitehead (III); Perantoni (FUS;3); NZSM (2+); UNCP; VBODA (6); VCE (or Salve Vener, Salve Marte); FTS; CM; ZER (2); UKM (J&S); UCLA (Sen)	Unaccompanied	13
48)	Trois Caricatures	Toulon	1989	Robert Martin	VBODA (4: any two)	Unaccompanied	1
49)	Tuba	Stewart	1977	Kendor	VBODA (5)	Tuba and piano	1
50)	Tuba Buffo	Jacobsen	2002	Ed. Suecia	UMPAG (Masters)	Tuba and wind band/piano	1
51)	Tuba Concerto	Bach, J	2003	Tuba-Euphonium Press	FTS	Tuba and orchestra/piano	1
52)	Tuba Concerto	Golland	2016	Mostyn Music	RIAM (Sen Cert B; 1st mvt.); RIAM (G8; List B); UWL (LLCM); UWL (FLCM); LRSM (1 st and 2 nd); FRSM; UNISA (PA; B); FTS; UWLD (LLCM); UWLD (FLCM)	Tuba and orchestra/piano	10
53)	Tuba Concerto	Grantham	2015	Longhorn Music	FTS	Tuba and band/piano	1
54)	Tuba Concerto	Mortimer	1983	EMR	UMPAG (Masters)	Tuba and piano	1
55)	Tuba Concerto	Ross	1975	Boosey and Hawkes	UI; UNTSS (7); Whitehead (III); Perantoni (FUS;3); Perantoni (FUS;4); UNCP	Tuba and band/piano	6

56)	Tuba Concerto	Williams, J	1988	Hal Leonard	UI; Trinity (FTCL); UNTSS (pg); Trinity (FTCL, '19); Whitehead (V); Perantoni (FUS;5); NZSM (2+); RAM (UG 3); RCDP (ADTP - A); UNCP; MOZ 5/M; FTS; CM; UKM (J&S); UCLA (Sen); UMPAG (Masters)	Tuba and Orchestra/Piano	16
57)	Tuba Concerto	Woodward	2000	Tuba-Euphonium Press	NZSM (2+)	Tuba and orchestra/piano	1
58)	Tuba Concerto No. 2	Schuller	2014	Potenza	FTS	Tuba and orchestra/piano	1
59)	Tuba Prima	Schilling	1981	Moseler	Trossingen (ED 01/02)	Unaccompanied	1
60)	Tuba Rhapsody	Grundman	1976	Boosey and Hawkes	UNTSS (1,2); Whitehead (II); Perantoni (FUS;2); UWL (LLCM); VBODA (5: to or from bar 247); UNISA (PA; C); Trossingen (ED 11/12); UWLD (LLCM); NYSSMA (5)	Tuba and band; Tuba and piano	9
61)	Tuba-Tabu	Köper	1968	Köper	Trossingen (ED 11/12)	Tuba and orchestra/piano	1
62)	Tuba Tango	Edelson	1966	Pro Art	Bailey (G2)	Tuba and piano	1
63)	Tuba Tantrum	Miller	1962	Pro Art	Bailey (G2)	Tuba and piano	1
64)	Tuba Treat	Frith	1993	Camden Music	ABRSM (7: B)	Tuba and piano	1
65)	Tubabillage	Gabaye	1959	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
66)	Tubachanale	Boutry	1956	Leduc	UCT (b3,a2); Trossingen (ED 11/12)	Tuba and piano	2
67)	Tubadour	Fote	1971	Kendor	Bailey (G1)	Tuba and piano	1
68)	Tubania	von Koch	1983	AB Carl Gehmans Musikforlag	Whitehead (V); Perantoni (FUS;5)	Tuba and piano	2
69)	Tubatests	Pichaureau	2001	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
70)	Tubatunes	Frackenpohl	1981	Almitra	VBODA (6); VBODA (5)	Unaccompanied	2
71)	Tubby the Tuba	Kleinsinger	1945	Caedmon	UNCP	Tuba and orchestra	1
72)	Tubilustrum: eine Übung im Blasen	Angerer	1985	Doblinger	Trossingen (ED 11/12)	Tuba and piano	1
73)	Tubissimo	Leitemeyer	1990	Doblinger	Trossingen (ED 01/02)	Unaccompanied	1
74)	Tubonetta	Pauer	1991	Editions BIM	Whitehead (V); Perantoni (FUS;5)	Tuba and piano	2
75)	Tune for Tuba	Goode	1969	Pro Art	Bailey (g4)	Tuba and piano	1
76)	Twelve Fantasies	Teleman/Whitehead	2002	Arranger	Whitehead (V)	unaccompanied	1
77)	Twilight Dreams	Clarke, H/Jacobs	1991	Tuba Euphonium Press	NYSSMA (5)	Tuba and piano	1
78)	Two Bourrees (from Suite No. 3)	Bach/King	n/a	n/a	VBODA (6); SCMMDF (Initial 1)	Unaccompanied	2
79)	Two Character Pieces	Davis	2009	Warwick	T7 (complete); ABRSM (6; B: 2)	Tuba and piano	2
80)	Two Classical Themes	Haydn/Perantoni	1976	Hal Leonard	VBODA (4)	Tuba and piano	1
81)	Two Little Leprechauns	Kulesha	1993	Sonante	RCDP (ADTP – 9 – List B)	Tuba and piano	1
82)	Two moods	Gower	1995	Theodore Presser	VBODA (6)	Tuba and piano	1
83)	Two moods	Swann	1961	Chamber Music Library	Whitehead (III); Perantoni (FUS;3); NZSM (1-2); GTTB (5-6); RCDP (10 - B); UWL (DipLCM); ABRSM (DipABRSM) (Elegy and Scherzo); UNISA (PA; C);	Tuba and piano	12

					UNISA 8 (C); ZER (2); UWLD (DipLCM); NYSSMA (6)		
84)	Two pieces	Haddad	1990	Southern	VBODA (4: either one)	Tuba and piano	1
85)	Two Pieces from "Children's Corner"	Debussy/Frackenpohl	1938	TUBA Press	UNTSS (5,6)	Tuba and piano	1
86)	Two songs	Spillman	1963	Editions musicus	UNTSS (7); Bailey (G6); Whitehead (II); GTTB (5-6); CM; TAMK; UMIS (4);	Tuba and piano	7

U (2)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Ulloco (or OCA from Tuber Music)	Proctor	n/a	Brass Wind	UWL (7 – C); ABRSM (7: B); UNISA (7; C)	Tuba and piano	3
2)	Urlicht	Mahler	n/a	n/a	FTS	n/a	1

V (26)

	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Variations for Ophicleide	Kummer/Mead	1995	Studio Music	VCE	n/a	1
2)	Variations in olden style	Stevens	1990	BIM	Trinity (atcl); UNTSS (5,6); Trinity (ATCL, '19); Whitehead (IV); NZSM (1-2); NZSM (2+); UWL (ALCM); UNISA (PA; D); VCE; FTS; CM; Trossingen (ED 11/12); UWLD (LLCM)	Tuba and piano	13
3)	Variations on a Temperance Theme (Tuba Solo's Vol. 1)	Parkhurst/Fletcher	1982	Chester	UWL (6 – C: No.3); UNISA (6; C)	Tuba and piano	2
4)	Variations on a Theme	Hanson	1980	Editions Musicus	VBODA (6)	Tuba and piano	1
5)	Variations on a theme by Rossini from Thomas Wyss Tuba Collection	Paganini/Wyss	1992	Kirklees	ABRSM (8:A)	Tuba and piano	1
6)	Variations on a theme by villa lobos	Bates	1977	The Musical Evergreen	Trossingen (ED 01/02)	Unaccompanied	1
7)	Variations on a theme from Judas Maccabeus	Beethoven/Bell	1937	Carl Fischer	NZSM (1-2); GTTB (5-6); GTTB (3-4); GTTB (3-4); VBODA (6); UNISA 8 (B); VCE; ZER (1); NYSSMA (5)	Tuba and piano	9
8)	Variations on a theme of Gottshlalk	Diercks	n/a	Tritone	NYSSMA (5)	Tuba and piano	1
9)	Variations on a theme of Robert Schumann	Davis	1983	Southern	VBODA (5)	Tuba and piano	1
10)	Variations on an aboriginal melody	Cumow	1992	TUBA Press	UKM (J&S);	Tuba and woodwind quintet	1
11)	Variations on Brahms	Szentpali	2006	Editions BIM	NZSM	Unaccompanied	1
12)	Variations on Carnival of Venice	Levy/Thurstone	1991	Southern Music	UNCW (3/4);	Tuba and piano	1
13)	Variations on Cobbler's Bench	Frackenpohl	1973	Shawnee Press	UNTSS (5,6); Whitehead (I); NZSM (1-2); GTTB (3-4); RCDP (ADTP – 8 – List B); ABRSM (7: B); ZC (3-4);	Tuba and Piano	7

14)	Variazioni piccolo	Croley	1965	Philharmonica	Whitener (D);Trossingen (ED 01/02)	Unaccompanied	2
15)	Venetian Carnival	Bowles	1973	Belwin	VBODA (4)	Tuba and Piano	1
16)	Venezia: 6 Sketches	Usher	1982	Primavera/Tutti	UWL (ALCM : any 4 movements); ABRSM (DipABRSM) (any four movts); UNISA (PA; B); UWLD (LLCM)	Tuba and piano	4
17)	Vier ernste gesange	Brahms/Little	2005	Southern	UNTSS (5,6); NZSM (1-2); UNCP; FTS; UCLA (Sen)	Tuba and piano	5
18)	Vier Haltungen zu einem alten Thema	Hilprecht	1981	Neue Musik Berlin	NZSM (2+); VCE (any 1,2, or 3 movts)	Unaccompanied	2
19)	Villanella	Ross	1992	TUBA Press	CM	Tuba and piano	1
20)	Visare	Dumitru	1995	Editions BIM	NZSM (1-2)	Tuba and piano	1
21)	Vivace from a Cello Suite (The Thomas Wyss Tuba Collection)	Bach/Wyss	1992	Kirklees	T8; ABRSM (8:A)		
22)	Vocalise	Rachmanioff/Allen	1992	Ludwig	VBODA (5) UCT (b3,a2); UNTSS (2,3); GTTB (5-6); ZER (1); UMIS (1);	Tuba and Piano	6
23)	Vocalise	Rachmaninov/Brown	1978	International Music Company	Whitehead (III)	Tuba and piano	1
24)	Voce nobile	Clérisse	1953	Leduc	Trossingen (ED 11/12)	Tuba and piano	1
25)	Voice of the Viking	Bennett	1938	Carl Fischer	VBODA (5)	Tuba and piano	1
26)	Vox Superius	Poore	1977	Arts Lab	Whitener	Unaccompanied	1

W (10)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Walkabout	Matchett	1990	RBC	VBODA (4)	Tuba and piano	1
2)	Walking	Plog	2014	Editions BIM	NYSSMA (6)	Tuba and piano	1
3)	Walther's Prize Song	Wagner	n/a	Rubank	GTTB (1-2)	Tuba and piano	1
4)	Waltz for Mippy	Leonard Bernstein	1950	G.Shirmer Inc.	UI; Bailey (g5); Whitehead (III); Meyer (pre-college); Perantoni (FUS;3); NZSM (1-2); GTTB (5-6); GTTB (3-4); RCDP (ADTP – 8 – List B); UWL (7 – C); UNCP; VBODA (5); UNISA (7; C); CM; Trossingen (ED 11/12); UMIS (2);	Tuba and Piano	16
5)	Waltz La Souterraine	Sweden	2007	Warwick	ABRSM (6; B)	Tuba and piano	1
6)	Wax Eloquent	Mishell	1991	n/a	UNCP	Unaccompanied	1
7)	When Love is Kind	Round	1968	Molenaar	VCE	Tuba and piano	1
8)	When the Saints go Marching In	Buchtel	1968	Kjos	Bailey (G1)	Tuba and piano	1
9)	Why do the nations so furiously rage together?	Handel	n/a	Frant	VBODA (5)	Tuba and piano	1
10)	Won't he get lonely?	Stratton	1986	PPM	VBODA (6)	Unaccompanied	1

Y (2)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Yorkshire Ballad	Barnes	2000	Southern	UNTSS (7)	Tuba and piano	1
2)	Ysano (Tuber Music)	Proctor	2003	Brass Wind	UWL (8 – C); ABRSM (8:B)	Tuba and piano	2

Z (3)							
	Work title	Composer	Year	Publisher	Institution and indicated level	Medium	Hits
1)	Zenobie La Perdrix	Joubert	1997	Robert Martin	VBODA (4)	Tuba and piano	1
2)	Zig Zags	Faye-Ellen Silverman	1988	Seesaw	UNCP	Unaccompanied	1
3)	Zum Üben und Voorspielen B-tuba	Meschke	1993	Hofmeister	Trossingen (ED 11/12)	Tuba and piano	1

Addendum 36: Analysis of repertoire lists - Sources

Sources alphabetical by author surname (115)						
A (8)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Agrell	Improvisation Games for Classical Musicians	2008 (IM)	GIA	CM	1
2)	Amis	Brass Player's Cookbook	2008 (BB)	Meredith	CM; NAU	2
3)	Anderson	Brass Solo and Study Material Music Guide	1976 (BB)	Instrumentlist Co.	NZSM	1
4)	Arban/Bell	Method for Tuba	1968 (TM)	Charles Collin Corp	Whitener, art (dif); GTTB (3); GTTB (4)	4
5)	Arban Famous Method	Arban	Various (BM)	Various	Bailey (Advanced); NWU; ISU	3
6)	Arban/Prescott	First and Second Year, Excerpts from ..	1937 (TM)	C. Fischer	Whitener; Bailey (Intermediate); Art (beg); GTBB (3)	4
7)	Arban/Randall and Mantia	Famous Method for Slide and Valve Trombone and Baritone	2013 (BM)	C Fisher	Whitener; Perantoni (FUS; 1-5); GTBB (3); GTBB (4); GTBB (5); NWU; WWICS (Diff), Pi; SFAU	9
8)	Arban/Young	Arban complete method for tuba	2007 (TM)	Encore Music	UCLA (F); ZC (1-5); IVCC; JSU; USA; UMIS (1); UM; Whitener, UCT (b1, c/d2-c/d3; b2,a1,c/d3-4, b3,a2, b4,a3); Meyer (pre-college); NZSM (A); UGA; NAU; NZSM (A); UNI; TAMUC; USC; CM; UNCW (1/4); UNCW (2/4); UNTCS (2); UNTCS (3); Trossingen (ED 00); TAMK; TPL; IUP	26
B (20)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Baines	History of Brass Instruments	2012 (BB)	Dover	NAU; NZSM	2
2)	Baker, David	Bebop Jazz Solo's	1981 (IM)	New Albany	Perantoni (FUS; no level)	1
3)	Baker, David	How to play Bebop Vol. 1-3	1985 (IM)	Alfred Publishing	Perantoni (FUS; 1-5)	1
4)	Baker, David	Improvisational Patterns	1980 (IM)	New York: Charles Colin	Perantoni (FUS; 1-5)	1

5)	Baker, David	Jazz Improvisation: A Comprehensive Method of Study for All Players	1983 (IM)	Alfred Publishing Co.	Perantoni (FUS; 1-5)	1
6)	Baker, David	Jazz Solos	1979 (IM)	Aebersold	Perantoni (FUS; no level)	1
7)	Baker, David	A New Approach to Ear Training for the Jazz Musician	1976 (IM)	Columbia Pictures Publications/Belwin Mills	Perantoni (FUS; no level)	1
8)	Barbour	Trumpets, Horns and Music	1964 (BB)	Michigan State University Press	NZSM	1
9)	Beeler	Method Vol. 1 and 2	1946 (TM)	Warner Brothers/Remlock	Whitener, UCT; Bailey (Beginner); ART (beg); GTBB (1); Trossingen (ED 00)	6
10)	Beeler	Vol 2	1962 (TM)	Remlock	ART (Int); GTBB (2); GTBB (3)	3
11)	Beeler	Play away for tuba or sousaphone	1960 (TM)	Schirmer	ART (beg); GTBB (1)	2
12)	Bell	Complete Method	1975 (TM)	Colin	GTBB (1)	1
13)	Bell	Encyclopaedia of Literature for Tuba	1967 (TB)	Colin	Whitener	1
14)	Bell	Foundation to Tuba Playing	1931 (TM)	C. Fischer	Whitener; ART (int); Perantoni (FUS; serious high school tuba student); GTBB (3); USA;	5
15)	Bellamah	Brass Facts	1960 (BB)	Southern Music	NZSM	1
16)	Bevan	The Tuba Family	1978 (TB)	Scribner	TAMUC;	1
17)	Blum	Casals and the Art of Intepretation	1977 (MB)	University of California Press	TAMUC	1
18)	Bobo	Mastering the Tuba	2003 (TM)	Editions Bim	Whitener; Meyer (pre-college); NZSM (A); NAU	4
19)	Brown	Teaching the Successful High School Brass Section	1981 (BB)	Parker	NZSM	1
20)	Byrd	Programme notes	1994 (TB)	Indiana University Press	UNTCS (3)	1

C (4)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Carse	Musical Wind Instruments	1940 (MB)	Da Capo Press	NZSM	1
2)	Colley	Tuneup: Basic Training	1993 (MB)	Tuneup Inc.	NAU; CM	2
3)	Coyle	The Talent Code	2010 (MB)	Bath	TAMUC	1
4)	Cummings	The contemporary tuba	1984 (TB)	Whaling Music	Whitener	1

D (1)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Devol	Brass Music for Church	1974 (BB)	Harold Branch	NZSM	1

E (4)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Eby	Scientific methods 1	1933 (TM)	Jacobs	ART (int)	1
2)	Eby	Scientific methods 2	1958 (TM)	Jacobs	ART (int)	1
3)	Eliason	Early American Brass Makers	1981 (BB)	Brass Press	NZSM	1
4)	Endreson	Method for Eb tuba	1937 (TM)	M.M. Cole	Whitener	1

F (4)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Farkas	Art of Brass Playing	1989 (BB)	Wind Music Inc.	NAU; NZSM; TAMUC	3
2)	Farkas	Art of Musicianship	1976 (MB)	Musical	NAU; NZSM, TAMUC	3
3)	Flemming	The Inner Voice	2004 (MB)	Penguin	NAU	1
4)	Fredericksen	Arnold Jacobs: Song and Wind	1996 (BB)	Windsong Press ltd	Whitener; NZSM (A); NAU; TAMUC; UNTCS (2); ZC	6

G (11)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Gallwey	Inner Game of Tennis	1974 (NM)	Random House	NAU; CM	2
2)	Geib	Method	1941 (TM)	Fischer	Whitener; Bailey (Beginner); ART (int)	3
3)	Gower and Voxman	Rubank Advanced method vol. 1	1957 (TM)	Rubank	Whitener; Bailey (Intermediate); ART (int); Trossingen (ED 00); GTBB (1)	5
4)	Gower and Voxman	Rubank Advanced method vol. 2	1989 (TM)	Rubank	Whitener; Bailey (Intermediate); ART (int); Trossingen (ED 00); GTBB (1)	5
5)	Green, B	The Inner Game of Music	1988 (MB)	GIA	TAMUC; IVCC	2
6)	Greene, D	Fight Your Fear and Win	2002 (MB)	Broadway	CM	1
7)	Greene, D	Performance Success	2002 (MB)	Routledge	NZSM; CM	2
8)	Greene, D	Audition Success	2001 (MB)	Theatre Arts Books	NZSM; CM	2
9)	Griffiths	The low brass guide	1980 (BB)	Jerona Music	Whitener	1
10)	Gladwell	Blink	2007 (NM)	Back Bay Books	NZSM	1
11)	Gladwell	The Tipping Point	2002 (NM)	Back Bay Books	NZSM	1

H (3)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Herfurth	A tune a day	1982 (TM)	Boston	ART (beg); GTBB (1)	2

2)	Heyde	Trompeten, posauern, tuben	1980 (BB)	VEG Deutsche Verlag für Musik	Whitener	1
3)	Hovey	Rubank elementary method	1989 (TM)	Rubank	Whitener; ART (84); GTBB (1); Bailey (Beginner); GTBB (1); GTBB (2); Trossingen (ED 00); UMIS (0)	8

J (1)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Jones	John Fletcher: Tuba Extraordinary: A Celebration	1997 (TB)	John Fletcher Trust	Whitener	1

K (2)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Kent	Within The Sphere Of The Master	2006 (NM)	Silver Fox Enterprises	NZSM	1
2)	Kuhn-Cimera	Method	1985 (TM)	Alfred/Belwin	Whitener	1

L (6)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Lawrence	Brass in your school	1975 (BB)	Oxford University Press	NZSM	1
2)	Lelong	Méthode (1-3)	1998 (TM)	Billaudot	Whitener; Trossingen (ED 00)	2
3)	Leonard	Advanced Band Method	1963 (TM)	Hal Leonard	USA	1
4)	Leonard, G	Mastery	1992 (NM)	Plume	NZSM	1
5)	Little	Practical Hints on Playing the Tuba	1984 (TB)	Belwin Mills	Whitener; GTBB (1); GTBB (2); GTBB (3); GTBB (4); USC (A); UNTCS (1)	7
6)	Learn to Play the Tuba!	Gouse	1970 (TM)	Alfred	Bailey (Beginner)	1

M (8)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Macdonald	The Odyssey of the Philip Jones Brass Ensemble	1986 (BB)	Editions BIM	NZSM	1
2)	Mason	The Tuba handbook	1977 (TB)	Sonante	Whitener	1
3)	McGill	Sound in Motion	2007 (MB)	Indiana University Press	NAU	1
4)	Mende	Pictorial Family Tree of Brass Instruments in Europe	1978 (BB)	Editions Bim	NZSM	1
5)	Miller	The Zen Of Muhammed Ali	2002 (NM)	Vintage	NZSM	1
6)	Morris	The tuba music guide	1973 (TB)	The instrumentalist	Whitener	1
7)	Morris and Goldstein	The tuba source book	1996 (TB)	Indiana University Press	Whitener; NZSM (A); USC (Bmus); ZC	4

8)	Morris and Perantoni	The Guide to Tuba Repertoire	2006 (TB)	Indiana University Press	NZSM (A); USC (Bmus); UNTCS (1); UNTCS (2); UNTCS (3); ZC;	6
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N (2)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Nelson, Ron	The tuba as a solo instrument: composer biographies	1995 (TB)	Tuba euphonium press	Whitener	1
2)	Nelson, Bruce	Also Sprach Arnold Jacobs	2006 (BB)	Polymnia Press	NZSM (A); NAU, TAMUC	3

P (5)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Pares	Scales for BBb bass	1946 (TM)	Rubank	NWU	1
2)	Pease	Bass Method, book 1	1964 (TM)	Pro arte	ART (beg); GTBB (1)	2
3)	Phillips and Winkle	The art of tuba and euphonium playing	1992 (TB)	Summy-Birchard	NZSM (A); ZC	2
4)	Preinsperger	Solo tuba und blsorchester ...	1993 (TB)	Musik verlag J Kliment	Whitener	1
5)	Prescott	Prep band method	n/a (TM)	Schmitt, Hall and McCreary	ART (beg); GTBB (1)	2

R (6)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Rama, Swami	"Science of Breath"	1999 (NM)	Himalayan Institute Press	NZSM	1
2)	Randolph	New Techniques in the Avant Garde Repertoire for Solo Tuba	1978 (TB)	Um 78-11, 493	Whitener	1
3)	Rasmussen, Mary	A Teacher's Guide to Literature for Brass Instruments	1968 (BB)	Brass Quartely	NZSM	1
4)	Rose	Studio Class manual for tuba and euphonium	1980 (TB)	Lola	Whitener	1
5)	Ristad	A soprano on her head	2002 (MB)	Real People Press	NAU	1
6)	Rusch/Jacobs	Hal Leonard Advanced Band Method for Basses	1963 (TM)	Hal Leonard	Perantoni (FUS;1-3); NWU	2

S (12)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Severson, Paul, and McDunn, Mark.	Brass Wind Artistry	1983 (BB)	Accura Music	NZSM	1
2)	Skomika and Boltz	Rubank Intermediate Method	1939 (TM)	Rubank	Whitener; Bailey (Intermediate); Trossingen (ED 00)	3

3)	Sorenson	Tuba pedagogy: A study of selected method books 1840-1911	1972 (TB)	University of Colorado	Whitener	1
4)	Stauffer	A treatise on the tuba	1989 (TB)	Stauffer press	Whitener	1
5)	Steckeler	Tuba: Schule für Anfänger	1990 (TM)	Oberneukirchen : Reischl	Trossingen (ED 00)	1
6)	Steenstrup	Teaching Brass	2007 (BB)	Aarhus	NZSM (A)	1
7)	Stegman	Elementary method for tuba	1992 (TM)	Stegman	Trossingen (ED 00)	
8)	Stewart	Arnold Jacobs: the legacy of a master	1987 (BB)	Instrumentalist Publishing Co.	Whitener; NZSM (A); NAU; UNTCS (1)	4
9)	Stewart	Philip Farkas: Legacy of a Master	1990 (BB)	Instrumentalist Publishing Co.	NAU	1
10)	Sueta	Band Method Book 1 (tuba)	1977 (TM)	Macie	ART (beg)	1
11)	"	Band Method Book 2 (tuba)	1977 (TM)	Macie	ART (int)	1
12)	"	Band Method Book 3 (tuba)	1977 (TM)	Macie	ART (int)	1

T (2)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Taylor	Brass Bands	1979 (BB)	Hart-Davis MacGibbon	NZSM	1
2)	Trusheim	"Mental Imagery and Musical Performance: An Inquiry into Imagery Use by Eminent Orchestral Brass Players."	1987 (BB)	Ed.D. dissertation, Rutgers University, 1987.	NZSM	1

U (1)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Uetz	Elementary method for Bb Tuba	1992 (TM)	Würzburg Stegmann	SCMMDF (Initial 1);	1

V (7)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Vandercook	Expression in Music	1989 (MB)	Rubank	TAMUC	1
2)	Various	Brass Anthology	1984 (BB)	Southern Music	NZSM	1
3)	Vernon	A Singing Approach to the Trombone	1983 (BM)	Atlanta Brass Society Press	TAMUC; Perantoni (FUS;3-4)	2
4)	Vinning	Breathing Book	2009 (TM)	Mountain Peak	NAU	1
5)	Vinning	Flow Studies	2016 (TM)	Mountain Peak	NAU	1
6)	Vinning	Daily Routines	2016 (TM)	Mountain Peak	NAU	1
7)	Vinning	Rangesongs	2011 (TM)	Mountain Peak	IUP	1

W (7)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Wastall	Learn as you play tuba	1985 (TM)	Boosey and Hawkes	Trossingen (ED 00)	1

2)	Watson, J. Perry.	The Care and Feeding of a Community British Brass Band. Farmingdale	1986 (BB)	Boosey & Hawkes	NZSM	1
3)	Watson, J. Perry	Starting a British Brass Band	1984 (BB)	Yamaha	NZSM	1
4)	Weber	Tuba Student	1970 (TB)	Belwin	Bailey (beginner)	1
5)	Weast, Robert	Keys to Natural Performance for Brass Players	2001 (BB)	Brass World	NZSM	1
6)	Whitehead	A college level tuba curriculum	2003 (TB)	Mellen	NZSM	1
7)	n/a	Usher your way in music	n/a (MB)	n/a	NAU	1

Z (1)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Zechmeister	Concerttuba: systematisches Ansatzafbau	1998 (TM)	Doblinger	Trossingen (ED 00)	1

Addendum 37: Analysis of Repertoire Lists – Solo Collections

Solo collections alphabetical by title (24)						
	Collection title	Author	Year	Publisher	Source	Hits
1)	Classic Festival Solos, Vol. 1	Lamb	1992	Alfred	ZC (1-3); NYSSMA (4); GTTB (3-4)	3
2)	Classic Festival Solos, Vol. 2	Lamb	1994	Alfred	ZC (1-3)	1
3)	Classics for Tuba	Woods/Death	1999	Studio	ABRSM (8:A); UNISA (PA; A); T8 ; UWL (8 – C); UNISA (PA; C); T6 (Rondo or Romanza); UWL (6–A: Romanza or Rondo); ABRSM (6; A Romanza); ABRSM (7: A: Rondo); T6 (Rondo or Romanza); UWL (8– C); UNISA 8 C;	12
4)	Concerto Grosso	Nelybel	2006	Cimarron	NYSSMA (4)	1
5)	Concert and Contest Collection	Voxman	1972	Rubank	ABRSM (6; A); VBODA (5); VBODA (4); (ADTP – 8 – A); ABRSM (7: B); NYSSMA (4)	6
6)	Concert Music for Tuba	Graham	1967	TUBA Press	RCDP (10 - A)	1
7)	First Solos for the Tuba Player	Wekselblatt	1972	Schirmer	ZC (2-4); RIAM (G6; List A); ABRSM (6; A); UWL (7 – A); UNISA (7; A); ZC (2-4); RIAM (G6; List A); ABRSM (6; A); UWL (7 – A); UNISA (7; A);	10
8)	Kendor Master Repertoire	Saltzman/Strommen	2013	Kendor	NYSSMA (5)	1
9)	Let's Face the Music for Tuba	Iveson	n/a	Brass Wind	T6	1
10)	Master Solos, Intermediate Level	Perantoni	1999	Hal Leonard	VBODA (5); VCE	2
11)	Medici Masterworks	Gershenfeld	1985	Medici Music Press	ZC (2-3);	1
12)	NYSSMA Folio for tuba	Various	n/a	Spratt	NYSSMA (5); NYSSMA (4)	2
13)	Nine Miniatures for Eb Tuba	Gregson/Ridgeon	1980	Belwin Mills	RIAM (G5; List B; Habanera and Ragtime)	1
14)	Savoire Faire for tuba	Mowat	n/a	Brass Wind	T6	1
15)	Soloist Folio	Various	1939	Rubank	NYSSMA (4)	1
16)	Solos for the Tuba Player	Wekselblatt	1964	Schirmer	ZC (2-5); NYSSMA (6); NYSSMA (4)	3
17)	Solo Sounds for Tuba Volume 1 Level 3-5	Hankinson/Lamb	1987	Belwin Mills	RCDP (ADTP – 8 – List B); VBODA (4); Trossingen (ED 11/12); NYSSMA (5); NYSSMA (4)	5
18)	Take the Tube	Proctor	n/a	Brass Wind	T6; ABRSM (6; B); T7; UWL (7 – C)	4
19)	The Music of Jim Parker	Parker	1998	Brass Wind	ABRSM (6; B)	1
20)	Thomas Wyss Tuba Collection	Wyss	1992	Kirklees	ABRSM (7: A); ABRSM (8:A); T8;	3
21)	Tubaphonics	Marcelino	1994	Currency	VCE;	1

22)	Tuba Solos Level 1	n/a	1984	Belwin Mills	ZC (1-2)	1
23)	Tuba Solos Vol. 1	Fletcher	1992	Just Brass	UWL (6 – C: No.3); UNISA (6; C); Whitener; UWL (6 – B);	4
24)	Tuber Music	Proctor	1990	Brass Wind	UWL (7 – C: Oca or Ulloco); ABRSM (7: B Ulloco or Oca); UNISA (7; C); T6; UWL (6 – C); UNISA (6; C); UWL (7 – C); ABRSM (7: B); UWL (8 – C); ABRSM (8:B)	9

Addendum 38: Analysis of Repertoire Lists – Study Collections

Study/etude collections alphabetical by author (154)						
A (3)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Adler	Tubetudes	1978	Southern Music Co.	Perantoni (FUS; 1-2); GTBB (2); GTBB (3); GTBB (4)	4
2)	Arban/Bell	Intepretations of the Arban Method	1975	Colin	ART (Int)	1
3)	Arban/Hooten and Marotta	14 Characteristic Studies	2013	Carl Fischer	VCE any (1); UNCW (3/4); SFAU	3
B (24)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Bach/Bixby and Bobo	Bach for tuba Vol. 1 and 2	1971	Western International	Whitener; Perantoni (FUS; 3-4); T7 No. 12, or Prelude WTC book 1 no. 9, No. 14); VBODA (6: any threepages); VCE any (any 2); NWU; CM; Trossingen (ED 01/02); UM	9
2)	Baer	Tonic/Dominant Scales for Tuba	2005	Baer Tracks Music	CM	1
3)	Baer	Cross-Training Scales for Tuba	2006	Baer Tracks Music	CM	1
4)	Bell	Blazevich Intepretaiions	1975	Colin	Whitener	
5)	Bell	William Bell Daily Routines for Tuba	1975	Colin	Whitener; TAMUC (scales); UNCW (1/4); ART (dif); GTBB (3); GTBB (4); TPL; UCLA (F);	8
6)	Bai Lin	Lip Flexibilities	1996	Balquidder Music	IVCC; TAMUC; ISU; UNTCS (1); UNTCS (2); TAMK	6
7)	Bernard	Quarante Etudes d'Apres J. Forestier	1948	Alphonse Leduc	Perantoni (FUS; 1-3)	1
8)	Bernard	Quarante Etudes d'Apres J. Forestier	1940	Alphonse Leduc	Perantoni (FUS; 1-2)	1
9)	Bernard	40 etudes pour tuba	2005	Leduc	Art (adv)	1
10)	Blazevich	70 Studies Vol. 1	1942	Robert King	TPL; ZC (3-4); IVCC; JSU; USA; UMIS (1); UM; TAMK; SFAU; Whitener, UCT (b2,a1,c/d3-4; b3,a2); Bailey (Advanced); ART (int); art (adv); NZSM (A); Gray (arrival at college); Meyer (pre-	51

					college); Perantoni (FUS; 1-5); NZSM (A); GTBB (1); RAM (UG 1); RCDP (10 – C – G3: 37,38,40-42); (ADTP – 9 – C – G3: 17, 21, 22, 27, 32); RCDP (ADTP – 8 – C – G1: 9-11,14,19,20); RIAM (G8; List C; 25 or 27 or 56); RIAM (G7; List C; 19 or 20); RIAM (G6; List C: 8); RIAM (G5; List B; 9); UWL (8; A - 24. Or , 26, or 27); UWL (7 – A: 15/22); UWL(6 – A: 11/14); UGA; ABRSM (6; C: 11/14); ABRSM (7: C: 15/20); ABRSM (8:C: 27/32); NAU; NZSM (A); UNI; TAMUC; USC (A); VCE (1,6,17,21 or 22); nwu; CM; ISU; UNCW (2/4); UNTCS (1); UNTCS (2); WWICS (Med-Diff); Trossingen (ED 00); PI; UCLA (F);	
11)	Blazevich Book 2	70 Studies	1985	R King	ZC (3-4); USA; TAMK; SFAU; Bailey (Advanced); ART (adv); Gray (arrival at college); Meyer (pre-college); Perantoni (FUS; 1-5); NZSM (A); GTBB (1); RIAM (Sen Cert C; #56); NZSM (A); NWU; UNTCS (2); WWICS (Med-Diff); Trossingen (ED 00); PI	18
12)	Blazevich	Clef Studies	1957	Southern Music	NWU; SFAU	2
13)	Bleger	Thirty-one Brilliant Studies for the Trombone	1962	Cundy-Bettoney Inc	NWU	1
14)	Blume/Fink	Thirty Six Studies for Trombone with F attachment	1962	Carl Fischer	Perantoni (FUS; 3-4); NZSM (all); CM	3
15)	Boosey and Hawkes	Complete scales and arpeggios	2013	Boosey and Hawkes	NZSM (all)	1
16)	Bordogni/Roberts	43 Bel Canto Studies	1972	R. King	ZC (3-4); SFAU; Whitener, art (adv); Perantoni (FUS;1-3); NZSM (A); USC (A); Gray (arrival at college); T6 (No.12); GTBB (1); GTBB (4); RCDP (10 – C – G1 29 - 33); RCDP (ADTP – 9 – C – G1: 12,14,15,17,19); RCDP (ADTP – 8 – C – G1: 5-8; 10-11); RIAM (G6; List C: 6); RIAM (G5; List C; 4); NZSM (A); UNISA (PA; A: 32/37);	23

					VCE any (any 1); ISU; TAMK; USA; IUP	
17)	Bordogni/Jacobs	Legato etudes for tuba	2006	Encore	Meyer (pre-college); TAMUC; UCT (b1,c/d2-c/d3; b2,a1,c/d3-4); RAM (1 st year); UNI; UNTCS (2); UNTCS (3); WWICS (Med-Diff); Whitener; NZSM (A); UGA; CM; UM; UMIS (1); JSU; MOZ	16
18)	Bordogni/Rochut	Melodious Etudes vol. 1, 2 (trombone)	2013	C. Fischer	IVCC; Whitener; Meyer (pre-college); Perantoni (FUS;1-5); NZSM (A); NAU (1); NAU (2,3); TAMUC (vol. 1), nwu; UNCW (1/4); UNCW (2/4); UNCW (3/4); UNCW (4/4; 2 nd book); UNTCS (2: vol. 1); UNTCS (3: 2); WWICS (Diff; 1 only); NWU; PI' SFAU; TAMK; USA; TPL; UCLA (F); UCLA (J);	24
19)	Bourgeois	Per tuba ad astra	1995	Brass Wind	Whitener, UCT (a4); T6 (Carefree or Convivial); T7 (Complex); RIAM (G6; List C: Happy or Downcast); RIAM (G5; List C; Pompous or Joyful); UWL (7 – A: Complex); UWL (6 – A: Happy/Convivial); ABRSM (6; C: Happy); ABRSM (7: C: Convivial); ABRSM (8:C: Complex); UNISA (6; C: Carefree/Convivial/Happy); UCT (b4,a3)	14
20)	Bourgeois	Fantasy Pieces for Tuba	1996	Brass Wind	T7 (Allegro Moderato no. 1 or Commodo No. 4); RIAM (Sen Cert C; No. 5 or 6); RIAM (G8; List C; 5 or 6); RIAM (G7; List C; 1 or 4); UWL (DipLCM; 2,5,6,7); UWL (8; A - 5/6/8); UWL (7 – A: 1/4); ABRSM (DipABRSM) (8/9), LRSM (9/9); ABRSM (7: C: 1/4); ABRSM (8:C: 5/6); UNISA (PA; A: 9); UNISA 8 (A: 6/8); UNISA (7; C: 1/4); UWLD (DipLCM 2, 5, 6, 7);	15
21)	Bousquet/Popiel	26 Celebrated studies	2016	Fischer	UCT (b3,a2); TPL; UCLA (Sen)	3
22)	Bowman/Stevens	Scale and Arpeggio Routines	2014	Stevens Desk Top Publishing	ISU	1
23)	Brandt	Etudes for Trumpet	1945	MCA Music Publishing	NWU	1
24)	Brightmore	43 Melodic Studies	1964	Chapell	Bailey (Intermediate); Art (int)	2

C (9)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Carnaud	25 Etudes for tuba	n/a	Salabert	Whitener	1
2)	Carnaud	25 exercices sur la gamme	n/a	Salabert	Whitener	1
3)	Charlier	Trente-deux études de perfectionnement pour trombone in si bémol à 4 pistons ou tub	1946	Henri Lemoine and Cie	Perantoni (FUS;3-4); NAU; NWU; CM; PI; SFAU; UM; UMIS (4);	8
4)	Cimera	73 Advanced Studies	1955	Belwin-Mills	Whitener, UCT (a4); art (int); ART (adv); Perantoni (FUS;1-2); NZSM (A); GTBB (1); GTBB (3); GTBB (4)	9
5)	Clarke/Gordon/Hickman	Technical Studies for Bass Clef Instruments	1976	Fischer	Perantoni (FUS;3-4); NZSM (A); GTBB (4); GTBB (5); Meyer (pre-college); NWU; UNTCS (1); TAMK	8
6)	Concone/Shoemaker	Vocalises (Legato Etudes for Trombone)	1970	Carl Fischer	Perantoni (FUS; 2-4); Trossingen (ED 00)	2
7)	Concone/Shoemaker	Legato Etudes	1969	C Fischer	Whitener; NZSM (A); VCE (any one); NWU; WWICS (Med-Diff); TAMK	6
8)	Concone/Jacobs	Legato Etudes for Tuba	2006	Encore	USA;	1
9)	Coucounaras	Musiq für den Einzelgänger	1994	Spaeth and Schmidt	Trossingen (ED 11/12)	1

D (5)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Davis	20 Minute Warmup	2006	Hip Bone Music	TAMK	1
2)	Del Giudice	Dix Petite Textes	1954	Eschig	Perantoni (FUS;4-5); Art (adv); Trossingen (ED 11/12)	3
3)	Dubois	Douze Soli en form d' Etudes	1964	Alphonse Leduc	Perantoni (FUS;3-4); UWL (DiplCM)	2
4)	Dufresne	Develop Sight Reading	1972	Charles Colin	NWU	1
5)	Duncan	15 Advanced Studies for Tuba	2018	Music Company	T6 (Napoleon, Blown Apart; T7 (Being Franck); T8 (Brahms Too...)	3

E (5)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Edwards	Lip Slurs	2006	Brad Edwards	UGA	1
2)	Edwards	Lip Slur Melodies	2013	Brad Edwards	UGA	1
3)	Edwards	Simply Singing for Winds	2009	Brad Edwards	UGA; CM	2
4)	Edwards	Tuning Drone Melodies	2014	Brad Edwards	UGA	1
5)	Endreson	Supplementary Studies	1936	Rubank	Whitener; Bailey (Intermediate); art (int); Trossingen (ED 00)	4

F (5)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Fink	Studies in Legato for Bass Trombone and Tuba	1969	C Fischer	Whitener; art (int); ART (adv); Perantoni (FUS; 1-3) ; GTBB (3); GTBB (4); NWU; TAMK; ZC (3)	9
2)	Fink	Introducing the tenor clef	1969	Accura	TAMUC	1
3)	Fink	Introducing the alto clef	1969	Accura	TAMUC	1
4)	Fitch	Rhythmical articulation Parts 2 and 3 from Complete Method by Pasquale Bona	1969	Carl fischer	ART (adv); NWU	2
5)	Fritze	Twenty-five Characteristic Etudes for Tuba	1991	Tuba Euphonium Press	Perantoni (FUS;3-4); NZSM (A); NWU; UM	4

G (13)						
	Author surname	Book title	Year	Publisher	Source	Hits
1)	Galay	30 studies	1978	R. King	Whitener; art (adv); Perantoni (FUS; 1-3)	3
2)	Galay	40 preludes	1974	R. King	Whitener	1
3)	Getchell	Practical studies Vol. 1 and 2	1955	Belwin-Mills	Whitener; ART (beg); Perantoni (FUS;1); GTBB (2); GTBB (3); CM; Trossingen (ED 00); UCT; UMIS (0); ZC (2-3)	9
4)	Getchell	Practical studies Vol. 2	1955	Belwin-Mills	ART (int); Perantoni (FUS;1); GTBB (3); UMIS;	8
5)	Girard	15 Etudes de concours	2000	Billaudot	Whitener	1
6)	Girard	15 Etudes de phrase et de vélocité	2000	Billaudot	Whitener	1
7)	Girard	50 Etudes Faciles et Progressives Volume 2: 25 études	2000	Billaudot	Whitener	1
8)	Green	Tuba Eurhythmics	2003	Warwick	Whitener; trinity (ltd); RIAM (G7; List C; #11) ; RIAM (G6; List C: 5); UWL (8; A - 12); UWL (7 – A: 11); UWL (6 – A: 5)	7
9)	Gregson	20 Supplementary tunes for tuba	2003	Brass wind	Whitener	1
10)	Grigoriev	78 Etudes	1983	Robert King	Meyer (pre-college); Perantoni (FUS;2-4); NAU, NZSM (A); NAU; TAMUC; NWU; UNTCS (1); TPL; UCLA (F);	10
11)	Grigoriev	50 Etudes		Encore	TAMK	1
12)	Grigoriev	Twenty - four etudes for Bass Trombone	1960	International	Perantoni (FUS;2-3)	1

13)	Guggenberger	Basics Plus	2007	Rundel	NAU; ISU	2
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H (6)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Hedja	Etudes	1958	Boosey and Hawkes	ART (int)	1
2)	Hickman, David	Music Speed Reading	1979	Wimbledon	Perantoni (FUS; 1-3)	1
3)	Hilgers	Daily Exercises	1993	Reift	Whitener; SCMMDF (Initial I, II; UG 1, 2, 3, 4); Trossingen (ED 00)	3
4)	Hoppert	Orchesterstudien: Berlioz	1995	Zimmerman	Trossingen (ED 00)	1
5)	Hoppert	Orchesterstudien: Wagner	1986	Zimmerman	Trossingen (ED 00)	1
6)	Hudadoff	A Rhythm a Day	1985	Alfred	Bailey (Intermediate)	1

J (9)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Jackson	Adverbial Etudes	2012	Onyx	T6 (Skittishly no. 19 or Daringly no. 20)	1
2)	Jacobs, A/Rusch	Special Studies for tuba from Hal Leonard Advanced Band Method	1963	Hal Leonard	ART (int); USC (A), NWU, PI	4
3)	Jacob, W	Developing High Register (3 volumes)	2016	Encore	CM	1
4)	Jacobs, W	Loud Playing	2020	Encore	CM	1
5)	Jacobs, W	Low Register Studies	1999	Encore	Bailey (Advanced); Perantoni (FUS; 2-4); Meyer (pre-college) ; TAMK; UM; UMIS (1);	6
6)	Jacobs, W	Low register development for tuba	1987	Encore	Whitener; CM	1
7)	Jacobs, W	Restructured Etudes Vol. 1-5	2015	Encore	Bailey (Advanced)	1
8)	Jacobs, W	Warm-up studies	1990	Encore	Whitener	1
9)	Johnson	The tuneful tuba	n/a	Brass wind	Whitener	1

K (10)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Kinyon	Basic Training Course for Tuba	2005	Alfred	Bailey (Beginner)	1
2)	Kinyon	Breeze Easy Method for tuba (1&2)	1979/1983	Alfred	GTBB (1); GTBB (2)	2
3)	Kleefoot	Basically Fit	2008	Hofmeister	SCMMDF (Initial 2; UG 1, 2, 3, 4); Trossingen (ED 00)	2
4)	Kleefoot	Estudios del método	n/a	Hofmeister	SCMMDF (UG 2, 3, 4)	1
5)	Kliment	Anfänger Schule für Bb Bass (all)	n/a	Musikverlag Johan Kliment	Trossingen (ED 00)	1

6)	Knaub	Progressive Techniques for Tuba	1970	Belwin; M.C.A.	Whitener; ART (adv); Perantoni (FUS; 1-4); GTBB (3); GTBB (4); GTBB (5);	6
7)	Kopprasch	60 Selected Studies		various	IVCC; PI; TAMK; UM; USA; JSU; ZC (3-4); TPL; UCLA (F); IUP; MOZ	11
8)	Kreutzer	10 Famous Etudes for Trombone or Baritone	1935	Fillmore Music House, Carl Fischer	NWU	1
9)	Kuehn	28 Advanced studies	1972	Southern	Whitener; ART (adv); Perantoni (FUS; 1-4); GTBB (1); NWU; UNTCS (2); Bailey (Advanced)	7
10)	Kuehn	60 Musical Studies vol 1 and 2	1969	Southern	Whitener; art (int); Perantoni (FUS; 1-3); GTBB (1); GTBB (2); GTBB (3); GTBB (4); UNTCS (1); Trossingen (ED 00)	9

L (7)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Lachman	25 etudes	1956	Hoffmeister	ART (adv); Perantoni (FUS;4-5); Trossingen (ED 00); GTBB (5)	4
2)	Lachman	26 etudes	1956	Hoffmeister	ART (adv); Perantoni (FUS;4-5); Trossingen (ED 00)	4
3)	Lake	12 Studies for Bass Trombone	1994	Neuschel	UCT (b4,a3)	1
4)	Lange	Etudes and test pieces (Etüden und Vortragstücke)	1980	Bohne & Schulz	Trossingen (ED 00)	1
5)	Lass	Studies and Melodious Etudes (3 books)	1969	Belwin	GTBB (1); GTBB (2); GTBB (3)	3
6)	Lawrence	Featuring Melody for tuba	1996	Brass Wind	Whitener	1
7)	Little, L	Embouchure builder	1985	Pro Art	Whitener; Bailey (Intermediate); GTBB (1); GTBB (2); GTBB (3); Trossingen (ED 00)	6

M (10)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Maenz	Zwölf specialstudien for tuba	1966	Hoffmeister	ART (adv); Perantoni (FUS;4-5); NZSM (A); Trossingen (ED 00); UNCW (3/4); UNCW (4/4); SFAU	6
2)	McKenzie	Rhythms of Life	2000	Con Moto	T6 (Czardas or Jota); T7 (Klezmer or Malaguena); ABRSM (6; C: Hornpipe or Mazurka); ABRSM (7: C: Dixieland or Sambe); ABRSM (8:C: Krivo Horo or Rock)	5
3)	Meschke	60 Studies for Contrabass Tuba	1980	Hofmeister editions	SCMMDF (UG 2, 3, 4); Trossingen (ED 00)	2

4)	Meschke	Tubafibel	2013	Hoffmeister	Trossingen (ED 00)	1
5)	Meschke	Orchestral studies for tuba	1989	Deutsche Verlag	Trossingen (ED 00)	1
6)	Moyse	Tone Development Through Interpretation for the Flute	1982	McGinnis and Marx Music Publishers	NWU	1
7)	Muczynski	Impromptus for Solo Tuba	1973	Schirmer	T6 (Allegro Moderato No. 3); RCDP (10 - B); UNTSS (5,6); T6; T7 (Andante No.2 and Allegro Giocoso No.5); RCDP (10 - B); RIAM (Sen Cert C; mvt. 1 or 5); RIAM (G8; List Amvt. 1,2 and 5); UWL (ALCM); UWLD (LLCM)	10
8)	Muller	Technical Etudes for trombone	1944	Carl Fischer	Perantoni (FUS;3-4)	1
9)	Müller	Technical Studies for Bass trombone and tuba	1972	Musikverlag Zimmerman	SCMMDF (Initial 2; UG 1, 2, 3, 4)	1
10)	Müller	Vier kleine spielstücke für anfänger	n/a	Pro Musica Verlag	SCMMDF (Initial 2)	1

N (1)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Nightingale	Easy Jazzy Tudes	2012	Warwick	ABRSM (6; C: on the off-beat; Transposition blues)	1

O (2)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Ostling	Tunes for Tuba Technic	2003	Warner Brothers	Bailey (Beginner)	1
2)	Ostrander	Shifting Meter Studies	1965	Robert King	UCT (b3,a2); Bailey (Advanced); Perantoni (FUS;1-3); GTBB (3); GTBB (4); NWU; CM; UNTCS (3)	8

P (9)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Pares	Scales	1956	Rubank	Whitener; Perantoni (FUS;1); GTBB (2); GTBB (3); PI	5
2)	Paudert	18 Etudes	1986	Encore	Whitener; Perantoni (FUS;3-4)	2
3)	Paudert	Virtuoso Studies	1917	Fischer	Perantoni (FUS; 4-5)	1
4)	Pietzsch/Mager	Twenty-two Virtuosity Studies	1969	Alphonse Leduc	Perantoni (FUS; 4-5); NWU	2
5)	Pilafian and Sheridan	Breathing Gym	2009	Focus on Music	NZSM (A); NAU; ISU; TAMK; UM; USA; IVCC; ZC	8
6)	Pilafian and Sheridan	Brass Gym	2008	Focus on Music	NAU; TAMUC; ISU; UNCW (1/4); UNCW (2/4); UNCW (3/4); UNCW (4/4); TAMK; UM; USA; JSU; IUP	12

7)	Pottag	335 Selected Melodious, Progressive and Technical Studies, Vol. 1 and 2	1958	Southern Music Co.	Perantoni (FUS;1-5); NWU; PI; UM	4
8)	Propper	Progressive technique and method for low brass	1995	Zimmerman	Trossingen (ED 00)	1
9)	Propper/Evans	Orchester Probespiel	1993	Peters Edition	SCMMDF (UG 2, 3, 4); Trossingen (ED 00)	2

R (7)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Ranieri	30 etudes	1994	Hoffmeister	Trossingen (ED 00)	1
2)	Remington	Warm-up Studies for Trombone	2000	Accura Music	NWU	1
3)	Reynolds	Forty-eight Etudes for French Horn	1961	G. Schirmer Inc.	Perantoni (FUS;4-5); UM; TPL; UCLA (MM)	4
4)	Reynolds	Intonation exercises for two horns	1980	Wimbledon	NWU; ISU	2
5)	Ridgeon	Eight graded lip flexibilities fir tuba	1981	Brass wind	Whitener	1
6)	Rinderspacher	New method for tuba in Bb and C	2009	Halter	Trossingen (ED 00)	1
7)	Ronka	Modern Daily Warmups and drills	1976	C Fischer	Whitener	1

S (13)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Schlossberg	Daily Drills and Technical studies (trombone)	1941	M. Baron Inc.	Whitener; Perantoni (FUS;3-4); NWU; CM; PI	5
2)	Sear	Etudes for tuba	1969	Wiltshire	Whitener; ART (adv); NZSM (A); GTBB (4); GTBB (5); Trossingen (ED 00)	6
3)	Sheridan	Performance Studies	2004	De Haske	T8 (El Patricio Latino); T7 (Bagtelle or Divertimento); ABRSM (7: C: Bagatella or Allegria); ABRSM (8:C: El Patricio Latino or You Can Count on it); T6 (Tuba Rag); UWL (6 – A; Tuba Rag); ABRSM (6; C: Tuba Rag or Saudade); UMIS (4);	5
4)	Sheridan	Style Studies			UMIS (3);	1
5)	Shoemaker	Legato Studies for Tuba	1973	Carl Fischer	Perantoni (FUS;1-2)	1
6)	Sieber	Vocalises	n/a	n/a	Trossingen (ED 00)	1

7)	Slama	66 Basic Studies for Trombone	1922	International Music Company	NWU, ART (int); ART (adv); SFAU	4
8)	Smith	Top Tones for the Trumpeter: 30 Modern Etudes	1936	Charles Colin	Perantoni (FUS;5); NWU; PI	3
9)	Snedecor	Low etudes	1996	Robert King/Pas music	UCLA (S); Whitener; Perantoni (FUS;2-5); T7 XVII The Firebird; T8 (XVIII Prokofiev); NZSM (2+); UGA; NAU; UNI; USC (A); nwu; CM; ISU; UNTCS (2); UNTCS (3); SFAU; TAMK; UM; USA; TPL; IUP	21
10)	Snedecor	Lower Etudes for Tuba	2018	PAS Music	USC (A)	1
11)	Sparke	Skilful Studies	2004	Wembley Anglo Music	T6 (Anglo)	1
12)	Street	Scales and Arpeggios	1977	Boosey and Hawkes	Whitener; Trossingen (ED 00)	2
13)	Swoboda	Lip Slurs for Tuba	2015	Meredith/Hal Leonard	USC (A)	1

T (4)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Teuchert	Method for bass tuba	1960	Hoffmeister	Trossingen (ED 00)	1
2)	Teuchert	26 Studies	1989	Hoffmeister	Trossingen (ED 00)	1
3)	Torchinsky, Abe	The Tuba Player's Orchestral Repertoire	Various	European American Music	Perantoni (FUS;1-5); Trossingen (ED00)	2
4)	Tyrell	40 advanced studies	1948	Bosey and Hawkes	UCLA (J); TPL; ZC (3-4); USA; TAMK; SFAU; Whitener; ART (int); Perantoni (FUS;1-3); NZSM (A); GTBB (1); GTBB (3); GTBB (4); RCDP (ADTP – 8 – C – G1: 6-8, 14, 17); NAU; TAMUC; UNISA (PA; A: 29/32); NWU; CM; UNCW (2/4); WWICS (Med-Diff); ISU, PI	23

U (4)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Uber	Concert Etudes	2005	Leduc	Whitener; ART (adv)	2
2)	Uber	25 Early Studies	1980	Southern	Whitener	1
3)	Uber	15 Progressive Studies	1987	Touch of Brass	VCE (any one)	1
4)	Uetz	Technical studies	1989	Hoffmeister	Trossingen (ED 00)	1

V (4)

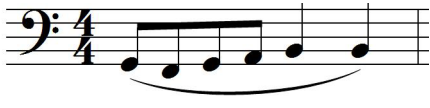

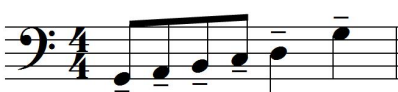

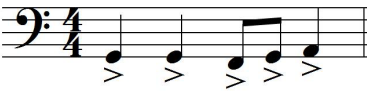

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Van der cook	Etudes	1989	Rubank	Trossingen (ED 00); ART (int); GTBB (2); GTBB (3); Trossingen (ED 00)	5

2)	Vasiliev	24 melodious studies	1967	R King	USA; Whitener; UCT (b2.a1,c/d3-4); Perantoni (FUS; 1-2); Bailey (Intermediate); ART (adv); NZSM (2+); GTBB (1); GTBB (3); GTBB (4); RCDP (10-C-G3: 16, 17, 21, 22, 23); (ADTP - 9 - C - G3: 3,4,6,9,10); NAU; NZSM (2+); USC (A); NWU; CM; WWICS (Diff); Trossingen; PI	20
3)	Verzari	Exercises on the Fundamental and Harmonic Tones	1997	Ricordi	UNI; TAMUC	2
4)	Verzari	Daily Exercises for Trumpet	1989	Ricordi	TAMUC	1

W (4)

	Author surname	Book title	Year	Publisher	Source	Hits
1)	Weissenborn/Lake	12 Studies for Bassoon	1994	Neuschel	Trinity (Itcl); UWL (8: A - 12);	3
2)	Weigand	Eine praktische Anleitung für den Jazzneuling	2019	Dux	Trossingen (ED 00)	1
3)	Whistler	Modern pares	1989	Rubank	ART (int)	1
4)	Williams	Little Classics	1946	Colin	Whitener	1

Addendum 39: Basic articulations

Articulation	Appearance	Definition	Brass performance
Legato	Written out legato or indicated with slur over a series of notes. 	Smooth, with no break between the notes (Taylor, 2012: xviii).	Air flow and sound should be constant. No sharpness to attack. Patterns of notes should be uninterrupted. (Bevan, 2010: 100)
Staccato	Written out staccato or indicated with dot above or below the notehead, depending on direction of the stem. 	Detached, short. (Taylor, 2012: xxi)	Played half the value of the note. Use short, common attack 'n', 'd', or short, brilliant 't'. release is open ended (Bachelder and Hunt, 2002: 38)
Tenuto	Written tenuto or indicated with lines above/below notehead. 	Held (Taylor, 2012: xxii).	Notes should be held to its entire value. (Jacobs and Young, 2000: 11).
Legato tongue, or portato		Slight separation of notes (Jacobs and Young, 2000: 11)	Syllables 'du' or 'da' used to articulate each note, but airstream and buzz remains constant as with slurring. (Bevan, 2010: 10);
Sforzando, or sforzato	As abbreviations sf , or sfz	'Forced' or 'forcing', a sudden accent applied to a note or chord (Taylor, 2012: 79).	Crisper or explosive than <i>piccato</i> . Build air pressure behind tongue to achieve (Bachelder and Hunt, 2002: 28).
Rinforzando or rinforzato	As abbreviations rf , rfz or rinf.	'reinforced', same as sforzando	Play with a sudden increase in volume, or make note stand out prominently (Taylor, 2012: 79).
Accent	Refers to <i>marcato</i> , or few different types of accents		
Marcato	As abbreviation Marc. or horizontal wedge placed above or below a note depending on direction of the stem. 	Accented or emphatic. Regular accent. Also 'stress', placing emphasis on a certain note of rhythm (Encyclopaedia Britannica, 2020)	Play the note louder and more forcefully; beginning of the note forcefully, then back off slightly (Melodyful and Buzzle.com, 2014)
Martellato	Either written as <i>martellato</i> , or open wedge above or below a note. 	Strongly accented 'hammered' (Taylor, 2012: xviii)	As loud as <i>Marcato</i> , but as short as <i>staccato</i> (Esther Zimmer Lederberg Trust, 2018)
Leggiero	Either in full, or the abbreviation leg.	Light, nimble (Taylor, 2012: xviii)	-

Addendum 40: Administrative components of syllabi

	Component	Respondents	Literature
1.	Basic Course Information	✓ (1, 2, 5, 6, 7, 8, 10, 11, 12, 13)	✓ (University of South Florida, 2021)
	Course name	✗	✓ (Coble, Picard and Riviere, 2014; Johnson, 2006)
	Venues	✗	✓ (Johnson, 2006; Coble, Picard and Riviere, 2014)
	Description or overview	✓ (5, 6, 7)	✓ (Johnson, 2006; Coble, Picard and Riviere, 2014; Woolcock, 2006; Gillis, 2003)
	Purpose and value	✗	✓ (University of South Florida, 2021; Cohen, Millis and O' Brien, 2008)
	Outcomes	✓ (1, 2, 4, 12)	✗
	Goals and objectives	✓ (2, 6)	✓ (Johnson, 2006; Cohen, Millis and O' Brien, 2008; Woolcock, 2006; Gillis, 2003; Gannon, 2018)
	Course structure	✓ (2, 3, 4, 8)	✗
	Directions for each level/semester	✓ (2, 5, 6, 7, 8, 10)	✗
	Outline the amount of work/plan per semester	✓ (2, 6, 8)	✗
	Clarifies content presentation	✓ (12)	✗
	Presenter information	✓ (1, 2, 5, 6, 8, 11, 12, 13)	✓ (University of South Florida, 2021; Cohen, Millis and O' Brien, 2008; Coble, Picard and Riviere, 2014)
	Pre/corequisites	✓ (1, 6, 13)	✗
	Clarifies expectations	✓ (2, 4, 6, 7, 10, 11, 12)	✓ (Cohen, Millis and O' Brien, 2008)
	Lists assignments	✓ (2)	✗
	Activities	✗	✓ (Gillis, 2003)
	Table of contents	✗	✓ (Cohen, Millis and O' Brien, 2008)
	Letters to students	✗	✓ (Cohen, Millis and O' Brien, 2008)
	Teaching philosophy statement	✗	✓ (Cohen, Millis and O' Brien, 2008)
	Course resources	✗	✓ (Cohen, Millis and O' Brien, 2008)
2.	Schedule		
	Course calendar/schedule	✗	✓ (Cohen, Millis and O' Brien, 2008; Gannon, 2018; University of South Florida, 2021; Woolcock, 2006)
	Time schedule	✗	✓ (Johnson, 2006)
	Test/exam dates	✗	✓ (Johnson, 2006; Coble, Picard and Riviere, 2014)
	Due dates (assignments)	✗	✓ (Johnson, 2006; Coble, Picard and Riviere, 2014)
	Assessment schedules	✓ (8, 13)	✗
	Topical calendar	✗	✓ (Coble, Picard and Riviere, 2014)
	'How to succeed' information	✗	✓ (Cohen, Millis and O' Brien, 2008)
3.	Materials		
	Required/recommended materials	✓ (5)	✗ (Woolcock, 2006; Gillis, 2003)
	Texts/books	✓ (5)	✓ (Johnson, 2006; Parkes and Harris, 2002; Riviere, Picard and Coble, 2014)
	Required readings	✗	✓ (Cohen, Millis and O' Brien, 2008; Woolcock, 2006; Coble, Picard and Riviere, 2014)
	Other materials	✗	✓ (Woolcock, 2006)
	Supplies	✗	✓ (Coble, Picard and Riviere, 2014)
	Information on how to obtain materials	✓ (7, 11, 13)	✓ (Boye, 2015)
	Important hyperlinks	✓ (11)	✓ (Boye, 2015)

4. Requirements			
Assessment/evaluation information	✓ (2, 4, 6, 12)	✓ (Cohen, Millis and O' Brien, 2008; Woolcock, 2006; Gillis, 2003; Coble, Picard and Riviere, 2014)	
Assessment procedures	✓ (1, 2, 4, 6, 7, 11, 12, 13)	✗	
Assessment types	✓ (2, 5, 12)	✗	
5. Policies			
Disability policy	✓ (2, 6, 11, 12)	✗ (Cohen, Millis and O' Brien, 2008)	
Diversity policy	✗	✓ (Gannon, 2018)	
Academic honesty	✓ (6, 13)	✓ (Cohen, Millis and O' Brien, 2008; Gannon, 2018; Coble, Picard and Riviere, 2014)	
Grading/marking policy	✗	✓ (Cohen, Millis and O' Brien, 2008; Coble, Picard and Riviere, 2014; Johnson, 2006; Gannon, 2018)	
Attendance policy	✓ (1, 2, 5, 6, 7, 11, 12)	✓ (Cohen, Millis and O' Brien, 2008; Gannon, 2018; Coble, Picard and Riviere, 2014)	
Student conduct	✓ (2, 6, 11, 12, 13)	✓ (Cohen, Millis and O' Brien, 2008)	
Student records	✓ (11)	✗	
Late submissions	✗	✓ (Cohen, Millis and O' Brien, 2008)	

Addendum 41: Sources consulted during document analysis

A. University/Institutional documents (57)⁷⁵					
	Institution	Abbreviation	Document title	Author	Year
1)	Angelo State University	ANSU	Course Syllabus Trombone, Euphonium, Tuba	Edward Surface	2017
2)	Arizona State University	ASU	Tuba Euphonium Applied Lesson Syllabus	Deanna Swoboda	2018
3)	Berklee College of Music	BCM	Module overview for Bachelor of Music - Tuba	Scott Roeder	2019
4)	Berlin University of the Arts	BUA	Module Overview for the Course of Study: Bachelor of Music in Tuba	Sebastian Wagemann	2019
5)	Bundesakademie für musikalische Jugendbildung Trossingen	Trossingen	Syllabus	Bundesakademie	2020
6)	Carnegie Melon	CM	Literature and Repertoire (Tuba) Syllabus	Craig Knox	2012
7)	Guildhall School of Music and Drama	Guil	Tuba Syllabus	Patrick Harrild	2006-07
8)	Illinois Valley Community College	IVCC	Syllabus Brass Lessons - Tuba	Brandon Czubachowski	2012
9)	Iowa State University	ISU	Tuba-Euphonium Studio Course Syllabus and Curriculum	Christian Carichner	2010
10)	Indiana University of Pennsylvania	IUP	Tuba/Euphonium Studio Syllabus	Zach Collins	2018
11)	Jacksonville State University	JSU	Applied Tuba and Euphonium Syllabus	Chris Hosmer	2018
12)	Mississippi State University	MSUS	Department of Music Course Syllabus	Mississippi State	2014
13)	Mississippi State University	MSU	Literature and repertoire syllabus	Mississippi State	
14)	Mozarteum Salzburg	MOZ	Curriculum für die Bachelorstudien Instrumentalstudium und die Masterstudien	Andreas Hofmeir	2011-12
15)	Nelson Mandela University	NMU	Practical Studies: Module Information	Erik Albertyn	2019
16)	Nelson Mandela University	NMUP	Practical Studies: Module Information	Erik Albertyn	2019
17)	New Zealand School of Music (NZSM)	NZSM	Brass Syllabus: Tuba Repertoire	Andrew Jarvis	2012
18)	New Zealand School of Music (NZSM)	NZSM	Brass syllabus	Andrew Jarvis	2012
19)	North West University	NW	Music Performance: Wind Instruments	Yvonne-Marie Brand	2019
20)	Northwestern University (NWU)	NWU	Syllabus	Rex Martin	2007
21)	Northern Arizona State University (NAU)	NAU	Applied Tuba and Euphonium Syllabus	Alexander Lapins	2010

⁷⁵ The university/institutional documents include all document types.

22)	Peabody Institute	PI	Tuba Requirements	Velvet Brown	2017
23)	Royal Academy of Music (RAM UG)	RAM UG	Undergraduate Handbook	Patrick Harrild	2007
24)	RAM (RAM PG)	RAM PG	Postgraduate Handbook	Royal Academy of Music	2019
25)	Royal Irish Academy of Music (RIAM)	RIAM	Syllabus for Woodwind, Brass and Percussion Instruments for Local Centres & Schools	Royal Irish Academy	2015-18
26)	Stephen F Austin University	SFAU	Tuba-Euphonium Studies at Stephen F. Austin State University	JD Salas	2019
27)	Stephen F Austin University	SFAUT	Tuba-euphonium studies curriculum	JD Salas	2019
28)	Superior Conservatory of Music "Manuel de Falla"	SCMMDF	Tuba Chair Study Program	Patricio Cosentino	2019
29)	Texas A&M Commerce	TAMUC	Applied Low Brass Lessons Syllabus	Dr. Jeff Baker	2010
30)	Texas A&M Kingsville	TAMK	Course syllabus	Matt Hightower	2016
31)	University of California Los Angeles	UCLA	Required and Suggested Repertoire for the UCLA Tuba and Euphonium Studio	Aubrey Foard	2013
32)	University of California Los Angeles	UCLA	Tuba and Euphonium Studio Syllabus	Aubrey Foard	2019
33)	University of Cape Town	UCT	Brass Teaching Syllabus and Exam Requirements 2015	William Haubrich	2015
34)	University of Central Florida	UCF	Syllabus for Applied Tuba and Euphonium Students	Robin Sisk	2014
35)	University of Florida	UF	Syllabus for Applied Tuba and Euphonium Students	Robin Sisk	2018
36)	University of Georgia, Athens	UGA	Syllabus	Zerkel	2015
37)	University of Iowa	UI	Recommended Tuba Literature	John Manning	2017-18
38)	University of Kansas Missouri	UKM	Typical Literature for Tuba Players	Thomas Stein	2018
39)	University of Kansas, Missouri	UKMSUG	Syllabus: Applied Tuba and Euphonium (UG)	Thomas Stein	2018
40)	University of Kansas, Missouri	UKMSPG	Syllabus: Applied Tuba and Euphonium (PG)	Thomas Stein	2018
41)	University of Memphis	UM	Applied Tuba and Euphonium Syllabus	Dr. Kevin Sanders	2017
42)	University of Mississippi	UMIS	Low Brass Syllabus	Dr. Micah Everett	2019
43)	University of Montana	UMO	Performance area syllabus	Benedict Kirby	2014
44)	University of Music and Performing Arts Graz (Austria)	UMPAG	Curriculum for the field of study INSTRUMENTAL STUDIES at the University of Music and Performing Arts Graz	Josef Maierhofer	2019
45)	University of North Carolina at Pembroke	UNCP	Tuba Solo Listing	Joanna Hersey	2019

46)	University of North Carolina Pembroke	UNCPS	Course Syllabus: Private Tuba and Euphnum MUSP 1721, 1741, 3721, 3741	Joanna Hersey	2019
47)	University of Northern Carolina at Wilmington	UNCW	Tuba and Euphonium Lesson Syllabus	Daniel Johnson	2014
48)	University of North Texas	UNTCS	Concentration syllabus	Donald Little	
49)	University of North Texas	UNTSS	Solo Syllabus	Donald Little and Roy Couch	2003
50)	University of North Texas	UNTTAMS	University of North Texas	Donald Little	2019
51)	University of Northern Iowa	UNI	Syllabus for Study of Applied Tuba and Euphonium	Jesse Orth	2019
52)	University of Prince Edward Island	UPEI	Course Outline	Gregory Irvine	2018
53)	University of South Carolina	USC	Applied Euphonium and Applied Tuba Syllabus for Fall 2019	Ronald Davis	2019
54)	University of Southern Alabama	USA	Applied tuba study	Dr. William H Petersen	2016
55)	University of Texas Arlington	UTA	Syllabus Applied Tuba Lessons	Ed Jones	2019
56)	UT: Rio Grande Valley (2016)	UTRGV	Course Syllabus Applied Tuba and Euphonium	Scott Roeder	2019
57)	West Texas A&M	WTAM	Technique syllabus: tuba	Jeremy Lewis	2017

B. Graded examination syllabi (9)

	Institution	Type of document	Document title	Location	Abbreviation
1)	Associated Board of the Royal Schools of Music	Graded examination syllabus	Brass syllabus	Worldwide	ABRSM (1-8)
2)	Associated Board of the Royal Schools of Music	Diploma syllabus	ABRSM Diploma syllabus	Worldwide	ABRSM
3)	Royal Conservatory Music Development Programme	Graded examination syllabus	Royal Conservatory Music Developmental Programme	North America	RCDP (Gr 1-8) ADTP (Associate Diploma in Tuba Performance);
4)	Trinity College London	Graded examination syllabus	Trinity College London Brass Syllabus 2019-2022	Worldwide	Trinity (ATCL, FTCL, LTCL)
5)	Trinity College London	Diploma syllabus	Diplomas in Music: Performance and Teaching	Worldwide	T (grades 1-8)
6)	University of South Africa	Graded examination syllabus	UNISA Brass Syllabus	South Africa	UNISA

7)	University of West London	Repertoire list	Graded Examinations Tuba Repertoire List	Worldwide	UWL
8)	University of West London	Repertoire list	Diploma Tuba Repertoire List	Worldwide	UWLD
9)	Victorian Certificate of Education (Victorian Curriculum and Assessment Authority)	Repertoire list	VCE 2019 Music prescribed List of Notated Solo Works: Tuba	Australia	VCE

C. USA Public school and ensemble lists (2)					
	Institution	Type of document	Document title	Location	Abbreviation
1)	New York State School Music Association	Repertoire list	State Solo/Ensemble Music List	New York, USA	NYSSMA
2)	Virginia Band and Orchestra Director's Association	Repertoire list	State Solo/Ensemble Music List	Virginia, USA	VBODA

D. Theses and dissertations (1)						
	Title	Author	Institution	Type	Year	Abbreviation
1)	College-Bound Tuba Players: What they should know and how to get there	Stephen Meyer	California State University	Masters Thesis	2009	MEYER

E. Books consulted (6)				
	Title	Author	Year	Abbreviation
1)	"For the University Student" from The Tuba Source Book	Perantoni and Dunn	1996	Perantoni FUS
2)	A complete guide to Brass	Scott Whitener	2006	Whitener
3)	Guide to teaching Brass	Dan Bachelder, Norman Hunt	2002	GTTB
4)	Teaching Brass: A Resource Manual	Bailey, Siebert, Miles, Stein	2006	Bailey
5)	A College Level Tuba Curriculum: Developed through the study of the teaching techniques of Williams Bell, Harvey Phillips, and Daniel Perantoni at Indiana University	Whitehead, G	2003	Whitehead
6)	The Art of Tuba and Euphonium	Phillips and Winkle	1992	ART

F. Articles (6)					
	Article	Journal	Author	Year	Abbreviation
1)	"Do you C what I C?"	International Tuba and Euphonium Journal (ITEA) 30:2	David Zerkel	2003	Zer
2)	Getting Ready for Advanced Study – Setting a course for success	The Instrumentalist 43:5	Skip Gray	1988	Gray
3)	Working with incoming college student	International Tuba and Euphonium Association (ITEA) Journal 33:4,	Michael Fischer	2006	WWICS (E:)
4)	Tuba Essentials	http://www.tubaphonium.com/resources.html	Zach Collins	2018	ZC
5)	Tuba Player's List of Etude and Method Books	UCLA website	Aubrey Foard	2013	TPL
6)	Tuba Solos	UCLA website	Aubrey Foard	2013	FTS

Addendum 42: Criteria and descriptors gleaned from the aspects of the well-rounded tuba player

Aspect/Criteria	Information gleaned
Embouchure	<ul style="list-style-type: none"> • Cannot function as a criterion independently but could constitute a descriptor in other criteria • Strength in relation to range • Relates to endurance – longer works require more stamina, as well as note density in areas where endurance is limited, including higher range
Breath requirements	<ul style="list-style-type: none"> • Possessing adequate breath supply for playing music • Air requirements for range, where higher playing and extreme low playing requires more air, therefore more difficult • Whether breath types or techniques will have to be implemented or not – e.g., transcription of cello suite would require the performer to employ different breathing types or techniques • Types of breathing e.g., circular breathing etc. • Decisions on where to breathe if music does not indicate it, or if it is difficult to achieve • Ratings of easy- difficult regarding breathing • If difficult, what strategies might be employed to overcome this
Articulation and tonguing	<p>Tonguing:</p> <ul style="list-style-type: none"> • Tonguing requirements of the work – single/double/triple, tonguing speed, different types of attacks in relation to articulation • Tonguing speed: 120bpm minimum for well-rounded player • Tonguing in different ranges – more difficult for achieving clarity in low register • Tonguing shorter note • Different gradations within the work <p>Articulation:</p> <ul style="list-style-type: none"> • Different types, and the degree of difficulty of each • Articulation in relation to range (lower notes more difficult) • Type of slurs: harmonic or valve • Attacks required (linked to articulation/expression markings) e.g., hard/soft attacks (accents etc.)
Extended techniques	<ul style="list-style-type: none"> • Difficulty rated according to type: easy – advanced. • Easy: wind sounds • Intermediate – Advanced: multiphonics (intervals required and vowel sounds), pitch bends • Advanced: ½ valve glissando, glissando (speed, range), valved ‘rip’ • No level assigned: flutter • Multiphonics: <ul style="list-style-type: none"> ➢ intervals required to sing and play, ➢ how many resultant tones are required? ➢ degree & frequency of dissonance. ➢ immediate-professional; advanced. ➢ vowel sounds.
Endurance	<ul style="list-style-type: none"> • Requirements (high notes for long periods, high playing vs. low playing) • Factors that influence them • Stamina level required • Phrasing: are adequate rests provided
Flexibility and dexterity	<ul style="list-style-type: none"> • Finger dexterity: speed of notes; level of difficulty in coordinating with air and breath • Flexibility: requirements for navigating through ranges; flexibility in relation to range; ease of moving between notes/harmonics; presence of lip trill • Required finger speed through registers: advanced technique
Range	<ul style="list-style-type: none"> • Range: Extremities are more difficult; range designations according to ITEA designation; middle-middle low most used in repertoire before university

	<ul style="list-style-type: none"> • Pedal: advanced – instruments that have more valves, normally intermediate: advanced • Frequent shifts between registers with large intervals: advanced
Dynamics	<ul style="list-style-type: none"> • Different types • Influencing factors including composer & style period • Related to interpretation (fewer indications require greater degree of interpretation) • Range dynamics are written in • Style period of works, baroque easier • Composer style • Context of accompaniment • Role of part in general, and in context of accompaniment • Simple: gradations within work; More advanced: 'pppp'
Accompaniment	<ul style="list-style-type: none"> • In relation to dynamics • Size and timbre of accompaniment
Rhythm and tempo	<ul style="list-style-type: none"> • Different types, fast or slow • Simple: basic note values, rhythms, patterns. • Complex: advanced rhythms, jazz elements, extended syncopations, note patterns, hemiolas, metrical displacement (duplets, triplets) • Basic note values from table • Syncopation types • Jazz styles: swing • Tempo: indications by difficulty; without directions (advanced); changes in tempo, abrupt or not; time altering devices (rubato, ritardando etc) • Breath in relation to tempo
Ornaments	<ul style="list-style-type: none"> • Presence & type of ornaments • Trills: speed, character, various difficulty levels, dependant on trills required; fingerings used in trills • Tremolo: none • Grace notes: by type and context; acciaccatura – appoggiatura and others. • Gruppetto: more advanced • Rated according to difficulty of execution

Addendum 43: Criteria and descriptors suggested by respondents

Technical criteria	
14.	General technique
15.	Range <ul style="list-style-type: none"> • General • Player/student range • Atypical tuba ranges • In relation to the tuba being played • Tessitura/density of notes • Frequency of shifts between ranges
16.	Breath requirements <ul style="list-style-type: none"> • In relation to length of phrases, and the total length of the work • Breath in relation to dynamics and intensity • The time available to breathe within a piece
17.	Extended techniques <ul style="list-style-type: none"> • Multiphonics • Tongue clicks • Popping • Thumping the instrument • Slide removal • Clusters • Free meter • Arpeggiated figures • Absence of barlines • Comprehension and interpretation of symbols
Musical criteria	
18.	Musical complexity <ul style="list-style-type: none"> • Amount of knowledge and interpretation required to perform • Phrasing and musical breath placements • Musical demands
Theoretical criteria	
19.	Harmonic language <ul style="list-style-type: none"> • Keys/tonal centre, including the number of sharps/flats, where more flats/sharps are more difficult • Key in relation to pitch of tuba • Key changes: amount, type, frequency, speed • Type, speed, and frequency of key changes • Complexity of scales and intervals • Tonality (tonal or atonal) • Melody characteristics <ul style="list-style-type: none"> ○ Contour ○ angularity
20.	Aural perception skills required <ul style="list-style-type: none"> • Complexity of intervals • Degree of difficulty in pitching notes
21.	Notation

	<ul style="list-style-type: none"> • Number of accidentals, as works with more accidentals are harder to read • Clefs used • Transition points (e.g., fermatas)
22.	<p>Temporal elements</p> <ul style="list-style-type: none"> • Rhythmic complexity <ul style="list-style-type: none"> ○ Presence of polyrhythms, syncopations, cross rhythms ○ In relation to technique (coordination of tongue and fingers) • Tempo <ul style="list-style-type: none"> ○ In relation to keys ○ Tempo modulations ○ Tempo in relation to note values • Length of work <ul style="list-style-type: none"> ○ Effect on endurance • Complexity of note values <ul style="list-style-type: none"> ○ Intensity and amount of shorter note values (semiquavers, demisemiquavers) ○ Complex note values (e.g., triplets) • Time signatures <ul style="list-style-type: none"> ○ Presence of multiple and asymmetrical time signatures
23.	<p>Musical expression</p> <ul style="list-style-type: none"> • Articulation <ul style="list-style-type: none"> • Different types of articulation • Changes/alternation of articulation types • Interplay between articulation types • In relation to range (e.g., articulations over pivots) • Dynamics <ul style="list-style-type: none"> • In relation to breath and range • Different types and gradations of dynamics • Dynamic changes
Other criteria	
24.	<p>Ornaments</p> <ul style="list-style-type: none"> • Appropriate execution of ornaments of various styles/eras
25.	<p>Performing voices</p> <ul style="list-style-type: none"> • Difficulty of accompaniment • Ensemble challenges (e.g., coordination of entrances between soloist and accompaniment)
26.	<p>Instrument</p> <ul style="list-style-type: none"> • Pitch and size of the tuba for which the work is written • Instrument used in performance

Addendum 44: List of recital performances

Recital 5: 13 April 2019

1. *Choralfantasie über: Est ist ein schnitter der heist Tod*, Opus 9 Koetsier
2. Sonatina for Tuba and Piano Glass
3. Sonata for Tuba and Piano Madsen
4. Capriccio for Tuba and Marimba Penn
5. Scherzo Stockton
6. Aboriginal Voices Corwell

Recital 4: 8 August 2018

1. Concerto Ellerby
2. Concerto Williams

Recital 3: 8 February 2018

3. Adagio from the Limpid Stream Shostakovich
4. Partita in A minor Bach
5. Sonata No. 1 Wilder
6. Adagio and Allegro Schumann
7. Concert Allegro Lebedev

Recital 2: 3 August 2017

1. Variations in Olden Style Stevens
2. Fantasiestücke Schuman
3. Sonata Broughton
4. Effie Suite Wilder
5. Three Miniatures Plog

Recital 1: 9 December 2016

1. Sonata Hindemith
2. Concertino Wilhelm
3. Capriccio Newton
4. Czardas Monti

Addendum 45: Programme notes for Recital 5

1. *Choralfantasie über Est ist ein Schnitter der heist Tod*, Opus 93 Jan Koetsier (1911-2006)

Koetsier grew up in Berlin, studying piano, conducting and composition at the *Hochschule für Musik* in that city. Upon completion of his studies he conducted various theatre ensembles, including the *Deutsche Musikbühne*, and the *Deutsche Landesbühne*. As a result of political pressure, Koetsier returned to the Netherlands, and became the conductor of the newly-founded *Kammeropera* in The Hague. During 1942-1948 he served as an assistant conductor of the *Koninklike Concertgebouworchester*, under Willem Mengelberg. In 1950 he was invited to become the principal conductor of the Bavarian Radio Orchestra, a post which he held for sixteen years. In 1966 he became Professor of Conducting at the *Hochschule für Musik* in Munich until his retirement. During his retirement, Koetsier devoted much of his time to composing at his Bavarian residence in Rattenkirchen. In 1999, he established the Jan Koetsier International Brass Chamber Music Competition, the main purpose of which was the encouragement of young brass ensembles.

Koetsier has received several commissions for new music as a result of his involvement with various brass ensembles and soloists, among them the Phillip Jones Brass Ensemble and the Slokar Quartet. Many of these works became an established part of the repertoire of these ensembles. His works for tuba are no exception and include *Wolkenschatten* (Opus 136 for tuba quartet), the well-known *Sonatina* (1970), the *Concertino* (1990), *Galgenlieder* for soprano and tuba (1997), and the *Choralfantasie über Est ist ein Schnitter der heist Tod* (1997) for tuba and organ.

The *Choralfantasie* is not as well-known as the *Sonatine* or *Concertino*. Nevertheless, it is important as it is one of very few works for the graduate tuba student who would like to perform with organ accompaniment. It takes the form of a theme and variations on the 17th century German folksong *Est ist ein Schnitter, heißt der Tod*, the melody of which was also included in a German Catholic hymnal. Many composers, including Mendelssohn, Schumann, Brahms and Reger, set the tune in one form or another. The original version of the hymn and the words to the first stanza are as follows:

Grim Reaper
He is a reaper, he is called death
Wields power granted by the highest God
Today he grinds his knife

It already cuts much better
Soon he'll cut through something
We have to tolerate it
Beware, beautiful flower.

1. Es ist ein Schmit-ter, der heißt Tod, hat
G'walt vom gro-Ben Gott. Heut
wetzt er das Mes-ser, es geht schon viel bes-ser, bald
wird er drein-schnei-den, wir müs-sens nur lei-den.
Hüt dich, schöns Blü-me lein!

The tessitura of the work spans mainly in the middle and higher range of the F tuba and is perhaps therefore more suited to the advanced university student. The opening *Introduction* features cadenza-like passages for both tuba and organ. Thereafter follows a *Passacaglia*, with organ and tuba alternating the *basso ostinato*. Variation 1 is dominated by a triplet figure, while the dominant rhythmic character of Variation 2 is pronounced in its rhythmic character is its dotted quaver-semiquaver note figure. In this performance, Variation 2 is played in the style of a French Overture. Variation 3 is in the form of a fugue, introduced in the organ. The movement culminates with a strong climax in the final coda.

2. *Sonatina for Tuba and Piano*

Jennifer Glass (b. 1944)

- I. *Allegro non troppo*
- II. *Lento*
- III. *Tempo di valse*
- IV. *Presto*

For many years Jennifer Glass served as Professor of Piano and Musicianship at the Guildhall School of Music and Drama in London. During her university studies at Pembroke College, Cambridge, she met a very talented tubist, John Fletcher, for whom this work was written. Completed in 1963, the *Sonatina* received several performances from Fletcher in that decade. These included a performance as part of the Phillip Jones Brass Ensemble concerts, and another as part of a BBC broadcast in 1968. In 1980, while on tour with the London Symphony Orchestra, Fletcher and Michael Reeves recorded the work in Japan on the album *Le tuba*

enchanted. After Fletcher's death in 1987, many other tubists performed it, notably including Ron Bishop of the Cleveland Orchestra.

The work is rated at Grade 4 level by the Guide to the Tuba Repertoire grading system and is included on the F.T.C.L. Diploma (Trinity), and the A.B.R.S.M. Diploma and Licentiate examinations syllabi. The work is more suited to the postgraduate university student. Glass describes the work as "quite palpable, developing, and repeating materials as any other composition. The tuba and piano parts are equally significant, as the work was conceived as a whole". It features both tonal and non-tonal harmonies, frequent metrical shifts, and at least one *Avant Garde* tuba technique, the glissando.

The first movement, *Allegro non troppo* as well as the final *Presto*, are musical representations of John Fletcher's obsession with steam trains. The basic form of the movement is A – B – A – B, ending with a diminished version of the A theme. The first movement is characterised by frequent metrical shifts – 4/4; 9/8; 5/8; 6/8; 2/4; 5/8; 3/8, and brisk octave skipping in the tuba part. There are two principal themes, the metrically-shifting A motive, and the more tonal and lyrical B (*cantabile*) motive.

The second movement, *Lento*, was originally subtitled 'unashamedly Romantic' in objection to the 1960s trend in Oxford that favoured works by Stockhausen and Monteverdi. The movement is mostly tonal and is in a quasi - rondo form. The third movement, *Tempo di valse* is a haunting waltz and quotes Beethoven's *Diabelli* theme. The waltz theme is introduced twice by the piano. The middle of the movement features a cheerful theme in the major key, before returning to the sinister waltz, ending the movement. The final movement, *Presto*, derived from the opening bars of the first movement, is John Fletcher's steam train, represented by constant ascending and descending quavers. The piano and tuba alternate the first theme, increasing in pitch and intensity. The climax of the first section is sounded by tuba and piano in unison. The opening motive returns, this time followed by more robust, and sometimes *cantabile* entrances. Low, loud pedals in the tuba symbolise train horns as the two locomotives pass each other. The quaver idea is again transferred between piano and tuba, and the movement ends with a return of the opening theme.

- 3. Sonata for Tuba and Piano, Opus 34** Trygve Madsen (b. 1940)
- I. *Andante Sostenuto*
 - II. *Allegro Energico*
 - III. *Allegro Moderato*

The Norwegian composer Trygve Madsen showed early signs of a future career as a composer, composing short piano pieces and songs by the age of 9. In his teens, Madsen studied composition with Egil Hovland and piano with Ivar Johansen. He

eventually enrolled for composition studies with Erik Werba at the *Akademie für Musik und darstellende Kunst* in Vienna. Madsen's musical influences are vast, taking in all eras of classical music as well as jazz. He is in high demand as a composer and of particular mention are his pieces for various national and international examination boards, including the Associated Board of the Royal Schools of Music. Commissions include two operas: *Circus Terra* (by the Norwegian National Opera) and *Aurora* (by the Norwegian-Swedish Union). Madsen's music has been included in as many as thirty-six albums, eight of these featuring his works exclusively. He has written four works for tuba including *Felix, Michael, and I* (opus 102, tuba and piano), *Michael and I* (opus 106, tuba and piano), *Introduction and Allegro* (tuba and band), a tuba concerto (opus 35), and the *Sonata* for Tuba and piano (opus 34).

The Sonata was written for tuba virtuoso Roger Bobo in 1984. The New Tuba Source Book rates the work at Grade 4-5, which denotes works for the postgraduate student or professional performer. Each of the three movements present the performer with various musical and technical challenges. While the harmonic language is fairly chromatic, the musical motives & themes are fluent, and therefore perhaps more enjoyable for the performers and the audience than other works that employ that type of harmonic aesthetic. In a broad sense, the Scherzo-like second movement is a direct contrast to the two moderately fast outer movements. The themes from the various movements are all related, creating uniformity throughout the piece as a whole.

The first movement, *Andante Sostenuto*, begins with a rather slow statement of the main theme, presented by solo tuba. The form of the movement is carefully calculated, with each section limited to 10 bars. The movement contains five different sections, each with a theme derived from the opening solo. The three sections following the main theme are simply transposed ascending and descending sequences of fragments of the opening. A harp-like passage for the piano leads into the cadenza, which bears a near-literal resemblance to the opening solo. The movement ends with a more relaxed restatement of the opening theme.

Particular challenges abound in this work that make it more suitable to the advanced postgraduate student. In this first movement, the tessitura remains in the middle and higher registers of the F tuba, so it requires a strong embouchure, and a performer with a well-developed high range. There is also a thirty-bar section where there are no evident places to take large, full breaths. The notation can also sometimes be confusing, as sharps and flats are used in combination, sometimes within the same bar.

The second movement, *Allegro Energico*, is a moderately fast waltz. The opening theme dominates the entire movement. After a few statements of the main theme,

there is a virtuosic piano section, over a pedal note in the tuba. The middle section, *Moderato e poco rubato*, is reflective, and features an unusually high G# for the tubist. A slower statement of the original theme follows, and an *accelerando* brings the movement to a brilliant close.

The third movement begins with a broad theme, which is immediately repeated. A short *fughetta*, resembling J.S. Bach's works in that genre, links this section with a faster second theme. The second theme is then repeated in the piano, and abruptly leads into restatements of both main themes of the first and second movements. Thereafter follows a transposed version of the whole first section of the movement. A short quotation from the first movement is heard, and the movement ends with the opening motive.

4. *Capriccio for Tuba and Marimba*

William Penn (b. 1943)

William Penn occupied prestigious positions as a Professor of Composition at the Eastman School of Music, University of Connecticut, University of Arizona, and the University of South Carolina. He is currently producer for Arizona University Recordings (Tucson). Penn's music has been widely performed by the Tucson, Indianapolis, and Atlanta Symphony orchestras. He has also written many original works for Broadway, off-Broadway, feature film & television (HBO and Cinemax). Penn is the recipient of numerous awards, including twenty-five from the American Society of Composers Authors and Publishers (ASCAP) in the serious and pop categories. He has also received two ASCAP-Deems Taylor Awards, as well as National Endowment for the Arts & Meet the Composer awards.

The *Capriccio* (dedicated to John Turk and Rosemary Small) was composed in 1992 and received its first performance in the same year. The work is available in two versions, tuba, and marimba, as performed this afternoon, and tuba and synthesized marimba. The piece is loosely constructed as a rondo. The rondo (A) theme is heard after a two-bar introduction by the marimba, and this is the main motive that returns frequently in different guises. The second theme (B) resembles *The Swan* from *Carnival of the Animals* by Saint-Saëns. Thereafter follows a more frenzied section, pushing the limits of technique for both players. The A theme returns, with a short *lontano* (at a distance) section. The lyrical B theme returns (*misterioso*), followed by a waltz. A brief episode, consisting of *glissandi* in the tuba part, leads into another frenzied section, before a restatement of the B theme. Another chaotic section returns, followed by a final statement of the A theme. A brief cadenza for the tuba is heard, and the work ends with *glissandi* in both parts.

5. *Scherzo for solo tuba* (after Penderecki)

Noel Stockton (b. 1930)

Noel Stockton was born in Benoni, and from a young age immersed himself in music, especially jazz. He studied music theory and jazz informally with Richard Cherry. After an apprenticeship as a piano technician with Bothner's, he became involved with many recording and broadcast labels as a freelance musician. As composer/arranger, Stockton composed many scores for advertisements and silent films. His years as military band director provided a platform to further develop his arrangement and composition skills. He then taught at the Free State Musicon, and played in the PACOFS orchestra, giving him much insight into composing orchestral works. After the Musicon, he accepted a position at the University of Free State, where his main duty was the establishment of a light music and jazz programme. He has established a reputation as one of South Africa's leading jazz teachers, arrangers, and composers. As a conductor and music director, Stockton directed many shows at PACOFS, and he has fulfilled an extensive list of commissions from SAMRO.

Stockton's *Scherzo* is the newer of two recently-composed works for the tuba. His *Sonatine for Tuba, Euphonium and Piano*, was completed and given its premiere at the South African Tuba and Euphonium Conference in 2017. The *Scherzo for solo tuba*, was completed in 2019, and receives its premiere performance this afternoon. It is based on Krzysztof Penderecki's *Capriccio for Solo Tuba* (1980) and was probably conceived with a graduate student or professional musician in mind, owing especially to the higher tessitura, and certain musical and technical demands. The diminished fifth recurs frequently throughout the ternary form work. Section A: *Vivo*, is in the unusual time signature of 5+3/8, is dominated by a triplet followed by an eight-note figure, with three bar phrases. Section B: *Leggiero e giocoso* is in the form of lilting waltz in 6/8 and is more euphonious in character than the previous section. The final coda is a condensed version of the A section.

6. *Aboriginal Voices*

Neal Corwell (b. 1959)

Dr. Neal Corwell has earned international acclaim for his activities as military musician, euphonium soloist, and composer/arranger. He began his 38-year professional career when he joined the United States Army Band "Pershing's Own", as a euphonium player in 1981. Since then, he has given over 1100 recitals in the US and abroad. Corwell has held adjunct positions at the Shepherd University in West Virginia, and Frostburg State University in Maryland. Now retired from the military, his main focus is the composition of new works for tuba and euphonium. Of the numerous works composed for these instruments, twenty-two call for CD accompaniment, thirty require a piano, and twenty-five a large ensemble. A versatile artist, Corwell has also gained invaluable experience in the recording industry in the roles of sampling, sequencing, tracking, mixing, and mastering, and has engineered many of his pre-recorded accompaniments himself.

Aboriginal Voices is one of the composer's better-known works and was written for tuba/euphonium/bass trombone with CD accompaniment. The version being performed today is for tuba and mp3. Graded at Level 4 by the New Tuba Source Book, the work is technically demanding, but in a comfortable range. One of the work's greater challenges is aligning the solo part with a rigid accompaniment. The work is therefore probably more suited to the more experienced graduate student, or professional musician.

It was commissioned by Mark Nelson, Head of Performing Arts at Pima Community College in Tucson, Arizona. Pete Hummel gave the premiere performance of the work at the International Tuba and Euphonium Conference (previously the Tubists Universal Brotherhood Association, presently International Tuba and Euphonium Association) in Washington D.C, in 1995. Dr. Nelson's interest in world music, and possession of a didgeridoo were the main inspiration in choosing materials for the work. The rhythmic and melodic materials are inspired by native aboriginal music, and the unique sounds were created by sampling the didgeridoo and other percussion instruments. Vocalsations and clicks are samples of Dr. Corwell's own voice.

The composer's intention is to musically conjure the life of an aboriginal hunter. The opening section, *Cadenza*, introduces the listener to the hunt, evoked by ethereal sounds of the didgeridoo, church bells, and wind. It features multiphonics (an extended technique achieved by singing and playing at the same time) and lip beats for the soloist. The rhythmically driven *Dance* is introduced by the accompaniment, establishing a tonal centre of c minor for the work. Other sounds include various drums, percussive stick clicks, and vocalisations (Shhhu!). The material presented by the soloist is dominated by rapid semiquaver scalar passages. A disguised metrical shift to 6/8 and pitched tongue clicks introduce a contrasting, lyrical middle section. After a brief recapitulation of the *Dance*, tribal drums introduce the final section of the work. Here, both forces create increasing intensity bringing the work to a robust conclusion.

Addendum 46: Programme Notes for Recital 4

Tuba Concerto (1983)

Martin Ellerby (b. 1957)

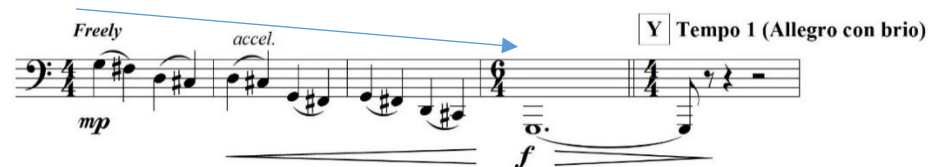
Andante ma non troppo – Allegro con brio

Dr. Martin Ellerby is currently the Artistic Director for the Studio Music Company, serves as an external examiner to the Royal Air Force Music Services and is the Honorary Principal of the Victoria College of Music Examinations Board. After graduating from the London College of Music, Ellerby studied composition with Joseph Horowitz and counterpoint with W.S. Lloyd Webber at the Royal College of Music. Thereafter, he continued his composition studies with Joseph Wilfred privately, subsequently becoming the composer's amanuensis.

Ellerby's compositions have been performed by leading ensembles throughout the world, in major venues including the Sydney Opera House, Carnegie Hall, St. Thomas Church (Germany), the Royal Albert Hall, and St. Paul's Cathedral. His output includes works for orchestra, ballet, strings, several instrumental sonatas, eleven concertos, suites, songs, and choral music. Some of these works served as test pieces for brass band contests. Ellerby holds a Doctor of Musical Arts from the University of Salford and an Honorary Doctorate of Letters from the University of West London. His numerous awards include the W. S. Lloyd Webber's Director's Prize, the Westminster Prize, the Arts Council of Great Britain Dio Fund Award, the Allcard Award, the George Butterworth, and Norman Sykes Memorial Fund Awards. In addition, Ellerby received the honour of the Freedom of the City of London.

The Concerto for Tuba (1983), and the Tuba Sonata (2009/2010) are the composer's only extant tuba pieces. Dedicated to Steve Sykes, the Concerto has been recorded and performed by several leading tuba soloists including Patrick Harrild, Patrick Sheridan, James Gourlay and Andreas Hoffmeister. Besides the original orchestral version, the composer has adapted the work for accompaniment by brass band, wind band, and piano, as performed this evening. The work was premiered by the dedicatee Stephen Sykes and the Ryton Sinfonia (directed by under Philip Chapman) at the Workshop Priory on 24 September 1988.

The Concerto is set in two contrasting movements, played without a break. The first section, *Adagio ma non troppo*, develops a rhapsodic motive introduced by a repeated note figure in the piano. The chief motive, transformed from its simple first appearance to one more complex, displays the highly expressive capabilities of the instrument. The section quickly gives way to the *Allegro con brio*, a fast-paced second section. This part displays the soloist's dexterity in a toccata-like motive. This theme is later augmented and evolved into a contrasting lyrical segment. The cadenza performed today is the extended version, added by the composer at the bequest of James Gourlay in 2002. It develops material from the first two sections; particularly notable is the reference to the Vaughan Williams Tuba Concerto's 3rd movement cadenza. The note values, intervals, movement, and direction of the phrase point to the reference (below).



Excerpt from extended cadenza from Tuba Concerto by Martin Ellerby



Excerpt from cadenza from 3rd movement of the Vaughan Williams Concerto for Tuba and Orchestra

The optional cadenza and frequent *ossia* (alternate) passages that replace the higher and technically difficult passages allow the work to be performed by both the advanced student and seasoned professional. This alternative cadenza extends the range down to the pedal C. After the cadenza, there follows a brief recapitulation, and an ascending scalar passage in the tuba. Trills and tremolos in both solo and accompaniment bring the work to a glittering close.

Concerto for Bass Tuba and Orchestra (1954) Ralph Vaughan Williams (1872-1958)

- I. *Prelude (Allegro Moderato)*
- II. *Romanza (Andante Sostenuto)*
- III. *Finale – Rondo Alla Tedesca (Allegro)*

Ralph Vaughan Williams has been referred to as the most individual voice among English composers for the first half of the 20th century, and he made a significant contribution in addressing the Teutonic change of England's reputation as "Das land ohne music". Of particular interest is the composer's affinity in later years of writing works for instruments that were not considered "solo" instruments at the time (in this case, the 1950s). In 1951 he completed the *Romance for Harmonica and Orchestra*, and in 1954, a *Concerto for Bass Tuba and Orchestra*. In a private conversation with the soloist who premiered the tuba concerto, Vaughan Williams confessed that he was planning a work for four-octave marimba and orchestra, but he passed on before its conception.

In 1954, the London Symphony Orchestra sought out Vaughan Williams, as England's foremost composer, to commission a work for the celebration of their Jubilee year. He responded with the *Tuba Concerto*. A seemingly insignificant idea spawned by a major composer's thirst to write a solo concerto for an instrument not thought of as a solo instrument, changed the tuba world for

generations to come. This concerto is possibly the most frequently-performed solo work of the tuba repertoire, making a home in each serious tuba player's arsenal. To this day, it serves as a test piece in numerous competitions, and is *the* solo work required at every orchestral audition. Phillip Catelinet, an ad hoc tuba player with the London Symphony Orchestra and the London Sinfonia received a call informing him that "Ralph Vaughan Williams has written a tuba concerto and wants you to play it at our Jubilee Concert in June". Needless to say, he was "terror stricken", but adds that his comfort came from reassurance from the composer that he did a fine job.

The work is dedicated to the L.S.O. and received its premiere performance on 13 June 1954 with Catelinet as soloist with the London Symphony conducted by Sir John Barbirolli. The work remains conservative despite the era in which it was written, firmly within the bounds of traditional harmony, tonality, and notation, with a modal feel prevalent in the first and third movements.

In his own words, Vaughan Williams had the following to offer regarding the concerto:

"The form of this concerto is nearer to the Bach form than that of the Viennese School (Mozart and Beethoven), though the first and last movements each finish up with an elaborate cadenza which allies the concerto to the Mozart-Beethoven form. The music is fairly simple and obvious and can be listened to without much previous explanation. The orchestration is that of the so-called theatre orchestra consisting of woodwinds, two of each horns, trumpets, and trombones, timpani, percussion and strings"

The first movement, *Prelude: Allegro Moderato*, is both pompous and light, probably owing to the reputation of the tuba as an oompah instrument. It features frequent short dynamic bursts in an almost folk song-like texture. The tonal centres include F minor – A minor – B-flat minor – a minor – F minor – c minor – b minor – F minor – cadenza – F major. The movement features a cadenza that exercises most of the range of the F tuba, for which it was originally written.

The 2nd movement *Romanza*, is a simple and melancholic movement which provides the soloist with ample opportunity to display his musicianship, as well as the lyrical capabilities of the tuba. It is mostly in the higher tessitura and represents one of the most beautiful movements ever written for the instrument. Contrary to the trend of tuba players always performing transcriptions of works for other instruments, the *Romanza* is one of the few examples of a work for tuba that is regularly performed on other instruments – euphonium, cello, or bassoon.

The third movement, *Rondo Alla Tedesca*, provides both soloist and accompanist ample opportunity for pyrotechnic display. Catelinet adds that when performed at the instructed tempo indication, it is difficult not for the work to sound rushed and frantic, due to the many fast triplet and 16th note figures throughout. The tempo indication is somewhat contrary to the composer's original intention of the work as a waltz in the German style. A short cadenza sounds before the work ends with a chaotic fizzle.

Addendum 47: Programme Notes for Recital 3

“Adagio” from *The Limpid Stream*

Dmitri Shostakovich (1906-1975)

Transcribed by Harri Mietunnen, and arranged for tuba and piano by Roger Bobo, the “Adagio” is taken from Act 2 of Shostakovich’s ballet *The Limpid Stream*, Opus 39. The ballet was commissioned by Stalin to silence the rumours of a government-instigated famine in the Ukraine that killed millions of people between 1932 and 1933. Shostakovich, already a renowned composer, was ordered to write a joyful but specious account of life on a collective farm, praising the improvements to rustic life. The result, in Shostakovich’s own words, is a “choreographed comedy” filled with vaudeville gags, drag acts, and hummable tunes. One of the themes from the ballet became a *leitmotif* for Stanley Kunick’s film *Eyes Wide Shut*.

After the premiere Stalin rejected and banned the work, and soon thereafter instigated a campaign against Shostakovich for straying “the path of social realism”. This led to the composition of his 5th symphony, and in 1948 a second denunciation of his works took place. It is rumoured that Shostakovich sat outside his house every night waiting on authorities to arrest him – so the commotion would not disturb his sleeping family. His rehabilitation came about after Stalin’s death in 1953, and *The Limpid Stream* only underwent a revival in 2003.

The plot revolves around ballet dancers sent to provide entertainment to a new Soviet collective farm. Some intricate plots unfold and the country – folk prove that they have way more to offer than what the city dwellers assumed. In this particular scene (Adagio Act 2 no.19), Piotr, the agricultural student is meeting one of the dancers to engage in an extra-marital affair, but the dancer is actually his disguised wife, Zina. Later, Piotr finds out that his wife, besides being a devoted farmworker, is a very gifted ballet dancer, and the two reconcile.

The “Adagio” is originally scored for cello solo with orchestral accompaniment, and is probably one of, if not the most moving movements of the whole ballet. It provides ample opportunity for the soloist to make sense of and explore the extremes of musicality, as well as demonstrating the sonorous capabilities of the tuba. The first portion of the work is a courtship dance, whilst the climax symbolizes their brief embrace. The maidens appear and discuss the affair, whilst a harp-like cadenza is heard in the accompaniment, and the incessant “C” in the tuba. The resolution return to the major key, and the recap of the main theme symbolize the return to the courtship dance.

Partita in A minor

J.S. Bach (1685-1750)

1. Allemande

2. Corrente

3. Sarabande

4. Bourrée Anglaise

The Partita in A minor is one of the many secular works Bach composed during his term as Kapellmeister at the Calvinist court in Cöthen (1717-1723). Prince Leopold Anhalt-Cöthen did not allow elaborate music during worship services, however enjoyed instrumental and chamber music. Bach’s oeuvre during this period was nonetheless fruitful and included the Orchestral Suite No. 1 BWV 1066, the six Suites for Violoncello BWV 1007-1012, the violin sonatas BWV 1014-1019, and the Brandenburg Concertos BWV 1007-1012.

As with several of Bach’s masterpieces, the precise completion date is unknown, however, some historians have suggested that it was written during the early 1720s. The circumstances around the composition are also not clear, as Bach was not a flute player. The work might have been written after hearing a performance by distinguished transverse flautist, and teacher to his older brother, Pierre Buffardin.

Originally titled *Solo Pour la Flûte Traversière* (“Solo for Transverse Flute”), the work was later renamed “Partita”. Aside from the original versions for flute, there are editions available for violin, oboe, recorder, guitar, and saxophones. Both the tuba and saxophone were unfortunately patented during the 19th century, lacking any serious compositions from the baroque and classical eras. Hence, tuba transcriptions of works originally for other instruments are quite common. Floyd Cooley was influential, creating versions of classic works under the Tuba Classics label, including the Partita. Roger Bobo, Russel Tinkham, and Gene Pokorny have transcribed the work as well. The version by Floyd Cooley is the chosen edition for tonight’s performance.

The work presents some peculiar challenges to the advanced tuba student or professional player and is rated at a grade IV-V level by the Guide to the Tuba Repertoire. These challenges include endurance, range, breathing, and the proper performance of the implied harmonies – a trait that is present throughout the work. Cooley’s edition keeps to the original key of A minor, transposed down two octaves to suit the range of the tuba.

The *Allemande* is a duple-meter dance of moderate tempo and is the longest, and certainly most challenging of the movements – there are no suggestions or evident places to take breaths that are musically unobtrusive. It is characterised by the constant 16th note patterns, outlining the broad binary design. The implied harmonies are identified by larger intervallic leaps, and the cadences are

approached by descending chromatic arpeggios. The only notable change to the original flute edition is the omission of the first repeat.

As is custom with the baroque suite, the *Allemande* is paired with the *Corrente* (“flowing”) also in A minor. It is a swift triple meter dance in binary form, and extends the 16th note idea presented in the previous movement. Frequent wide leaps indicate the presence of implied harmonies – harmonies created by an instrument that can only play one note at a time. The movement features longer note values, introducing the 8th note durations of the *Sarabande*.

The *Sarabande* was originally a lively dance from Latin America, danced with two rows of couples with castanets, and was absorbed throughout Europe as slow dance in triple meter. The movement is characterised by rhythmic flexibility, beginning with slow-moving 8th notes, eventually adding scalar 16th note passages. The melody is slow and wide ranging and regarding interpretation, quite demanding. The movement is perfectly set within the mid-high range of the tuba.

The final movement, *Bourrée Anglaise*, is a quick dance in 4/4 time, with the characteristic short-short-long construction of the motive. The first section is repeated, thereafter follows a second section almost mirroring the first, in the dominant key. After a return of the opening motive in the original key, a sequence of the 16th note idea brings the work to a satisfactory ending.

Sonata for tuba and piano

Alec Wilder (1907-1980)

1. Moderato
2. Allegro
3. Andante
4. Allegro

Wilder’s friendship with tuba renaissance frontrunner Harvey Phillips is apparent in the number of original works composed for tuba beginning in the 1950’s. His extensive works list includes a concerto for tuba and wind ensemble, 12 Duets for Horn and Tuba, Suite for French horn and Tuba, Convalescence for Tuba solo, Suites 1-5 for tuba and piano, and two sonatas for tuba and piano. The most well-known of his works for tuba is the Suite No.1 “Effie” (1968), performed at my last recital. The Sonata no.1 (1959) is a lesser-known work, despite appearing on many syllabi internationally, and was one of the previous required works for the Tuba Artist division of the Leonard Falcone International Tuba and Euphonium Festival.

76 The grading system in the Guide to Tuba Repertoire classifies works into five difficulty levels, unlike grade levels of syllabi for external examination syllabi (UNISA/Trinity). Level IV are suitable for university/college students.

The Guide to Tuba Repertoire grades the work at level IV⁷⁶, making it a suitable work for university tuba study, with the annotation “good recital material”. The four movements are non-programmatic and represents a more experimental side to Wilder’s writing – usage of jazz elements and modern harmonies. Of particular mention is Wilder’s deviation from the classic sonata ordering the movements Moderato-Fast-Slow-Fast.

The first movement is tonal and includes a jazz motive in the piano part. A *dolce* introduction introduces the lyrical first theme in the tuba. The opening introduction again announces the same theme at a different pitch. The jazzy piano motive leads to the second theme, at a slightly slower tempo, and with less movement in the accompaniment. The introduction is heard again transitioning into the jazzy episode, and a third theme is introduced in the tuba over a dreamy 8th note texture in the accompaniment. The piano again sounds the first theme, and a retrograde version of the second theme ends the movement quietly.

The second movement is made up of two alternating sections – an “Allegro” (lively) and “Swing” segment. The tuba opens the movement, followed by the piano resembling a 1920’s dance. The first theme made up of staccato and accented eighth and quarter notes in simple quadruple meter (4/4), whilst the accompaniment swings. The piano then plays the opening motive, and the first theme is transposed. The accompaniment consists here of a mechanical eighth note scale pattern. The opening motive in the piano introduces the slower swing section. The piano repeats the opening motive, and the first theme returns with yet another accompaniment variant, this time with longer note durations. The swing section begins in the piano and is taken over by the tuba. Previous material is used to speed up the tempo, and the first theme returns with the original accompaniment. A final swing section ends the movement quietly.

The “Andante” is the most expressive movement of the work, full of pleasant and almost reflective moments. The melody, presented by the tuba, consists of scalar ascending and descending passages. The second part of the theme introduces descending arpeggios. These arpeggios are the basis for the second theme, this time in the major key. A repeat of the piano introduction from the beginning, signals the entry of the tuba, this time with a completely different theme. This melody starts with 5th intervals and is characteristic of this section. The build-up to the climax of

the movement dissipates the wider intervals climaxing with the scalar motive. The piano introduces a statement of the opening theme, transposed a ton higher. A short statement of the second theme (5ths) ends the movement quietly in D minor.

The fourth movement is more frantic, with quick alternations in time signatures between 4/4, 3/4, 2/4 and 1/4 time. The entire movement is based on derivatives of the opening bars in the piano. It is presented throughout the movement with the left and right hands of the piano creating a palindrome with each other. The first theme is presented by the tuba as the response to the piano's call. In the second theme, the tuba transforms the opening piano motive, whilst the piano plays material based on the second part of the same motive. For a brief episode, both hands play in similar motion, before a return to the palindrome. This time, the call and response has ceased, and piano accompanies the tuba in a sinister waltz. A brief echo is heard, before the piano signals the return of the opening palindrome. Thereafter follows an extended development of the piano's opening bars, the first time the tuba is given the opportunity to play the motive. Wilder, perhaps unintentionally, provides octave unisons in the piano that resemble the BACH motive. The first and second themes return truncated, and the work ends with a characteristic "door slam".

Adagio and Allegro Opus 70

Robert Schumann (1810-1856)

The *Adagio and Allegro* (originally *Romance and Allegro*) was completed during the same week as the *Fantasiestücke* Opus 73 for clarinet and piano. During this time, Schumann's attention was on creating works for piano and another instrument. Upon hearing the newly designed "ventilhorn" in Dresden in orchestras including those headed by Richard Wagner, Schumann was inspired to write for the new instrument. What followed were two works, the *Adagio and Allegro*, and the *Konsertstuck* Opus 86 for four horns and orchestra. Part of the reason behind the sudden drive to write for horn, was its ability to play, for the first time, the full chromatic compass of the instrument, without changing crooks. Schumann later added "or cello" to make performances of the work more accessible to other instruments, in the same way as his *Fantasiestücke*.

Had Schumann heard the standard of tuba soloists around today, he might have composed a work for the tuba, or even titled the work "Adagio and Allegro for French horn (or cello, or tuba) and piano". Floyd Cooley's arrangement of the work is the chosen edition for tonight's performance. The arrangement, recorded on "The Romantic Tuba" stays true to the original tonality of Ab. Compared to the edition for horn and piano, there are a few notable dynamic and articulation changes, especially regarding the usage of accents. For the sake of authenticity, and effect, these accents have been re-introduced in tonight's performance. Another notable change is to the second to last note. Cooley places a high Ab for the tuba, whereas the

original versions for horn and cello differ. The cello version middle C as the second last note is preferred for this performance. The work is a *tour de force* for postgraduate level (tuba) students, for two reasons. Firstly, the tessitura is in the higher range, and there are very few places to rest. Secondly, proper interpretation of probably one of the major romantic works for instrument and accompaniment, will suit the more advanced player.

The work embodies, like the *Fantasiestücke*, Schumann's struggle with conflicting emotions, being a sufferer of what today might be termed severe bipolar disorder. The "Adagio", in some editions marked *Langsam mit innigen Ausdruck*, idiomatically displays the beauty of tone of the solo instrument. Idiomatic probably to the French horn, the work consists of constant legato marks, and solo passages and cadence points that mirror the harmonic series. The "Allegro" section is also idiomatic of the French horn, with its repetitive triplet motive. The first triplet theme is contrasted with a more lyrical second theme, and the section features many fine dialogues between solo and accompaniment. Quickly, the first theme returns, ending on the tonic chord. Typical of Schumann's "dramatics", the next section begins, without warning, in the key of B major – Schumann favoured modulations prepared or unprepared of a third up or down, in this case, up. The "Tranquillo" is more relaxed and is loosely based on the opening ascending three notes of the "Adagio". Sequence and modulation followed by an *accelerando* bring back the tonality and tempo to the "Allegro" theme. The first and second themes of the "Allegro" return in their original form, but a coda and "schneller" (faster) section bring the work to a fantastic close.

Concert Allegro

Alexei Lebedev (1924-1993)

Alexei Konstantinovic Lebedev (1924-1993) was to Russia what Bill Bell was to the tuba in the US -the first tuba soloist and pedagogue. Finishing school in 1942, he joined the army, and was subsequently deployed to the Russian front of WW2. Wounded in 1943, he was sent to Moscow to continue service in the military band. Thereafter he studied at the Ippolitov-Ivanov Music College, and the Moscow Conservatory (1945-1949), graduating with honours a year early. Here Lebedev studied tuba, and composition (1950-53). He led an illustrious career at the Moscow Conservatory, first as a teacher (1953-1993), associate professor, and finally professor (1986-1993). During his time as student, he composed two major works for tuba, that interestingly predate what people regard as the two first serious compositions for tuba - the Hindemith Tuba Sonata (1955) and the Vaughan Williams Tuba Concerto (1954). These works were the Concerto no. 1(1947) and the Concert Allegro (1949), published in 1950 and 1956 respectively. Lebedev aimed to broaden the tuba repertoire, and aside from the compositions and the method book, he composed etudes and exercises for tuba and piano, and arranged and transcribed

many solos from the classical repertoire. During 1986 he completed his Concerto no.2, published posthumously in 1995. Aside from the tuba compositions, he composed over 60 lyrical, military and children's songs. The T.U.B.A. (Tubists Universal Brotherhood Association), precursor to the International Tuba and Euphonium Association awarded him with the lifetime achievement award in recognition of his important contribution to the tuba. Of all his works for tuba, the Concerto in One Movement and the Concert Allegro are his most frequently performed works.

The work is placed here as the final piece as an effective end to the programme, as it represents, one of the few existing "romantic" works originally composed for the tuba, as opposed to transcriptions. In terms of difficulty, one can easily draw a comparison between Schumann's Adagio and Allegro for Horn, and the works for tuba, reminding us that although almost one hundred years passed, the standard of tuba players was not close to the ability of horn players almost 100 years prior when the Adagio was composed. The work nonetheless is a very rewarding and fun piece to play and to listen to.

After a brief introduction, the tuba introduces the first theme. The piano writing throughout the work resembles in texture writings by Rachmaninov. The first theme is made up of two cells, the first section marked "f", and more lyrical "mp" reply. After development on these themes, the slower *Andante* is introduced by a pedal tone "E" in the tuba, and the swaying piano accompaniment. A characteristic one bar chorale heard first in the piano, precedes the *Allegro*, leading to the climax of the first section. Thereafter the first theme returns, modulating to F minor and sees a repeat of the *Andante*. A quick episode is followed by a lively *Presto*, and a one bar cadenza in the tuba. The chorale theme returns on an elevated dynamic level, and a brief restatement of the theme (augmented) ends the work heroically.

Addendum 48: Programme Notes for Recital 2

1. **Variations In Olden Style (d'apres Bach)** Thomas Stevens (b. 1938)
- I. Theme
 - II. Variation 1: Grazioso
 - III. Variation 2: Allegro Moderato
 - IV. Variation 3: Adagio
 - V. Variation 4: Adagio
 - VI. Variation 5: Finale: Allegro

The American trumpet player, arranger, orchestrator, composer, and writer Thomas Stevens enjoyed an extensive career as a trumpet player, with appearances in the United States Military Academy Band at West Point, the Dallas Symphony Orchestra, George Solti's World Orchestra for Peace, and the Los Angeles Philharmonic Orchestra (1965-2000). He co-founded the Los Angeles Brass Quintet, was a member of the Chamber Music Society of the Lincoln Centre and was personally invited by Pierre Boulez to be part of the *Ensemble Intercontemporain* (Paris). Stevens has edited volumes of method books for trumpet, including those by James Stamp, Max Schlossberg, and William Vacchiano. In 1996, Stevens received the Outstanding Alumnus of the Year Award from the Thornton School of Music, University of South Carolina. In 2007, he received the Certificate of Special Recognition from the United States Congress, and a similar certificate from the California State Senate for "outstanding and invaluable service to the community". Stevens has contributed extensively to both the body of instructional material for the trumpet, as well as to the brass repertoire in general.

The **Variations in Olden Style** (1989) were written for Roger Bobo, with the dedication: "For Bozo the Great". The work is in the form of a theme with five short variations. The theme is taken from the *Sarabande* from Cello Suite No.6 by J.S. Bach and is set in the higher tessitura of the F tuba. The version performed tonight features piano accompaniment, although there is also a version for tuba, string ensemble and harpsichord. As the tuba was only invented in 1835, there is no original repertoire from the baroque, classical or romantic eras, and tuba players therefore rely principally on transcriptions. The *Variations* are written in the style of a baroque theme and variations, one of many works composed to compensate for this gap in the repertoire.

The theme introduces a grace note figure that becomes prominent throughout the movement. The two-bar phrases keep the movement simple, with keys limited to the tonic, dominant and relative minor keys. The gracious first variation remains in the tonic key of F major and is governed by eighth-note arpeggiated sequences throughout. The livelier second variation is characterised by the alternation of

arpeggiated and scalar motives, often with wide intervallic leaps reminiscent of J.S. Bach's writing in his cello suites. The third variation is marked *adagio poco pesante* and contains significantly faster scalar passages. By contrast, the fourth variation is slower-moving, providing ample opportunity for expressive musicality. The last movement is in the form of a lively gigue.

2. **Sonata** Bruce Broughton (1945)
- I. Allegro Moderato
 - II. Aria: Andante Moderato
 - III. Allegro Leggero

Bruce Broughton is currently Adjunct Professor in Scoring for Motion Picture and Television at the Thornton School of Music of the University of South Carolina, and composition lecturer in the Herb Albert School of Music of the University of California, Los Angeles. He previously served as governor of the Academy of Television Arts and Sciences as well as the Academy of Motion Picture Arts and Sciences. Broughton's works for film and television have earned him 24 Emmy nominations, 10 Emmy Awards, and one Grammy nomination. Titles accredited to him include the soundtracks to the films *Tombstone*, *Homeward Bound*, *Harry and the Henderson's*, and *Honey, I Shrunk the Kids*. His television scores include music for *JAG*, *Tiny Toon Adventure*, *Dinosaurs*, *Dallas*, and *Hawaii Five-0*. His score for the *Heart of Darkness* (1999) was the first score ever recorded for a video game. Broughton has recently accepted a position as composer in residence at the University of North Texas, Division of Composition Studies.

The Sonata for Tuba and Piano (1976) was written for Tommy Johnson, probably the most recorded tuba player in history, having played for over 1000 film scores including *Jaws*, *Close Encounters of the Third Kind*, *Indiana Jones*, *The Lion King*, and *Titanic*. The piece is enjoyable for both performer and audience.

The persistent opening motive presented by the piano is used as a unifying device throughout the G tonality sonata form movement, and the only occurrence of the motive in the tuba part is in the final measures. The first theme is characterised by a repeated 16th note pattern, which appears throughout the movement. Also characteristic of the first theme is the metrical shift from 4/4 to 2/4 and 5/8. The second theme is softer and lighter in character and exhibits the pedal range of the tuba. The recapitulation features an elaborated version of the main theme and the movement ends with an afterthought.

The second movement, *Aria*, in Bb, was inspired by half-step progressions. The very lyrical nature stays true to the title, the texture remaining essentially straightforward melody and accompaniment, with occasional dialogues between the two instruments

for contrast. The middle section is an episode with shifting tonality and meter. The movement throughout exploits the half-step progressions, especially in the last descending sequence ending on the tonic chord.

The third movement, featuring a return to the tonality of G, is in 6/8. The piano introduction, in common with the first movement, begins with a flurry of activity in the accompaniment, playing essentially a compressed version of the solo theme. The exuberant first theme is based on leaps of 3rds and 4ths. Another piano interlude introduces the more insistent second theme, the notes of which quickly descend to the lower tessitura of the tuba. The return to the last theme is again introduced by the piano, with a prolonged version of the main theme. The coda develops a simple progression ending the work.

- 3. Fantasiestücke** opus 73 Robert Schumann (1810-1856)
 Transcribed and edited by Floyd Cooley
- I. Zart und mit Ausdruck
 - II. Lebhaft, leicht
 - III. Rasch und mit Feuer

Floyd Cooley is currently Professor of Tuba at De Paul University, and previously held the position of Principal Tuba with the San Francisco Symphony Orchestra. He is acknowledged for his considerable contribution to the world of the tuba. As a soloist, Cooley has performed internationally to critical acclaim and has recorded three solo albums (*The Romantic Tuba; Schumann Fantasy* and *Friends in Low Places*). His transcriptions of works from the baroque and romantic eras fill a crucial gap in the tuba literature, and many have become standard repertoire for every serious tuba player. They include J.S. Bach's Flute Sonata No.2 (BWV 1031), the *Partita* in A Minor (BWV 1013), and Schumann's *Drei Romanzen, Marchenbilder*, and the *Fantasiestücke*.

Originally for clarinet and piano, the *Fantasiestücke* were written in 1849, after Schumann had completed the opera *Genoveva* and some large-scale choral works. That year was one his most productive, as he completed 32 opus numbers. Among the 1849 compositions was the *Adagio and Allegro* for horn and piano, the *Drei Romanzen* for oboe and piano and the *Konsertstück* for four horns and orchestra. Versions of the *Fantasiestücke* were also made available by the composer for violin/cello and piano. In addition, there are several other arrangements for other instruments including this present version for the tuba.

The movements are musically demanding, a cycle of harmonically unified poetic miniatures harmonically displaying moods ranging from lyrically expressive, lively, to fiery and urgent. Although the music is not programmatic, it retains an episodic

character. Cooley's arrangement remains fairly true to the original in the first and second movements, with minor articulation, dynamic and phrasing adjustments that allow for the work to be performed more idiomatically on the tuba.

The final movement includes a considerable number of alterations to the original. Most of these changes are slight, as in the previous movements, due probably to Cooley's interpretation. Other changes, however, are more pronounced; the first is the slowing of the metronome mark from the original 160 to 132 – this allows the tuba some space to be able to perform the faster passages. To avoid having the movement sound slower, and to stay true to the *Rasch und Mit Feuer* character, Cooley alters the motive throughout the movement, replacing quavers with semiquavers.



Fig. 1: Original Clarinet part

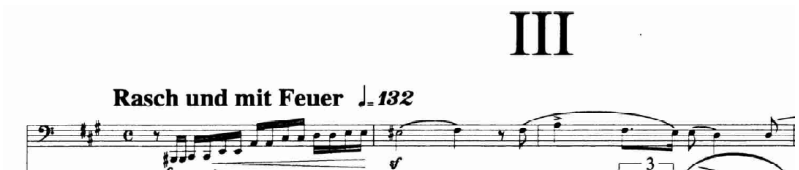


Fig. 2: Altered Tuba part

- 4. Suite No. 1 "Effie" for Tuba and Piano** Alec Wilder (1907-1980)
- I. Effie Chases a Monkey
 - II. Effie Falls in Love
 - III. Effie Takes a Dancing Lesson
 - IV. Effie Joins The Carnival
 - V. Effie Goes Folk Dancing
 - VI. Effie Sings A Lullaby

Alec Wilder was one of the first truly "American" composers of the early 20th century. His compositional oeuvre contained over 300 works for the popular song, art song,

orchestral, chamber music and operatic genres. Wilder's style is perhaps best described as the combination of simple melodies, from his autodidactic musical education background, fused with jazz, pop and classical elements. Each of his works has a quirky, humorous side, exemplified by the use of such titles from his Octet for Wind Instruments: "Sea Fugue Mama; Neurotic Goldfish, Amorous Poltergeist, Home Detective Registers". His contributions for brass include three brass quintets, the Jazz Suite for brass quintet, the Jazz Suite for 4 Horns, Nonet for 8 horns and tuba, Suite for 19 Trombones, Suite No.1 for Horn, Tuba and Piano, and Suite No. 1 "Effie" for Tuba and piano (1968).

The title of the work is rumoured to be derived from the range of the tuba part (F-E), hence "Effie", and depicts a "typical" day in the life of an elephant. The highly descriptive and programmatic titles personify Wilder's wit, which marries perfectly with the occasionally humorous nature of the tuba. The piece was written at the bequest of Clarke Galehouse of Crest Records for a children's album, specifically for tuba soloist Harvey Phillips - pioneer of the tuba renaissance in the 1950's in mind. The original combination for which the piece was written was tuba, piano, drums, bass, and percussion, including xylophone. The work represents one of the first works written especially for the solo tuba and is technically and musically demanding.

The first movement, "Effie Chases a Monkey", is characterised by a chromatic motive symbolising the chase, while smaller lyrical interjections impersonate the dialogue between Effie and the monkey. In a sudden shift, Effie misjudges his step and runs straight into a tree.

"Effie Falls in Love" embodies Wilder's lyrical side. The outer sections are largely diatonic, which contrast with a chromatic middle section. Whether this love is directed towards the monkey, another elephant, or is simply the dazed result of the collision with the tree is up to the listener.

In "Effie takes a Dancing Lesson", the pianist takes on the role of a dance instructor. After the instructor demonstrates the step, Effie (the tuba) follows suit, although not very well, judging from the off-beat accents and wrong notes in his part. The instructor, not entirely content with the effort, shouts furiously, (portrayed by the repeated accented notes in the piano part). The movement ends with Effie finally mastering his steps and being cheered on by the instructor.

"Effie joins the Carnival" is a fun movement, with a simple opening section, quickly becoming frenzied in both parts.

The final movement, "Effie Sings a Lullaby" is a relaxing melody, as Effie settles down to rest after a long day of activity.

5. Three Miniatures

Anthony Plog (b. 1947)

- I. Allegro Vivace
- II. Freely
- III. Allegro Vivace

Composer, conductor, and trumpet player Anthony Plog enjoyed an illustrious career as a trumpet player and teacher. In 2001 he retired from playing to devote his career to composing. Previous teaching duties include posts at the Norwegian Music Academy in Oslo, California State University at Northridge, the University of Southern California, Music Academy of the West, Schola Cantorum (Basel Switzerland), Malmo Music Academy (Sweden), the Accademia di Santa Cecilia (Rome), and the Staatliche Hochschule für Musik (Freiburg, Germany). As a performer, Plog played with the Basel Symphony Orchestra (Switzerland), Malmo Symphony Orchestra (Sweden), Utah Symphony Orchestra, San Antonio Symphony Orchestra, and the Los Angeles Philharmonic Orchestra.

Plog's early compositions were exclusively for brass instruments, and some of these works have appeared on lists for competitions in Munich, Porcia (Italy), France, Brno (Czech Republic) and Lieksa (Finland). He has since broadened his compositional horizons to include other media, recently completing two operas and two horn concertos.

The *Three Miniatures* were composed for Daniel Perantoni, a tuba soloist and pedagogue, currently Professor of Tuba at the University of Indiana (Bloomington). In addition to the version performed today, the work is also available with wind band accompaniment. It is intended for performance on the F or E-flat bass tubas. The three movements extend the limits of range and technique of the advanced player and are rhythmically driven.

In the composer's own words: "When I wrote the piece, I had Dan and also Roger Bobo as role models for the different types of playing (elegant for Don, and aggressive for Bobo) and so I was basically trying to explore the different approaches".

The first movement is melodically angular and features frequent mixed meters. The arpeggiated, driving opening motive in the tuba provides the basis for the entire work. A percussive piano part introduces a scalar middle section, but quickly returns to the material of the opening motive. A dreamy piano episode introduces a new rhythm reminiscent of *Mars* from Holst's *Planets*. Another link reintroduces the opening

theme, at the original pitch. The coda section features a chromatic scale passage in the tuba, before the work ends softly in the high range.

The second movement indicated “Freely”, centres on the recitative-like opening theme played by the tuba and provides ample opportunity for *ad libitum* expression.

The themes of the third movement are mostly scalar, fully exploiting the octatonic scale. A bass guitar-like line played by the piano introduces a more lyrical theme in the tuba, before returning briefly to the scalar motive, this time in the dominant. The middle section is characterised by frequent syncopations. In the final, faster section, Plog requires the piano to execute a flurry of scalar sequences with the tuba providing ornamental accompaniment.

Addendum 49: Programme Notes for Recital 1

Rodney Newton (b. 1945)

Capriccio

Newton majored in composition, music theory, conducting and percussion at the Birmingham Conservatory of Music. Thereafter, he performed as a percussionist with various orchestras, including the London Symphony Orchestra. He received a PhD from the University of Salford. A certain portion of his career was spent in the music publishing business with United Music Publishers. During 1997-2000 he taught film music composition and orchestration at the London College of Music. Newton has always been associated with brass and wind bands; he has composed and arranged various works for these ensembles and served as a coordinator of light entertainment music at the Williams Fairey Engineering Brass Band. Newton presently holds the position of composer and advisor to the Band of Her Majesty's Coldstream Regiment of Foot Guards. His output includes 14 symphonies, 5 string quartets, concertos for flute, euphonium, and tuba, as well as many other works for brass and concert bands.

Capriccio (2002) was written for one of Britain's leading tuba players, James Gourlay, at present the Artistic Director of the River City Brass in Pittsburg, Pennsylvania. The work is a favourite among tuba players, being both fun to perform and a crowd pleaser. Although written with the E-flat tuba in mind, it suits the F tuba just as well.

The almost percussive feel to the first theme harks back to the *Concerto for Bass Tuba* by Ralph Vaughan Williams (1954), whilst the second theme, marked *cantabile*, is more lyrical in nature; this theme is reminiscent of a British brass band euphonium solo. The percussive drive later returns, giving way to the cadenza, which develops themes presented previously over the four-octave range. The first two themes are then played in reverse order, ending the movement in the same manner as the beginning. The version performed today was arranged for tuba and piano by the composer.

Paul Hindemith (1895-1963)

Sonata für Basstuba und Klavier

Allegro pesante

Allegro assai

Variationen

Hindemith is arguably one of the most significant German composers of his era. His early works conform to the late Romantic idiom, his middle period may be considered

expressionistic, and the music of his mature period (from the 1920s onwards) is known for being contrapuntally complex.

The *Neue Sachlichkeit* movement in Germany during the 1920s represented an opposition to the overtly emotional aesthetic of the expressionist movement. The musical branch of this style manifested in a shift away from the excessive chromaticism prevalent at the time. Along with *Gebrauchsmusik* (utility music), the intention was to create art that was accessible to a larger section of society. Despite the fact that the *Sonata* was written much later than the peak of the *Neue Sachlichkeit*, it maintains many of these traits, and is an example of Hindemith's contrapuntally complex style.

Between 1936 and 1950 Hindemith wrote a series of sonatas for all the orchestral instruments, including a sonata for *viola da gamba*, four horns, and alto horn. In a letter to his friend and publicist Willy Strecker, Hindemith outlines his two reasons for writing these sonatas:

“...there is nothing decent available for these instruments except for a few classic examples...”;

“...they serve as a technical exercise for the big job I hope to tackle this Spring, namely the Kepler opera, to be called *Die Harmonie der Welt*”.

The *Sonata für Basstuba und Klavier* (1955) is the last work in the series. Although his compositional style had developed since, it remains one of only two works in which he experimented with twelve-tone (dodecaphonic) techniques. Hindemith coined his twelve-tone system “*Totaltonaliteit*”, implying that it combined both tonal and atonal principles.

The sonata-form first movement begins with a partial statement of a twelve-tone row, using notes and intervals, particularly leading notes to establish the B-flat tonality of the movement. A characteristic of this movement is the use of poly-meter, present already in the opening measures – the piano part is in 2/2 and the tuba part in 3/2.

The second movement, in rounded binary form, is in the keys of D-flat, C and D-flat respectively. The tuba plays the main theme, with piano accompaniment syncopations. A *hemiola* section reverses the scheme – now the syncopated accompaniment appears in the tuba part against the main theme, which is played by the piano. The middle section contains a repeated figure (in C) before the main theme returns. This time it is presented by the tuba in syncopation, with the piano accompaniment on the strong beats. The *hemiola* passage forces the main theme back onto the strong beats, where a written out *ritardando* ends the movement.

The third movement, a theme with three variations, explores the tonalities of D-flat, A, C and B-flat. The theme is presented at the beginning by the tuba, with the variations following. A cadenza, inserted between the second and third variations, links the tonal centre of C to the original key of B-flat. As with all the sonatas in Hindemith's series, the instrumental parts are written with very gifted amateurs in mind. The piano parts are very challenging; this is especially evident in the final variation.

Jan Koetsier (1911-2006)
Sonatina per tuba e pianoforte
Allegro
Tempo di minuetto
Allegro moderato

Jan Koetsier was born in Amsterdam and studied piano from an early age. His family relocated to Berlin, and at the age of 16 he became the youngest person to pass the entrance audition for the *Berlin Hochschule für Musik*. In 1940 Koetsier worked as conductor for Berlin Radio, but due to political turmoil he left the position and instead accompanied the dancer Ilse Meudtner on her year-long tour. Thereafter Koetsier became the conductor of the *Kammeropera* in Den Haag ('The Hague'), and eventually second conductor of *Het Koninklijke Concertgebouw Orkest* (1942-1948). After a short period with the *Residentie Orkest*, Koetsier was offered a position as principal conductor of the newly formed Bavarian Radio Symphony Orchestra. He held this position for 16 years, thereafter assuming the role of Professor of Conducting at the *Hochschule für Musik* in Berlin. Upon retirement, Koetsier devoted his time mainly to composition, and made a substantial contribution to the brass world. He formed the Jan Koetsier International Competition (1999), and his involvement with various soloists and ensembles led to several commissions for new compositions.

Today, many of these pieces have become part of the standard repertoire for brass players around the world. The *Sonatina* for tuba is one of these examples, as it appears on many international repertoire lists for tuba. The work is firmly in the Romantic tonal idiom, with an emphasis on melodic writing, with frequent chromaticism.

The first movement (E-flat, *Allegro*) contrasts a *marcato* and a lyrical, almost Mozartian theme. It features syncopated jazz rhythms, demonstrates various stylistic capabilities of the tuba; Koetsier is explicit with his marking of dynamic contrasts.

The second movement is a brief minuet in C. An arpeggiated *marcato* theme serves as a contrast to a very lyrical scalar passage, demonstrating the melodious qualities of the instrument.

The final movement is a whimsical rondo with frequent metrical shifts. The movement can best be described as a series of contrasting moods or scenes, which range from serious to comical. The *sostenuto* theme is always coupled with a comic counter-motive. The rest of the movement contains waltz-like moments, and even sometimes sounding like a polka. It ends with a familiar motive from Alec Wilder's *Effie the Elephant* Suite for tuba and piano.

Rolf Wilhelm (1927-2013)
Concertino for Tuba and Wind Band
Moderato deciso
Andante lirico
Allegro comodo

Wilhelm enrolled at the *Musikhochschule Wien* at age 15, where he studied composition with Joseph Marx and piano with Grethe Hinterhofer. His musical career was hampered by compulsory military service, which resulted in his captivity and subsequently with time served as a prisoner of war. Released in 1945, he returned to his war-ravaged hometown of Munich, where he continued his studies at the *Hochschule für Musik* in Munich in 1946 under Heinrich Knappe (conducting) and Joseph Haas (composition).

When Wilhelm was only 19, Munich Radio commissioned him to compose music for the play *Das Gespenst von Canterville*. Impressed by his abilities, he was employed as a freelance composer. His compositional output included music for 250 radio plays, scores for over 500 television productions for the German and Austrian television corporations, and over 65 cinematic scores. While Wilhelm's work is not widely known outside Germany is fairly limited, he remains an example of one of the foremost film composers from that country.

In 2012, Wilhelm received the I.T.E.A. (International Tuba and Euphonium Association) Lifetime Achievement Award for his contributions to the tuba and euphonium repertoire. These works include the *Duett Concertino* for trumpet, euphonium and wind band, the *Concertino* for euphonium and wind band, *Five Etudes for Solo Tuba*, *Five Pieces for Brass Instruments*, *Ragtime* for two tubas, *Bavarian Stew* for tuba-euphonium quartet, and the *Concertino* for tuba and wind band.

The *Concertino* (1983) was composed for Robert Tucci, the principal tuba player of the Bavarian State Opera; it received its premiere in the same year, with Tucci as

soloist with the United States Air Force Band (Washington), at the ITEA Conference at the University of Maryland. The work is written specifically for the F tuba.

In recent years, the *Concertino* has enjoyed a revival, having been recorded by Patrick Sheridan, Joseph Skillen, and Jens Bjørn-Larsen. Furthermore, it was one of the prescribed works for the Tuba Artist competition at the I.T.E.A. Conference in Tucson, Arizona, in 2010. The work is light in character, equally enjoyable to both performers and listeners, and provides the soloist with ample opportunity to display virtuosity and lyricism on an instrument not normally associated with these traits.

“My intention was to create an easily comprehensible, uncomplicated work of a pleasant nature for the tuba, that fascinating instrument with an enormous range of more than four octaves. Further, I wished to contradict in a jovial manner the ever-prevailing prejudice that the tuba was an uncultivated monster suitable only for march music. The second movement in particular proves how expressive and lyrical this “transubstantial” instrument can be”

(Programme notes for the Solo Tuba – Gary Bird)

The sonata-form first movement is characterised by the accented and rhythmical main theme. Wilhelm’s fondness for ragtime is evident not only for his piece for two tubas with the same name, but also in his choice of including an episode from the genre into a major work. The cadenza, a dialogue between tuba and piano, showcases the four-octave range of the tuba; details regarding each tempo and dynamic change are explicitly marked. The main theme is transformed into a chorale-like passage before a fast sequence between the soloist and accompanist leads to the end of the movement.

The second movement provides a lyrical contrast to the outer movements.

The third movement in 6/8 time is playful, and sometimes bombastic in nature. A staccato figure preceded by a double appoggiatura is the principal musical motive in this movement. Wilhelm’s attention to detail is again evident in his explicit directions to the performer (for example, he even instructs the player when to use *vibrato*). The middle section features elements reminiscent of Bavarian folksong. Dialogues between tuba and piano permeate the cadenza, and the movement ends in a furious *stretto*. The version performed today was arranged for tuba and piano by the composer.

Vittorio Monti (1868-1922)

***Czardas* (Arr. Walter Hilgers)**

Originally a composition for violin and piano, Monti’s *Czardas* has since been adapted for many instruments. One of the first arrangements for tuba was performed by John Fletcher in the previous century. Major tuba soloists around the globe have since performed the piece – these include Walter Hilgers, Patrick Sheridan and Øystein Baadsvik. This arrangement by Hilgers was written specifically with the F tuba in mind. The slower theme provides the tubist with ample opportunity to display lyricism, whilst the faster sections provide a showcase for virtuosity.

Addendum 50: Respondent biographical questionnaire results (Respondents 1-5)

Respondent information		Respondents 1-5				
		1	2	3	4	5
1	Respondent age	59	39	38	47	57
2	Respondent gender	M	M	M	M	M
3	What is your highest academic music qualification?	PhD (1988)	DMA (2012)	Diploma	DMA	MMus
4	Do you have any other practical (tuba) qualifications aside from the one mentioned above?	Yes	Yes	No	Yes	Yes
5	If yes, please list the qualifications, and the years in which they were awarded	MMus (1991) LRSM (1978) BMus (N/A)	MMus 2005 BMus 2003	N/A	MMus in Music Education (2001) BSc in Music Education (1993)	BMus (N/A)
6	Total number of years of university teaching experience	32	14	12	15	13
7	Are you currently employed full at a tertiary institution?	Yes	Yes	Yes	No	Yes
8	What academic year/level and number of students are you currently teaching at each institution?	N/A	BMus 1st year: 6 2nd year: 3 3rd year: 2 4th year: 2 MMus 1st year: 1 2nd year: 1	University Conducting: 1 Academy Tuba students: 3	N/A	PG Dip Music: 1 BMus Final year: 1 Bass trombone (A4) = 1 Music Education (foundation) = 1 B4 jazz trumpet = 1
9	Full time (FT) or part-time (PT)	FT	FT	PT	PT	FT

10	What are your duties at this institution/s?	Brass tuition: 22 hrs Brass Method: 3hrs Ensemble: 6hrs	Applied lessons: 18 Studio class: 1 Committee work: N/A Research/Scholarship: N/A Service to the field: N/A Teaching 55%: 18 students, 1 studio class	Ensemble conducting: 1hr Practical tuba tuition: 3hrs	Supervision of dooctoral student, masterclasses, workshops	Brass tuition: 12hrs Repertoire 1: 1hrs Repertoire 2: 1hr Teaching method 1: 1hr Teaching method 2: 1hr Studio class: 1hr Orchestral sectionals: 1hr Wind band sectionals: 1hr
11	How many students are you tuba performance studies to?	0	6	4	0	4
12	Does your institution have or utilise a syllabus for tuba performance studies in your teaching?	No, Module Guide	Yes	No	No	Yes
13	Did you compile the syllabus yourself? If no, please elaborate on who compiled the syllabus.	Yes	Yes	N/A	N/A	Yes
14	What genres of materials do your students cover in their various years of study (solo repertoire, chamber music, orchestral excerpts etc.)?	Solo repertoire, chamber music (Brass), orchestral excerpts, brass ensemble	Fundamentals, flow studies, solfege, transposition, intonation and rhythm, clefs, tunes, solos, etudes	Solo, orchestral, technical, scales, fundamentals, chamber music tuba/euph ensmeble	N/A	Scales and arpeggios, scale patterns, method books, solo repertoire, books and duets.
Respondent positions						

	Respondent position: Current	General brass professor	University tuba lecturer, Principal Tuba in opera orchestra	International tuba soloist, occasional university brass lecturer, masterclass coach, conductor, university conducting/brass methods teacher	Music teacher	General brass lecturer, arranger, composer
	Past (if previous positions are relevant only)	N/A	N/A	N/A	Associate professor of euphonium	Principal trombonist with symphony orchestra

Addendum 51: Respondent biographical questionnaire results (Respondents 6-13)

Respondent information		Respondents 6-13							
		6	7	8	9	10	11	12	13
1	Respondent age	47	62	52	40	37	71	33	37
2	Respondent gender	F	M	M	M	M	M	M	M
3	What is your highest academic qualification?	DMA	DM	BMus	BMus	Professional Performance Diploma (2006)	MM	DMA (2015)	BMus (Hons) (2001)
4	Do you have any other practical (tuba) qualifications aside from the one mentioned above?	MMus BMus	MMus BMus	Yes	No	Yes	Yes	Yes	Yes
5	If yes, please list the qualifications.	N/A	N/A	LRSM (1984)	N/A	PD (2006) Bmus Hons 2004	BMus (Education) (1971)	MMus BMus	PG Dip (2002)
6	Total number of years of university teaching experience	18	41	25	2	28	47	8	3
7	Are you currently employed at a tertiary institution?	Yes	Yes	No	No	Yes	Yes	Yes	Yes

8	6. What academic year/level and number of students are you currently teaching at each institution?	Tuba:1 Euphonium: 5	Bmus 1st year: 1 2nd year:1	Tuba: 1	N/A	Institution 1 Undergraduate: 4 Postgraduate: 1 Institution 2 Undergraduate: 6 Postgraduate: 1 Institution 3 Undergraduate: 2 Postgraduate: 2	N/A	BMus 1st year: 1 2nd year:3 3rd year: 4 4th year: 3	Diploma 3rd year: 1 BA 1st year:1
9	Full time (FT) or part-time (PT)	FT	FT	PT	N/A	FT	FT	FT	FT
10	What are your duties at this institution/s?	Brass Tuition: 6hrs Music History: 6hrs Brass Methods: 2hrs Chamber Music: 2hrs Ensemble: 1hr	Brass tuition: 9 hrs Music history: 3 hrs Brass techniques: 2hrs Instrumental conducting: 2hrs	Practical Tutor: 1hr	N/A	Institution 1: 6hrs Institution 2: 3hrs Institution 3: 2hrs	Tuba instruction: N/A Recruitment: N/A Administration : N/A	Tuba and euphonium instruction: N/A	Brass instruction: 12hrs Big band director: 2hrs Brass ensemble conductor: 2hrs Studio class: 2hrs
11	How many students are you teaching Tuba performance studies to?	1	2	1	N/A	22	16	9	2

12	Does your institution have or utilise a syllabus for tuba performance studies in your teaching?	Yes	Yes	Yes	No	Yes	Yes	Yes	No, module guide
13	Did you compile the syllabus yourself? If no, please elaborate on who compiled the syllabus.	Yes	Yes	Yes	N/A	Salford: Yes RNCM: committee of all tuba teachers	Yes (Assisted by graduate student)	No, adapted from predecessor	No, module guide by HOD
14	What genres of materials do your students cover in their various years of study (solo repertoire, chamber music, orchestral excerpts etc.)?	Syllabus contents, band excerpts, chamber music (tuba/euphonium ensemble, duo, trio, quartet, brass quintet etc.)	Solo, Chamber Orchestral excerpts	solo, scales, books, os graded	n/a	Mostly solo repertoire, with chamber music and orchestral repertoire at one institution	Solo repertoire Etudes Orchestral and band excerpts	Solo repertoire Etudes Orchestral and band excerpts	Solo repertoire Studies/etudes Wind band repertoire Brass quintet Jazz standards Bass lines Improvisation
Respondent positions									
	Respondent position: Current	Professor of tuba and euphonium	Retired	Principal tuba with symphony orchestra, university tuba instructor	Brass teacher and condutor at music school	International tuba soloist and university tuba lecturer	Professor of tuba	Assistant professor of tuba and euphonium, tuba soloist	Low brass lecturer

	Past (if previous positions are relevant only)	N/A	Professor of tuba and euphonium, principal tubist in symphony orchestra	Head of brass department	Principal tubist in symphony orchestra, university tuba lecturer	N/A	Professor of tuba and euphonium, principal tuba with opera orchestra	N/A	N/A
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