The relationship between private studio-based piano lessons and home-based private practice: Case studies of young piano students

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Declaration

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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Abstract

This thesis examines the relationship between studio-based instrumental teaching and home-based private practice within the context of Cyprus. It focuses on practice-related behaviours and actions, as well as on factors that may influence this relationship (e.g., parental involvement, personal characteristics and motivation). Specific interest is given to the level of expertise to examine its impact on the teaching and learning of practice. Actions and behaviours of the teachers and the students are investigated through an in-depth examination of a set of private piano lessons and subsequent home-based practice sessions over a specific period of time. The research is based on six case studies, with the participants being chosen from a private music school located in Cyprus. For the purposes of this study, three different levels of musical expertise were used and assessed under the Associated Board of the Royal Schools of Music (ABRSM) criteria. The aim was to examine any influences of competency level on the relationship between studio-based lessons and students' home-based practice. Videoed observations of the lessons and videos of the home-based practice sessions were used to gather data over four weeks, as well as data from unstructured interviews with the students and the teachers. The video data was analysed using a specially designed observation checklist drawn from the literature and results from two pilot studies, which was comprised of practice strategies, actions and behaviours found during the lessons and the practice sessions. A multi-methods approach to design and analysis was used, drawing on quantitative and qualitative perspectives to examine how categories from the observation checklist were used under different circumstances. Semi-structured interviews were also used and subsequently analysed with the use of the NVivo software. The results from all the data focus on two main themes: i) teaching methodologies that are related to practice and ii) practice strategies that were used in home-based practice by the students. Among the themes that emerged from the studio-based data were i) advisory comments of specific strategies, ii) reference to previous practice, iii) reference to future practice and iv) written notes about practice. Likewise, themes found from the home-based practice sessions were i) quantity of practice, ii) concentration while practising, iii) usage of own choice and tutor recommended practice strategies, and iv) identification of mistakes.

The main findings are that the student's level of expertise can influence the practice relationship between the studio-based lessons and the home-based practice sessions. However, according to the analysis, its influence may vary upon different teaching approaches (e.g., reference to future practice and written notes) depending on the teacher's perceptions.

Furthermore, findings revealed additional factors that can have a direct impact on the practice relationship. The teaching method applied by the teachers during the lessons was found to be one of the main factors influencing the student's behaviour in the subsequent practice. Other factors of influence were the age of the students, their achieved level of practice development, self-regulation, personal characteristics and lastly, motivation and enjoyment of this activity. Findings also revealed several external factors that may have weight on the relationship between lessons and practice. The research showed that availability of time, other responsibilities, parental involvement, health issues and other aspects of the home environment (e.g., quite environment with no distractions) are possible influences on the studio-home practice relationship. However, their level of dynamic impact may vary with individuals. All findings are discussed in the context of this research by providing possible aspects that may influence learning within private music conservatories. A theoretical synthesis of the teaching and learning cycle is also proposed, which draws on all the findings from the six case studies. Finally, implications are made for instrumental tutors and their students.

Impact Statement

My research sought to provide an insight into the nature of the teaching and learning process of home-based instrumental practice, with a particular interest in one of the factors of possible influence, the students' level of expertise. It is suggested that detailed research into this topic can provide a more profound knowledge and understanding of how private instrumental practice relates to the studio-based lesson – and have the potential, therefore, of increasing the quality of instrumental teaching and learning. The findings emphasise that the central role of instrumental teachers is to help their students develop their musical skills to the fullest and potentially reach a high level of expertise. Teachers' greatest challenge is through successfully engaging their students during the lessons and motivating them to undertake an activity in private that is often perceived as non-enjoyable, but necessary – to practise. Aiming to succeed in this, instrumental teachers need to develop knowledge and understanding of any available effective teaching approaches in relation to practice. However, they also need to be aware of the factors that may directly influence the learning process so as their students successfully develop their practice skills.

This research investigates the practice relationship of pre-college students in a music studio-based environment set by the teachers. This research fills a gap in the existing literature into instrumental teaching and learning, as it is the first study that focuses on pre-college students. In addition, the research highlights several teaching approaches concerning practice, adding specificity to the perception of this topic. The research findings may serve as a guideline for educators and researchers to gain a deeper understanding of instrumental lessons and instrumental tutor behaviours in relation to practice. However, based on the limitations of this research, it is strongly recommended that a further investigation be undertaken within a wider population as it should deepen and develop the model reported in the final chapter and reveal additional teaching approaches that may enhance practice development.

Despite the limitations resulting from the usage of case studies as a research method, the present study nevertheless provides insights into how the teaching and learning process is multi-faceted, related to tutor behaviour and subsequent private action by the student. Although such awareness may be common, this is the first systematic study of the process over time. In addition, the identification of possible factors having an impact on the studio-home practice learning relationship raises new challenges as well as opportunities for music researchers.

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Chapter 1
Introduction

1.1 Introduction

This Chapter presents the study's main objectives, starting from a brief reference to the background from existing research on instrumental practice and musical expertise. The reference to literature is designed to aid the comprehension of the purposes of the current research. It also provides details about the aims, purpose and proposed audience of the study. The hypotheses, the research questions and the research methods are also presented, as well as the different stages of the research. Chapter 1 closes with information about the thesis outline and definition of key terms.

1.2 Background to the research

This research focused primarily on teaching and learning within the Western 'classical' (Art Music) tradition, and therefore all research cited focuses in this direction. In this area, instrumental practice has been identified as a central element in developing musical expertise (Bloom, 1985; Manturzewska, 1990; Hallam, 2001a, 2001b). Although researchers have proposed different definitions of effective practice, 'deliberate practice' is the term that has often been linked with the development of expertise (Ericsson, Krampe and Tesch-Romer, 1993). Deliberate practice has been defined as 'a highly structured activity with the explicit goal of improving some aspect of performance…Individuals should invent specific tasks to overcome weaknesses and monitor performance so that further improvements can be made' (Williamon and Valentine, 2000, p.355). Such a highly focused activity requires concentration and effort, and for that reason, it has been argued that it is not necessarily an enjoyable activity. Nevertheless, it is a key element for musicians to reach high levels of expertise (Ericsson et al., 1993).

Within the literature that focuses on Western classical music tradition, two main aspects of instrumental practice are considered crucial for the development of expertise, the quality and the quantity of practice (Jorgensen and Hallam, 2009). Although there is a perceived direct relationship between the quantity and the quality of instrumental practice, their impact on the student's progress may vary. The effectiveness of practice is reported to be mainly determined by its quality rather than quantity (Bonneville-Roussy and Bouffard, 2014). The practice strategies adopted by student musicians are critical to achieve their goals (both short-term and

long-term) and maintain the improvement of performance (Hallam, 2001a; 2001b). Many researchers suggested that the development of appropriate practice strategies is directly linked with the development of expertise (e.g., Sloboda et al., 1996; Sloboda, 1991). As musical expertise develops, students should gradually build a repertoire of effective practice strategies, and over the years, should reach a level where they have knowledge and understanding of the usage of these strategies. Literature often refers to this level as a form of 'self-regulation' (Varela, Abrami and Upitis, 2014; Miksza and Tan, 2015), while it is also known as an example of 'metacognition' (Hart, 2014; Jorgensen and Hallam, 2016). The development of metacognitive skills allows students to identify and select available strategies, as—at least in theory—their knowledge and understanding allow them to distinguish when, why and where each practice strategy can work best (Barry and Hallam, 2002).

It could take years for musicians to develop a repertoire of appropriate practice strategies and more generally reach an appropriate metacognitive level (McPherson, 2005). It is therefore not surprising that the use of particular strategies will likely change as expertise develops. In addition, some strategies will not have the same effect on students' performance behaviours as previously (Nielsen, 2004). In these cases, they need to constantly evaluate their own progress and the ways that they approach practice. When students become aware of strategies that do not have the same impact as before, they need to identify alternative strategies and replace them with more effective strategies. The development of appropriate metacognitive skills is, therefore, seen as crucial so that progress can continue.

From the early 1990's until the present time, research that focuses on instrumental learning in the Western Art music tradition has had a prime focus on the development of musical expertise and the development of instrumental practice strategies. However, although there is a large amount of evidence about the development of practice strategies through various stages of expertise, limited research has focused on the relationships between the lessons and the subsequent private practice sessions. The current doctoral research is intended to fill a gap that was identified by exploring the process to which the teaching of practice strategies becomes the acquisition of knowledge for the students, and—therefore—an application takes place, with a particular interest in the influence of the student's level of expertise. Triangulation of the topics 'music practice', 'musical expertise' and 'teaching and learning processes' should reveal a deeper understanding of the teaching methods that can be best used for the student's development of appropriate practice strategies, related to different levels of expertise.

In addition, limited research was identified for instrumental teaching and learning within the context of Cypriot musical conservatories. Cyprus is one of the European countries that had many external cultural influences throughout the years, including in the field of arts (Skoutella, 2015). One of the most substantial impacts on the island's educational system is considered to be the British colony, as it played a significant role in the establishment of musical education (Hasikou, 2019). During the early British colonial period, Western classical music was initially introduced to the Cypriot community through concerts, while at a later point, they also provided opportunities to the Cypriots to receive formal instrumental instruction (Hasikou, 2015). During the following years, the first private music conservatories were established by Cypriot musicians, and so instrumental teaching began to flourish. Since then Cypriot community had expressed its gratitude to the British community for its contribution to their cultural development (Skoutella, 2015). Thus, until the present day, the Cypriot educational system in the field of music has influences from the British community. This is particularly evident in the education within private contexts (private music conservatories), as Cypriot instrumental teachers adapted the ideology to use recognised examination systems (e.g., ABRSM[1]) from Britain (Teklos, 2011; Papageorgi, 2007). The study examines teaching and learning within this context, as it can enhance existing literature, which at the moment is limited. Further information on the Cypriot context for this study can be found in Chapter 4.

1.3   Aims of the study

The study is focused primarily on instrumental teaching and learning within the Western 'classical' tradition, and therefore all models of development (e.g., expertise) that are used in the thesis arise from studies in this genre. The principal aim of the study is to investigate the relationship between studio-based instrumental teaching and home-based private practice. Specific interest is given to the process whereby education becomes knowledge and subsequently turns into action for instrumental learners. The nature and role of education in 'instrumental practice' is explored in-depth, along with actual home-based practice carried out by the students, aiming to fill the gap identified in the existing literature. This study will also aim to explore if and how the student's level of expertise might influence this relationship. This is considered to be the only study that has investigated musical expertise from this point of view. Lastly, this research aims to identify additional factors of influence and issues related to instrumental learning within the Cypriot context.

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[1] Associated Board of the Royal Schools of Music (https://cy.abrsm.org/en/)

1.4 Audiences for, and purposes of, the study

The purpose of this study is to enhance existing knowledge on the relationship between studio-based lessons and home-based practise sessions. At the moment, there are a limited number of studies on this subject with a Western classical music tradition, and findings can reveal valuable information for instrumental teaching and learning. Knowledge and understanding of factors influencing directly or indirectly this relationship can greatly aid the effectiveness of children's practice development. Another purpose of this study is to reveal information about instrumental teaching and learning situated in Cyprus as, at the moment, there is limited research in relation to private Cypriot conservatories. Information can enhance current knowledge on how these enterprises run, but most importantly, it can reveal information about factors influencing instrumental learning within this type of enterprise.

The topics addressed in this study will be of particular relevance to piano teachers, Cypriot educators and researchers who are interested in the topics of i) piano practice of pre-college students, ii) instrumental teaching and learning in private Cypriot musical conservatories, iii) theory of expertise and practice development and iv) relationship of practice between private piano lessons and home-based practice. Therefore, the findings of this study can serve as a guideline for educators and researchers seeking to gain more profound knowledge and understanding of these topics.

The findings of this study can also be used for future studies aiming to examine the relationship of practice between private lessons and home-based practise. Results can also be combined with other studies to provide stronger evidence in this domain. In addition, findings can serve researchers interested in investigating instrumental practice within the Cypriot context, as it provides valuable information about factors of influence and any related issues.

Lastly, this research provides a proposed framework model of the learning cycle (see Chapter 9), which researchers can use in future studies. The development of this framework can enhance current knowledge and understanding of the relationship of practice between instrumental lessons and home-based practice. However, considering the limitations of the present study, it would be worth examining this topic within a larger population. This could also enhance the development of the suggested model.

1.5 Hypotheses of the study

This research aims to test the following hypotheses:

H1: Grade 1 students' practice strategies are closely related to the practice suggestions from their piano teachers in the observed lessons.

H2: Grade 1 piano tutors provide explicit practice guidance orally in the lesson and back this up with written guidance for home practice.

H3: Grade 1 student's practise mainly by playing throughout the piece and not by using a part-whole method.

H4: Grade 5 students' practice strategies are less closely related to the practice suggestions from their piano teachers in the observed lessons and more on a growing self-regulation.

H5: Compared to Grade 1 students, Grade 5 students are likely to practise for fewer yet longer sessions each week.

H6: Grade 5 piano tutors provide some explicit practice guidance orally in the lesson and do not use a notebook, but back this up with written guidance on the score for home practice.

H7: Grade 5 students practise by playing the pieces through as a whole, while they also begin to spend time on isolation on difficult parts.

H8: Compared to Grade 1 and 5 students, Grade 8 students are likely to practise for a few long sessions each week.

H9: Grade 8 students' practice strategies are not closely related to the practice suggestions from their piano teachers in the observed lessons, but more on self- regulation.

H10: Grade 8 students do not necessarily spend much time playing the piece through as a whole in their practice, unless a performance appears imminent.

H11: Grade 8 piano tutors provide some explicit practice guidance orally in the lesson and do not use a notebook but may mark the score.

H12: The higher the level of expertise, the greater the possibility for the practice to be self-regulated and less related to the piano teacher's instructions in the lesson.

1.6   Research Questions

Three research questions were formed to test the validity of the hypotheses and also to act as a guide for the completion of this research.

Research Question One:

What is the nature of the relationship between one-to-one studio-based instrumental lessons and home-based private practice?

Research Question Two:

To what extent and how does the nature of the lessons influence how students use their time whilst practising?

Research Question Three:

Is the level of expertise a factor of influence in the relationship between studio-based lessons and home-based practice?

1.7   Methods used for the research

The main data collection contained the following methods:

- Case studies allowed a micro-analysis to be undertaken of the identified behaviours and actions;

- Observations of four consecutive studio-based lessons were made for each student by the researcher;

- Videos were recorded by the researcher of all of the lessons that were conducted; and

- Videos were recorded by the students of all of the home-based sessions that were carried out in between their lessons.

1.8   Duration of the research

The research was conducted from 2012 until 2019. For its completion, five different phases were undertaken over a period of seven years.

1.8.1   Phase One (2012)

The first phase of the research integrated a systematic review of literature that embraced two main topic; 'musical expertise' and 'instrumental practice'. Elements regarding practice strategies and teaching methods were retrieved from the two topics to begin the creation of a research tool that could be used for the main fieldwork. A mind-map was then used to classify categories with elements that were identified from the literature. As a next step, a pilot study was conducted in Cyprus (I) with the aim to enhance the development of the research tools for the main study. Findings also aided in the development of the conceptual framework for this research and the selection of the methodology and the methods.

1.8.2 Phase Two (2012-2013)

Another pilot study (II) was conducted within the context of Cyprus to test the selection of the research methodology and methods. A micro-analysis of the collected data was undertaken, and an evaluation of the research methods tool place. It also enabled the revision of the research tools for the main study.

1.8.3 Phase Three (2013-2014)

Amendments to the research tools were made before their application in the main study. Additional research tools were created based on the needs of the research. All the essential procedures were made, including getting access for data collection and choosing the participants of the study. The main study took place in 2014 in Cyprus and lasted for two months in total, as observations for each student took place for four consecutive weeks.

1.8.4 Phase Four (2014-2016)

Initially, a micro-analysis of the collected data took place from 2014 until 2016. Each case study was analysed separately with the use of the research tools, and then a comparison of all case studies was made. Preliminary conclusions were drawn by taking into consideration the main themes from the literature concerning the development of expertise and development of practice strategies.

1.8.5 Phase Five (2017-2019)

Phase five was the final stage, which included the final analyses, additional statistical analyses, text revisions, and the completion of the thesis.

1.9 Thesis Outline

The PhD thesis consists of nine Chapters, allowing the reader to acquire an understanding of the process that was followed, as well as to comprehend the outcomes. Chapter 1 is an introduction, aiming to outline all of the components of the thesis, by giving a perspective to the reader about its main objectives. It provides an overview of the procedure that was followed until completion, by explaining the phases and procedures that were followed. An introduction of the aims and purposes of the study, the proposed audience, the hypotheses, the research questions and the methodology and methods that were used for data collection follows, so as to provide the reader with key information about the design of the research. This Chapter closes with an introduction of each Chapter separately, by providing an explanation about their components.

Chapter 2 begins with a review of literature on the development of expertise within the field of music. The Chapter provides an exploration of different terminologies of an 'expert' that researchers in the subject of music used. Key theories of the development of musical expertise are also discussed. Various levels of the development of musical expertise are explored in-depth, as they serve as a basis for the current research. All of the factors that can have an impact on this process were taken into consideration and examined in detail. The characteristics of experts are also explored in this chapter, with reference to the musical skills that instrumental learners acquire over time. Chapter 2 then focuses on the theoretical background of 'instrumental practice' by taking into consideration issues related to teaching and learning. It reports different terminologies of 'instrumental practice' that have emerged within the field of music education. An exploration of past research on the topic instrumental practice follows. This includes a deeper examination of the main components of effective practice, identified by researchers as 'quantity' and 'quality'. Each of these variables is explored separately by addressing different issues, including their effect upon the development of musical expertise. Quantity of practice is initially discussed through the topics of the physical changes over time, amount of practice, length of practice sessions and also parental involvement. Analysis of issues concerning the quality of practice follows, with reference to metacognition. Practice strategies considered effective are also discussed, providing an overview of those that contribute towards progress. All of the strategies explored in this Chapter serve as a theoretical grounding for the creation of the research tools (e.g., observation checklist) used for data collection and analysis. This Chapter closes with reference to previous research on the relationship between lessons and subsequent practice sessions.

Chapter 3 provides an insight into the chosen research methodology. It presents the applied research paradigm along with a discussion about methodological considerations. The Chapter also presents results from the two pilot studies and discusses the key aspects and their contribution to this research. It also reports the methods used for this research, while it also takes into consideration their advantages and limitations. Part of this Chapter is also dedicated to the creation of the research tools that were used for the data collection and analysis. Lastly, Chapter 3 closes with a discussion on researcher bias and challenges faced while conducting the research, as well as strategies used to overcome difficulties.

Chapter 4 presents the context that the current research was conducted. It initially provides information about the Cypriot education background and a description of the current educational system in relation to instrumental teaching and learning. It also provides a historical outline of the establishment of music conservatories and explores cultural influences. Lastly, Chapter 4 provides relevant information about the musical conservatory that

participated in the study (e.g., instruments taught, types of assessment, and required qualifications of teachers) and the participants (e.g., age and gender).

The following Chapters 5, 6 and 7 presents the results from the analysis of the data that were collected from the main study. These three chapters focus on the results that were found from the two individual case studies for each Grade (ABRSM) level (Grades 1, 5 and 8), a total of six participant piano students. Results for each student are initially reported separately in the chapters. Next, an introduction to the learning background of each student is presented, as well as the musical material that was used while taking part in the research. The following sections examine different practice-related behaviours and characteristics that were noted. They were all classified and discussed under the two main categories of teaching and learning. Specifically, results on the structure of the lessons, encouragement of strategies, reference to practice and usage of a notebook are presented under the category of teaching. Elements that are discussed in relation to the learning process are the quantity of practice sessions, concentration, application of practice strategies and identification of mistakes. The relationships between the lessons and home practice are then examined, to identify how precisely each student followed any lesson instructions from their teachers. Each case study closes with a summary, outlining the findings. A comparison of the pairs of students finally takes place at the end of each Chapter, based on the results that were discussed earlier.

The next Chapter (8) focuses on discussing the main findings with a comparison of the three levels of expertise that are investigated. The chapters seek to consider all of the elements detected from the analysis of the studio-based lessons and the home-based practice sessions. Different issues in relation to the level of expertise are discussed with the use of a comparative analysis. An exploration of the differences and similarities among the six students takes place, with the use of tables and charts that were specially created to present any correlations that were found. Teaching and learning issues in relation to home-based practice are also presented and discussed.

Chapter 9 is the final thesis chapter where the main findings are reviewed against the research questions. The limitations of the study are also discussed, as well as implications for policy and practice. Finally, the chapter concludes with suggestions for future research and implications for policy and practice.

1.10 Definition of Key Terms

This section defines all the key terms used in the thesis. The terms are introduced in this early chapter of the thesis to allow the reader a clear understanding.

Advanced students: All learners who have acquired a high level of expertise and have a lot of experience playing the piano are considered advanced students. All of the Grade 8 (ABRSM) students are considered to be advanced students.

Beginners: Learners who are in the first years of learning the piano are referred to as beginners or novices. In the thesis, all Grade 1 (ABRSM) students are considered beginners as they are in their early years of learning.

'Break down Chords' Strategy: Learners break down a chord by playing each note separately, as a broken chord.

'Closed Eyes' Strategy: The learners play the piano while having their eyes closed.

'Count Aloud' Strategy: A vocalised practice strategy used to identify the beat of a piece of music. Learners can use different systems of counting aloud, with the most common being usage of numbers, words, or sounds.

'Count Off' Strategy: A practice strategy which involves the player counting one or more bars/measures before beginning to play the piano. Count off can be evident either silent or vocalised, and it is used to establish the tempo of the music to be played.

'Focus on each voice separately' Strategy: This strategy applies mainly to polyphonic pieces. Students practise by focusing on each voice of the piece separately. This strategy aids on a deeper understanding of the melodic lines and, therefore, students build a solid foundation for future practice.

Grade Levels: The ABRSM system of examination was used to identify the acquired level of the students. The examinations include eight different Grade levels, with the Grade 8 being the last level and the most demanding.

Home-based practice sessions: This term is used to describe the practice sessions carried out in the home of learners. This activity involves the learner playing the piano in their home environment, usually with privacy.

'Increasing Gradually the Tempo': A practice strategy in which players begin practising at a slower tempo than the regular, and then they gradually increase the tempo.

Intermediate students: Students who have completed a basic elementary series and they have achieved the basic concepts and skills of piano playing. All of the Grade 5 (ABRSM) students are considered to be intermediate students in the thesis.

'Link two parts together' Strategy: The player plays two consecutive parts as a larger part after practising each separately.

'Memorize part(s)' Strategy: The student has to learn and play a part of the piece of music by memory, with no usage of any notation.

'Memorize the whole piece' Strategy: The player has to learn to play the entire piece from memory, by not using any form of notation.

'Play key signature as a chord' Strategy: This strategy is used by the learners mainly whilst practising the scales. Students play the key signature of a scale as a chord.

Practice Strategy: Any form of an activity or behaviour that is evident while practising on any instrument, with the main aim to improve over time.

Private studio-based lessons: The definition applies to any one-to-one lessons carried out in a classroom of a musical conservatory/school. The lessons are carried out privately, with the student and the piano teacher being the only individuals present in the room.

'Record themselves' Strategy: This strategy involves students recording while practising, with the usage of any voice recorder device (including mobile phone recorders).

'Reference to the key signature': Any form of reference to the scale's key signature, either by the teacher or the student during the lesson or the home practice.

'Say the notes' Strategy: This strategy involves the players saying the notes that they are playing at that specific time.

'SFB': Abbreviation for 'Start from the beginning' of the piece or the scale while playing.

'Semitone-semitone' Strategy: This strategy applies only when students are practising on the scales. It is merely used by learners who have mastered an intermediate level in the piano, and they learn the scales of all the keys. When using this strategy, they are practising all the scales, each time playing one semitone higher than the previous scale (e.g., C Major, Db Major, D Major, etc).

'Sing a part in their head' Strategy: The player thinks a part of the piece in their head before start playing, with the aim to identify a suitable tempo of playing.

'Sing the notes' Strategy: Players sing the notes along while playing.

'Starting note' Strategy: This strategy is only used when practising the scales. The students use it to learn in which octave they should begin playing each of the scales.

'Variable practice': A practice strategy in which players modify a pattern, such as by changing its rhythm, dynamics, key, tempo, and/or articulation.

'What needs improvement': A teaching method used to provide feedback to their students of what needs further improvement in the future. This is a verbal method used by the teacher during the lesson, or either after student's playing of as part of discussions.

'Work chords at a fast tempo' Strategy: Work the chords of a piece at a fast tempo, one following the other, by not taking into account their normal rhythm.

Chapter 2
The Development of Musical Expertise

2.1 Introduction

Chapter 2 focuses on the development of musical expertise by exploring various phases that musicians are likely to pass during their professional career. The expert's characteristics are reported, as well as the development of essential musical skills. Special attention is given to one key component of this process, instrumental practice. This Chapter provides information on the development of key practice strategies by discussing both quantity and quality of practice in depth. A discussion of various factors of influence is also part of this chapter, as well as any issues related to this process.

2.2 What is musical expertise?

The acquisition of expertise as a learning process has long provided a constructive source of discussion. Over the past 20 years, studies have been conducted with the aim to explore the development of expertise in various areas, including chess (Gobet and Campitelly, 2006; Bilalic et al., 2007; Howard, 2012) and sports (Starkes and Ericsson, 2003; Ericsson, 1996). Music and expertise were also a keen interest of researchers in the area of music psychology and education. Research under the topic of music developed key theoretical perspectives of the development of musical expertise and these have had a significant influence (Ericsson et al., 1993; Bloom 1985; Manturzewska, 1990; Hallam et al., 2012; Ruthsatz et al., 2008). Specifically, Ericsson's publications in the early 1990s increased the attention of researchers and, as a result, others began exploring how musicians develop an exceptional level of performance (Ericsson et al., 1993; Ericsson, 1996).

Often associated with the Ericsson, Krampe and Tesch-Romer's (1993) framework, the term 'expert' has been used to describe persons who are widely recognised for their extensive knowledge and their outstanding technique or skills in one particular field (Ericsson, 2006; Corrigall and Schellenberg, 2015; Jorgensen and Hallam, 2016; Ericsson et al., 2006). Taking into account the terminology used by Ericsson (2006), a translation into the music field is that an expert musician is someone who has developed outstanding performance skills on one specific instrument or more. Usually, their expertise falls into a specific genre or style (e.g., classical or jazz music), as each of these has different demands in relation to knowledge,

understanding and skills. Expert musicians are usually acknowledged for their expertise by other professional musicians and the audience based on performance. Their high levels of expertise can also be established through their participation in international competitions, recognised examinations, or on audition results (Papageorgi et al., 2010). Some of the characteristics of music experts in relation to their skills are that, depending on their chosen musical genre, they are 'competent in reading musical notation, quick at learning new music, quick at addressing errors, possess superior musical memory, have refined problem-solving skills and analytical skills and have strong self-monitoring skills' (Creech, Papageorgi and Welch, 2010, p.14). Considering all these characteristics, an expert in the domain of music can be considered to have a high level of musical skills, including analytical skills, self-regulation/metacognitive performance skills, and an ability to sustain concentration for a long time.

Moreover, the experts' personal characteristics of experts in relation to motivation also play an important role in their achievement. As Hallam et al. (2016) argued, one of the major components of personal characteristics is an ability to maintain a positive musical identity. Thus maintaining a positive self-belief as well as sustaining self-efficacy can play a crucial part in the process of becoming an expert, allowing musicians to face difficulties, including negative feedback better. In specific cases in which confidence is not evident, in combination with a lack of motivation, interest and commitment to continue playing seems rather unrealistic. A solid body of knowledge demonstrates that motivation and positive attitudes held by musicians are strongly influenced by external factors, such as parental support (Ilari, 2018; McPherson, 2009; Davidson and Borthwick, 2002).

Parental involvement is also reported to be a key element, particularly in the initial stages of this potentially 'life-time journey', as different types of support can enhance the development of positive attitudes (Creech, 2010; Ilari, 2018). Specifically, emotional support (Ruzek et al., 2016) can have various benefits including maintaining musician's attention, keeping them motivated to practise and overcoming emotional difficulties (McPherson and Davidson, 2002). Past research has revealed that one motive for the parents to be actively involved in their children's learning is their beliefs about the benefits of instrumental learning (Cho, 2015). Increases in psychosocial skills and self-esteem are some of the perceived benefits (Mahoney et al., 2006). However, although it is reported that parents have a strong influence on their children's learning, research evidence has indicated that not everyone may be equally placed to develop musical expertise (Ilari, 2013). Negative parental attitudes towards instrumental learning may lead to limited or even no support (e.g., involvement), which may possibly have as a result in diminishing student's development (Margiotta, 2011).

The acquisition of that exceptional level of performance in music is thus a long and complex process with many influences (Hendry and Hodges, 2018). It is a process that requires continuous support, effort, commitment, persistence, and long-term investment of time (Gruber et al., 2004). Therefore, it is not surprising that the development of expertise is unlikely to be a smooth process. In contrast, it is considered to be a very challenging path to follow in order to achieve excellence (Ericsson, Krampe and Tesch-Romer, 1993).

2.3   Theories on the development of expertise

Since expertise is considered to be a relatively life-long process (Gruber et al., 2004), it is suggested that there are various phases of development through which individuals are likely to pass until they reach high levels of expertise in a specific domain (Whyton et al., 2008). An early piece of research that explored the development of expertise was conducted by Bloom and his colleagues (1985). Based on the findings collected through interviews with international-level performers in various domains, Bloom identified three phases of development: the Early Years, Middle Years and Later Years (Figure 2.1).
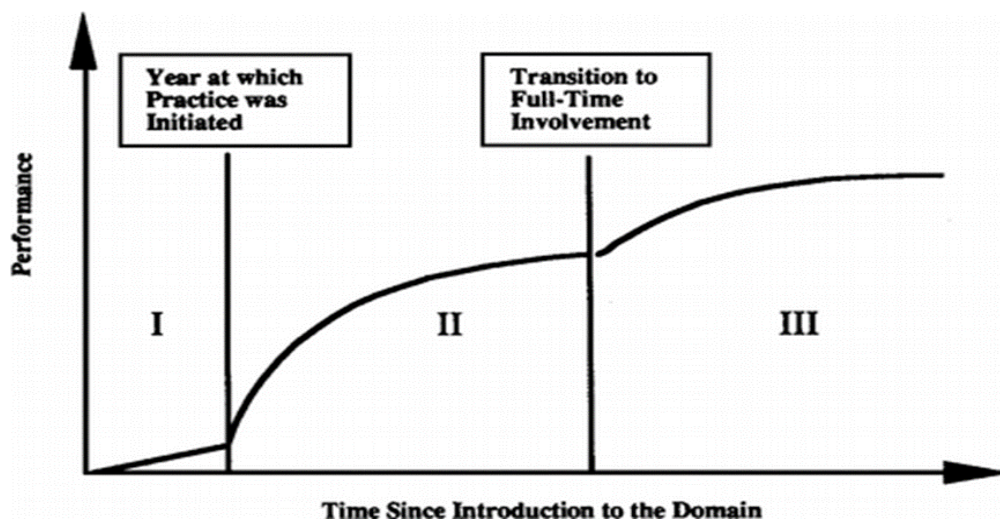
Figure 2.1 Three phases of development toward adult expertise (Ericsson, Krampe and Tesch-Romer, 1993, p.369)

During the Early Years, proponents of this theory describe how the child is initially introduced to the activity in an informal phase, under playful conditions. Then, in the next phase, formal instruction and deliberate practice begins. This phase consists of an extended preparation period as the development of practice skills is one of the most extended processes (Hallam, 1997). Finally, the transition to later years is argued to begin usually in the early or mid-teens, in which the individual makes a full-time commitment to the domain. This final phase is conventionally regarded to end when individuals reach the top level in the domain where they

can make a living as professional performers. As Bloom (op. cit.) argued, during the final phase, nearly all international-level performers had teachers that either were considered to be experts in that specific domain, or had students that attained that level of expertise. According to him, having that kind of teacher is extremely important for the individual to successfully complete all three phases.

In discussing Bloom's research, Ericsson, Krampe and Tesch-Romer (1993) proposed a theoretical framework demonstrating the developmental process from novice to expert in-depth. According to this particular theory, there is an additional phase (see Figure 2.2) to those three suggested by Bloom (1985). The following section focuses on the suggested four phases, along with a discussion of possible factors evolving around the influence and critical issues that may be raised.
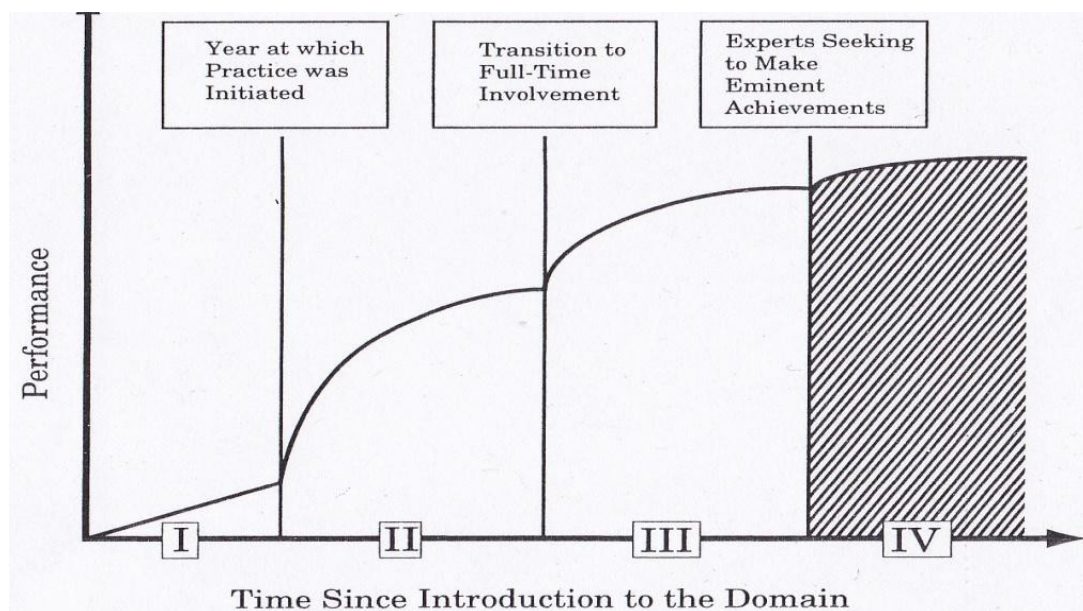
Figure 2.2 Four phases of development (Ericsson, Krampe, and Tesch-Romer, 1993, p.369)

The first phase is suggested to begin with a certain period of playful interaction within a specific domain. Taking into consideration Ericsson, Krampe and Tesch-Romer's (1993) arguments, in the case of music, the home-environment significantly influences children's exposure and engagement in various informal musical activities. As previously reported, singing, listening to recorded music and playing with musical toys are some of the most common activities children are involved with during their early childhood (Ilari, 2018; Ilari, 2005; McDonald, 1989). Parents, therefore, have a central role in this phase in terms of providing available sources in the home-environment, so as to give children the opportunity to explore different music sounds on a daily basis. Children who have parents as musicians or siblings have even more advantages. It is highly possible that parents will offer the child a wider range of opportunities

to explore musical instruments and participate in group activities or musical games (Davidson and Borthwick, 2002). However, some children may live in an environment where exposure to music is limited or even not evident, and as a result of not having such opportunities are not involved in any type of music-related activity. Keeping in mind that the living home-environment for each child varies, this suggests that unequal opportunities are given in developing musical expertise.

The first phase is argued to end when an individual reveals 'talent' or 'promise' in that domain and so parents come to a decision to offer formal tuition to their child. However, this talent or promise may, to a certain extent, be linked to the level of parental investment, again suggesting that these investments may not be equal for all children. Parents' aspirations and objectives for their children's future influence investments made for their development. While some parents invest in instrumental learning (Ilari, 2018), research showed (Shih and Yi, 2014) that others may have preferences in paying tuition fees for alternative lessons (e.g., computer lessons).

Additional factors may influence transition into this phase, one of the most common being the family's socio-economic status. Previous research has revealed that the family's income was a strong factor determining support of children's instrumental learning (Lareau, 2011; Cho, 2015). Middle-class families with higher incomes are more likely to provide opportunities to their children to engage in organised musical activities. This might include offering financial support for instrumental lessons such as paying tuition fees and purchasing musical instruments, as well as taking their children to concerts (Purves, 2019; Cho, 2015). In contrast, working-class or low-income families tend to focus on the natural growth of their children by means providing basic needs such as food, shelter and comfort, among others (Lareau, 2011; Ilari, 2013; Savage, 2015). This has as a result for the children to have a more flexible schedule after school time, as they are not provided with opportunities to be involved in organised activities (Cho, 2015; Shih and Yi, 2014; Southgate and Roscigno, 2009). Consequently, this has an impact in their development in general, as they have limited or no prospects for further development through extra curriculum activities.

Availability of time can also be a factor of influence, as some parents may lack time to be actively involved in their children's after-school activities (Cho, 2015). Some hidden barriers can be found here, as one type of support that parents often need to provide to their children is transportation to instrumental lessons (Purves, 2019; Ilari, 2018; Ilari, 2013). This can raise some issues, especially in countries where public transportation is not an option for children. This is particularly evident in Cyprus, as public transportation is rarely an option for the children, resulting in parents needing to drive their children to music lessons. In addition, a

busy afternoon schedule (e.g., through parents working shifts/non-social hours) may cause difficulties practically, and therefore this may influence decisions in offering opportunities for their child to participate in instrumental lessons. Findings from previous studies were consistent with this argument, as they indicated that parents with higher incomes usually have more time and resources to devote to their children's musical learning (Ilari, 2013).

The socio-economic status of the family hides additional factors of influence such as attitudes and beliefs held by parents as well as their values over music learning in human life. Studies have showed that parents who tend to support engagement in such activities have strong beliefs that music learning can benefit their 'concerted cultivation', which is perceived to be an important element in their children's future life (Lareau, 2011; Savage, 2015; Ilari, 2013). Along with the development of social and cultural skills, they also perceived that engagement in musical activities can enhance personal success (e.g., developing autonomy and confidence), present and future academic achievement, while it can also be an advantage in brain development (e.g., cognitive such as linguistic skills) (Purves, 2019; Pitts, 2007; Southgate and Roscigno, 2009). These attitudes, behaviours and values, also referred to as 'musical parenting', are often associated with 'middle-class families' (Ilari, 2018, 2016, 2013; Purves, 2019; Savage, 2015). Taking into account all the above, the social-economic status of the family and parental beliefs and attitudes can noticeably have an impact on completing the first phase of Figure 2.2 successfully.

The second phase is characterised in the theory as an 'extended period of preparation' (Ericsson, Krampe and Tesch-Romer,1993, p.369) in which individuals develop their skills and abilities through deliberate practice. They are noted to gradually begin to acquire profound knowledge and understanding of how to practise successfully and achieve progress over time. Teachers and parents also have a key role in this process, as their support, by any means, can enhance students' motivation to remain committed in this process (Cho, 2015; Savage, 2015; Ilari, 2013). By the end of this phase, Ericsson, Krampe and Tesch-Romer (1993) argue that individuals have already acquired high levels of skills (e.g., self-regulating skills) and are determined to make a major commitment to this domain. As Burland and Davidson (2004, p.243) suggest, one of the most important factors influencing the decision to follow a career as a professional musician is 'the role of music as a central determinant of self-concept'. It is suggested that a musician's self-concept is strongly influenced by parents, teachers, siblings or even educational institutions where students have been learning how to play an instrument until this point (op. cit., p.244). Social interactions and experiences therefore shape musicians' perceptions. This might suggest that it is likely that musicians who develop a self-concept strong enough to progress into professional musical life come from a home-environment where 'musical parenting' is evident (Ilari, 2018; Savage, 2015). Although this might not always be

the case, due to various reasons such as socio-economic differences in families (Southgate and Roscigno, 2009; Ilari, 2013), it seems that such parental behaviour can stimulate individuals' aspirations to follow a musical career.

The third phase is observed when the individual makes a full-time commitment to improving performance skills. During this phase, musicians seek opportunities to be involved in as many musical activities as they can so as to gain experience of the professional world of musicians (Mills, 2007). Therefore, apart from the private lessons given usually by expert teachers, they also participate in various musical performances in which they perform either as a soloist, or as a member of a choir, or orchestral group. In addition, they may also take part in diverse activities such as musical ensembles or other activities offered to them in the context of their education (Scharff, 2015). During these years, the aim is to develop their entire personality as musicians. This includes meeting and collaborating with other musicians with the main target of developing their musical knowledge in many fields and to explore new areas. Although musical engagement within this phase seems to derive mainly from self-motivation to achieve a high-level of musical attainment, external factors can also have a key role. Financial resources (e.g., paying tuition fees) and practical (e.g., transportation) support can have a powerful impact in this phase of development (Cho, 2015; Ilari, 2019). This might suggest that musical engagement at the fullest potential may only be possible in situations where other factors are in place.

This phase of Ericsson, Krampe and Tesch-Romer's (1993) theory is said to be completed when the individual reaches a state of superior performance and can make a living based on their performances. As a next step, they seek to establish exceptional levels of performance and, throughout these years, they may become widely recognised for their high-performance quality, either by other expert performers or the public. For a musician, this could be achieved either by playing in concert halls as soloists, participating as an active member in choirs or in orchestral groups, making recordings, and/or winning international competitions (Lehmann and Gruber, 2006, p.462).

However, perhaps in reality, this idealised state is complicated in practice. In particular, although expert musicians establish high or even exceptional levels of performances, other qualities for succeeding in the music profession are essential. For example, the social and interpersonal skills of the musician can have an impact on how they interact with other people in a professional setting. However, at the beginning, many musicians may not be prepared for the professional music environment. As MacNamara, Holmes and Collins (2006) argued, a lack of preparation for the realities of the musical profession can cause difficulties for musicians who start searching for a job as professionals. Gender, race and class for instance, are some

of the most commonly reported factors influencing opportunities offered within the classical music profession (Scharff, 2015). Therefore, it is likely for musicians to face difficulties in engaging activities within the world of the music profession due to inequalities (op. cit., 2015). The issue here is that formal music education usually does not offer opportunities to the student for development awareness, skills and characteristics so as to be prepared when they begin to work professionally (op. cit., p.300). Conservatories and universities can contribute by providing guidance to enable students to shape their careers. In addition, instrumental teachers also have an important role as they can share their personal experiences as professional musicians and advise their students accordingly (Mills, 2004).

The fourth and final phase of Ericsson, Krampe and Tesch-Romer's (1993) theory is suggested to be completed when musicians obtain a profound knowledge and understanding of their domain, often exceeding that of their teachers. This phase is also marked by making a unique contribution within their domain. In order for those different phases to be completed, Ericsson, Krampe, and Tesch-Romer (1993, p.393), proposed the '10 year rule', in which they claim that the preparation time required for the attainment of exceptional performance is ten years or more.

> *'Expert performance is acquired slowly over a very long time as a result of practice and the highest levels of performance and achievement appear to require at least around 10 years of intense prior preparation.'*

> (Ericsson, Krampe, and Tesch-Romer, 1993, p.336).

More recently, Papageorgi et al. (2010) presented an updated theorized developmental pathway for professional musicians across the lifespan (see Figure 2.3) based on past theories of expertise (Bloom, 1985; Sosniak, 1985, 1990; Manturzewska, 1990; Ericsson and Smith, 1991). Their proposed diagram also takes into consideration of key elements of this process, such as skill acquisition. According to their suggestions, skill acquisition seems to develop simultaneously with expertise (Hallam, 1998), and can be directly linked with different phases that musicians pass through until they reach proficiency. In order to identify the various phases that musicians pass through when acquiring skills, their theory includes three main phases suggested by Fitts and Posner (1967): the cognitive, the associative and the autonomous phase. Their diagram offers a more comprehensive perspective as it addresses perceived inadequacies in Ericsson, Krampe and Tesch-Romer's (1993) proposed diagram. Therefore, it can be more valuable for music educators who seek to gain knowledge and understanding on how to aid their students' musical development in different phases of their learning.
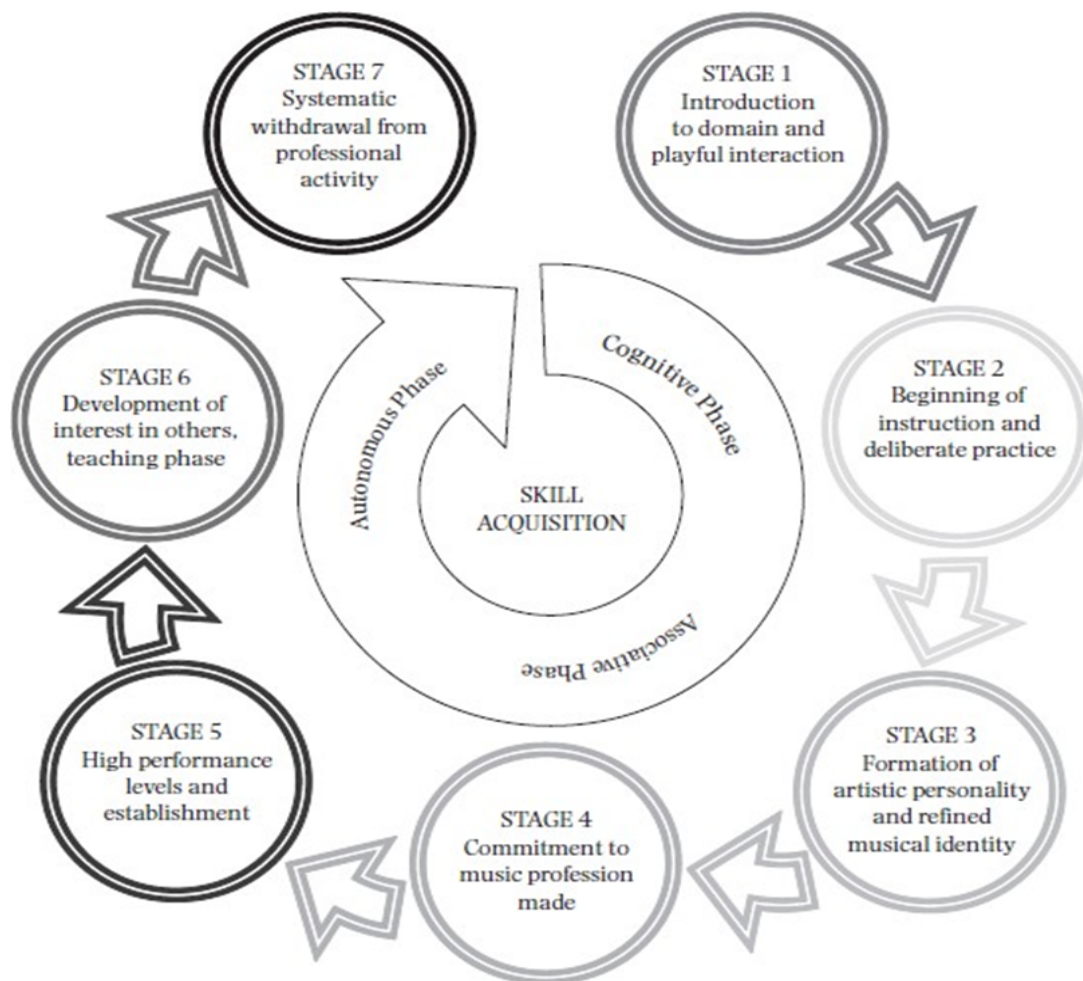
Figure 2.3 The developmental pathway of professional musicians (Papageorgi et al., 2010, p.34)

The theories discussed above seek to show the life-circle process of acquiring expert proficiency. The current study focuses on one of the most critical phases of this developmental process, phase two (*cf* Figure 2.3). It particularly examines behaviours and attitudes of children who are actively involved in formal instrumental lessons in private musical conservatories. The aim was to explore how they gradually acquire practice skills that are essential for passing into the later phases of musical expertise (Hallam, 1997). The current study, therefore, focuses on the children's development within this phase, and so it takes into account three different levels of expertise between the ages of 6 and 18: beginners, intermediate and advanced. In this study, children's practice is also intended to be situated within issues related to motivation, parental support and personal characteristics as all of these are key elements in establishing successful musical development (Margiotta, 2011; Creech, 2010; Hallam et al., 2016).

2.4 Development of musical skills and characteristics of expert musicians

As was demonstrated in the above sections, in order for all of the phases of musical expertise development to be completed successfully, the acquisition of various skills is seen as being essential (Papageorgi et al., 2010). This section will report and critique different theories and studies that have been proposed for the development of musical skills. As Lehmann and Gruber suggested, 'the time line of acquisition of a new skill allows us to better conceptualize the process as a whole' (2006, p.462). This section therefore seeks to provide an insight into the objectives of instrumental lessons in relation to the development of students' musical skills and abilities.

The characteristics of an expert are specific to a particular domain, being related to its nature. Experts develop characteristics over a number of years, although – in the case of music – different genres can have an effect on these music-related characteristics. For instance, a classical musician will shape particular characteristics of their performer skill behaviour over time which are different to those of a jazz performer, such as related to improvisation (Hallam and Bautista, 2012). The following sections focus on music within a Western classical music genre as it is the main element in the current study.

Researchers have tried to categorize musical development in relation to the skills that are required. Hallam (1998) claims that each of the following musical skills, is essential for a professional music performer: aural, cognitive technical, musicianship, performance learning and life skills. McPherson and Hallam (2009) developed a table (see Figure 2.3), based on the above skills, in which they classify in detail all the subcategories that distinguish those skills. For example, aural skills are required for good intonation, developing rhythmic accuracy and a sense of pulse and improvisational skills (op. cit., p.260).

Aural skills required for:	Developing rhythmic accuracy and a sense of pulse;
	Good intonation;
	The facility to know how music will sound without having to play it;
	Improvisational skills.
Cognitive skills required in the processes of:	Reading music;
	Transposition;
	Understanding keys;
	Understanding harmony;
	Understanding the structure of music;
	The memorization of music;
	Composing;
	Understanding different musical styles and their cultural and historic contexts.
Technical skills required for developing:	Instrument specific skills;
	Technical agility;
	Articulation;
	Expressive tone quality.
Musicianship skills are concerned with:	Being able to play expressively;
	Being able to project sound;
	Developing control;
	Conveying meaning.
Performance skills include:	Being able to communicate with an audience;
	Communicating with other performers;
	Being able to coordinate a group;
	Presenting to an audience.
Learning skills are concerned with:	Being able to learn, monitor and evaluate progress independently.

Figure 2.4 Musical Skills (McPherson and Hallam, 2009, p.260)

More recently, Hallam and Bautista (2012) revised the previous version of Hallam's (1998) theory by suggesting additional skills that musicians acquire through musical learning (Figure 2.5). According to them, musicians develop their aural, cognitive, technical, musicianship, performance, creative, evaluative, and self-regulatory skills through active engagement. Their proposed theory indicated that musicians gradually acquire these skills over time, mainly through formal education. In addition, some of these skills (e.g., evaluating skills) are also likely to be developed through social learning scenarios, such as live concerts or listening to recordings (Savage, 2015; Ilari, 2018). However, factors such as the socio-economic status of the family (Cho, 2015; Purves, 2019), provision of sources to engage in music (Ilari, 2005;

2016) might also influence the development of these skills. This suggests that learning may not be equally assessable to all learners, which raises issues about inequalities when it comes to formal learning.

Aural skills supporting the development of:	Performance skills supporting the development of:
• Rhythmic accuracy and a sense of pulse; • Good intonation; • The facility to know how music will sound without having to play it; • Playing by ear; • Improvisational skills.	• Communication with an audience; • Communication with other performers; • Being able to co-ordinate a group; • Presentation to an audience.
Cognitive skills supporting the development of:	Evaluating skills support the development of:
• Reading music; • Transposition; • Understanding keys; • Understanding harmony; • Understanding the structure of the music; • The memorization of music; • Composing; • Understanding different musical styles and their cultural and historic contexts.	• Listening with understanding; • Being able to describe and discuss music; • Being able to make comparisons between different types of music and performances; • Critically assessing personal performance, improvisation and compositions; • Monitoring progress.
Technical skills supporting the development of:	Creative skills supporting the development of:
• Instrument specific skills; • Technical agility; • Articulation; • Expressive tone quality.	• Interpretation; • Improvisation; • Composition.
Musicianship skills supporting the development of:	Self-regulatory skills support the development of:
• Expressive playing; • Sound projection; • Control; • Conveying musical meaning.	• Managing the process of learning; • Managing practice; • Enhancing concentration; • Enhancing motivation.

Figure 2.5 Skills which can be acquired in learning to play an instrument (Hallam and Bautista, 2012, pp.13-14)

All of the skills discussed above are reported to be essential to become an expert musical performer. As outlined in detail in Chapter 4, the majority of the conservatories located in Cyprus offer opportunities for their students to develop these skills mainly through the usage of syllabuses of widely recognised examinations (e.g., ABRSM Associated Board of the Royal Schools). By adopting this approach, they support cognitive, technical, musicianship, creative, aural skills, evaluating and self-regulatory skills through different types of activities. The development of cognitive skills is also maintained through music theory lessons, although this is an additional lesson for which students and their parents have to pay extra tuition. Instrumental lessons also involve developing performance skills through various formal and informal concerts and ensembles. However, this might not always be the case, as there are various issues related to the policies of each music conservatory.

The need for children to be persistently involved in related activities and, most importantly, in deliberate practice, is reported to determine their success of moving from one phase of expertise to the next (Ericsson et al., 1993; Bloom, 1985; Papagerogi et al., 2010). The following sections focus on various aspects of instrumental practice as well as on different influences that may have an impact on its outcome.

2.5   Instrumental practice

2.5.1   Terminology

Music practice is seen as a key ingredient for musical development at all levels of expertise (Jorgensen and Lehmann, 1997). Musicians need to develop a range of musical skills so that the transition from novice to expert can be achieved, and effective practice is considered to be a central element for this process (Ericsson, Krampe and Tesch-Romer, 1993; 1996). The term 'effective practice' used in this section refers to the type of activity where its outcomes verify the progress and achievement of short-term or long-term goals. This type of activity also refers to individual practice where students practise privately in a distraction-free environment (Harris and Crozier, 2000). A large body of the literature refers to this activity with the use of various terms and definitions. One of the most commonly used terms by researchers is 'deliberate practice'. The term deliberate practice was first introduced by Ericsson, Krampe and Tesch-Romer (1993) as a core concept in their study on the acquisition of musical expertise. According to their definition, deliberate practice is

> *'a highly structured activity, the explicit goal of which is to improve performance. Specific tasks are invented to overcome weaknesses, and performance is carefully monitored to provide cues for ways to improve it further.'*

> (Ericsson, Krampe and Tesch-Romer, 1993, p.10).

Based on this theoretical construct, an extended engagement in deliberate practice is the prime element for a successful performer, regardless of individual differences in 'talent' (Ericsson, 2006). Since its original iteration, deliberate practice has been linked directly with the development of expertise in music and other areas, including sports (Helsen et al., 1998) and chess (Charness, Krampe and Mayer, 1996).

Deliberate practice requires the identification of specific goals so as to improve particular aspects of performance. However, for improvement to occur, it has been argued that the setting of goals should always be attainable in relation to the current skill level of the performer (Hatfield and Lemyre, 2016; Chaffin and Lemieux, 2004; Barry and Hallam, 2002). It is important for the performers to be aware of their current skills level so as to invent meaningful tasks that can not only improve the skills that they already have but can also extend the reach

and range of their skills (Ericsson, Prietula and Cokely, 2007). Therefore, it would seem that progress should be constantly monitored so that performers continue practising deliberately. Such a highly focused activity requires significant effort, determination and concentration (Barry and Hallam, 2002) and, thus, it can only be maintained for limited amounts of time per day. It also needs a lot of support and the right environmental conditions (Lehmann and Gruber, 2006; Harris and Crozier, 2000). For that reason, it has been argued that deliberate practice is not necessarily particularly enjoyable as an activity, but musicians are motivated to practise deliberately because practice is perceived to improve performance (Ericsson, Krampe and Tesch-Romer, 1993; Bonneville-Roussy, Lavigne and Vallerand, 2010; Hatfield and Lemyre, 2016). As Ericsson, Prietula and Cokely (2007, p.117) stated, 'it is only by working at what you can't do that you turn into the expert you want to become.'

A similar term to that of deliberate practice was proposed by Hallam (1997, p.181) in which she defines 'effective practice' as 'that which achieves the desired end product, in as short a time as possible, without interfering with long term goals'. Organisation of practice by planning, goal setting and time-management, therefore, plays an important role in this process (Ericsson et al., 1993). Focusing on specific goals and a commitment to these could save time and also enhance outcomes. This point of view derives from another theory suggested by Zimmerman (2002), the so-called 'self-regulation' theory. Zimmerman argued that strategies such as planning and goal setting, meta-analytic practice, evaluation and self-reflection can have a significant effect upon performance improvement. Self-regulated learners are considered to be 'active participants of their own learning process' (Zimmerman and Martinez-Pons, 1988, p.284), although in some cases they might seek and maintain their teacher's authority (Nerland and Hanken, 2002). As previously reported, expert learners who display a self-regulation behaviour can 'still rely on the influences of others to enhance their musicality and motivate their learning' (Upitis et al., 2015, p.7). Therefore, social interactions (e.g., with teachers and parents) play an important role in developing and maintaining self-regulated behaviours.

It has been argued that motivation can have a strong influence over the development of self-regulated learning. Results from a study by Renwick and McPherson (2002) showed that the selected repertoire can be related to the student's motivation to practise effectively. When students were asked to practise a piece of music that they chose themselves, they applied more sophisticated practice strategies. It seems, therefore, that intrinsic motivation can be significantly related to faster improvement. This can perhaps be used as a teaching tool by instrumental teachers to engage their students in practising, especially when practice is insufficient.

In addition, researchers claimed that self-efficacy beliefs can determine the effectiveness of practice and, therefore, the development of student's self-regulation (Miksza and Tan, 2015; McPherson and Zimmerman, 2011; McPherson and Mccormick, 2006). However, students' perceptions of their own abilities are not only shaped by their personal judgments, but also from social experiences. Social support (e.g., emotional support) by parents, teachers and peers seems to have a great impact on students, as it can increase possibilities for a positive attitude (Zarza-Alzugaray et al., 2020). This stresses the importance of learners being able to access fertile social musical situations in which they have opportunities to develop characteristics that influence their musical identity (Ilari, 2013; Shih and Yi, 2014; Margiotta, 2011). Students with limited opportunities to acquire these characteristics, might result in achieving less success in the domain (Cho, 2015).

Effective practice has also been identified as 'self-teaching' (Jorgensen, 1995; 1997). Self-teaching is characterised by the behaviour of musicians acting as teachers while practising, where they have to take account of their goals and aims, the musical content, the available learning media, the allocation of time and, finally, specific practice strategies. As Jorgensen claims, 'in the absence of the teacher, students must act as the teacher's deputy, assigning themselves definite tasks and supervising their own work' (1995, p.85). A strategy suggested by Harris and Crozier (2000, p.98) is that children should always have in their minds a 'reconstruction of the previous lesson'. Modelling behaviours and actions can be an important element of learning how to practise effectively.

Practising effectively is, therefore, a learning activity that can be developed over time through experience and extensive involvement. However, it is well established that instrumental teachers have a central role in this process, as it is considered to be their responsibility to teach their students how to practise effectively and, therefore, to be in a position subsequently to initiate their own learning (Hart, 2014; Hatfield and Lemyre, 2016; Jorgensen, 2004). Results from a study carried out by Koopman et al. (2007) revealed that students tended to model strategies used during the weekly lessons rather than self-regulating their practice. This might be the case even for students who have reached high levels of expertise, as findings from a study undertaken with conservatory level students indicated that they needed support from their teachers so as to self-regulate their practice (Hatfield and Lemyre, 2016). These findings suggest that there is a need for teachers to have an active role in this process, regardless of the student's level of expertise, and give emphasis to ensuring that their students are fully equipped with life-long learning skills (Burwell and Shipton, 2013). While practical support seems to be crucial in terms of guiding practice development, emotional support is also an essential element in this process. This type of support is essential for high-quality instruction, as it can contribute to student's well-being and academic engagement (Ruzek et

al., 2016). Considering that practising is a very demanding activity; all types of support provided by teachers are crucial to enhance students' commitment. Parents play a crucial role in finding a teacher who is able to offer appropriate support for the learning of their children. As previously argued, musical parenting often involves 'scanning the market to identify advantageous educational opportunities for their children' (Purves, 2019, p.2). However, research showed that this behaviour is perhaps more likely to be evident in middle-class families (Ilari, 2018; Connell, 2008). The family's financial status enables them to seek and find the best, but also the most expensive conservatories that have a reputation for offering high-quality instrumental education (Lamprianou and Lamprianou, 2013), noting that Cyprus is reported to be ranging in the 'fourth place among European countries' in terms of spending on private lessons (Lamprianou and Lamprianou, 2013, p.33). In contrast, scanning the market is perhaps less likely to happen in working-class families, suggesting that some children may not be receiving the highest quality education – assuming that there is a positive relationship between cost and quality, and this eventually leads to less success in some pupils' instrumental learning (Cho, 2015).

The following sections focus on a range of music practice strategies considered essential for an effective practice session. Primarily, they aim to provide critical insights for the reader, as usage of practice strategies is the focus of this study. Different elements of practice are thus explored, along with discussions on any related issues.

2.6 Quantity and quality of music practice

Research has demonstrated two main components of effective practice; its quantity and quality. It has been argued that both of these, in interaction with prior knowledge and skills, influence significantly progress and attainment over time (Jorgensen and Hallam, 2009, p.265). The effectiveness of practice is, therefore, perceived to be determined both by the amount of time that a musician devotes to practising and the quality of the practice session itself (Ericsson, Krampe and Tesch-Romer, 1993; Hallam et al., 2012; Sloboda, Davidson, Howe and Moore, 1996). The following discussion focuses initially on the quantity of practice, focusing on two different aspects, with particular interest on the starting age and the amount of practice that instrumental players invest over time in their learning process. The subsequent section focuses on quantity of practice by initially reporting different issues concerning the time spent on practising in relation to the level of expertise. Discussion about the quality of practice follows, taking into account various practice strategies suggested through various studies, along with their reported effects upon instrumental learners. All the strategies below were used as a basis for this study, and so they are explored in depth.

2.6.1 Quantity of practice: Time spent on practising

2.6.1.1 Physical changes

Musicians are likely to devote many hours to practising, especially if reaching a high level of expertise is the main long-term goal. Musicians who reach an exceptional level of expertise usually begin to be actively engaged in instrumental lessons at a very young age (Manturzewska, 1990; Ericsson et al., 1993; Sloboda, Davidson, Howe and Moore, 1996; Creech et al., 2008). An early start can have a positive impact on achievement, since the body is more open to change, thus allowing more easily physiological and related neurological adaptation (e.g., Hallam, 2006; Hyde et al., 2009). Wagner's (1988) study on pianists' hands supports this view, since he found that when pianists start playing at a very young age, their hands changed physically over time with practice. Physical changes are also evident in the brain structure of musicians, especially for those who begin learning a musical instrument at an early age. As Hodges (2006) reports, children who receive early musical instruction will develop different brains from those who do not receive any musical training.

The earlier the child begins to learn a musical instrument, the greater the changes in the brain's structure and function. In addition, the choice of the instrument may influence the neural networking. For example, children who begin to receive piano instruction before the age of seven are reported to be more likely to have more symmetrical left and right motor cortices as adults (Zafranas, 2004; Habib and Besson, 2009). Learning a musical instrument at a young age would, therefore, cause physical changes to the muscles, bones and related brain structure, especially in the cases when daily practice takes place (Herholz and Zatorre, 2012; Jancke, 2009; Lehmann and Ericsson, 1997; Moussard et al., 2016).

However, the type of the instrument may influence the starting age. It has been considered that the instruments that benefit from an early start are the piano and the violin, with the starting age being between three to eight years old (McPherson and Davidson, 2006). In contrast, instruments such as brass and woodwind demand more physical strength, and for that reason, at least one author reports that instrumental teachers usually advise young children to start at an older age (Hallam, 1998).

There is also a bias in musical genre and instrumental choice. Musicians in popular music are likely to have started learning their chosen instrument at a slightly later age than their Western classical peers (Creech et al., 2008). It seems that those parents who offer opportunities for instrumental tuition to their children are likely to hold more positive attitudes towards Western classical music. This is particularly evident in the case of middle-class families, as they aim to 'transmit social status to their children through cultural capital, or the ability to appreciate,

decode and understand ''high'' arts, such as literature, visual arts, and classical music' (Ilari, 2016, p.93). It is a common phenomenon for the parents within the Cypriot context to hold these attitudes, related to the colonial influences that the educational system exhibited (Hasikou, 2015; Skoutella, 2015; see more in Chapter 4).

2.6.1.2 Amount of practice time

Musicians who start playing a musical instrument at a very young age and show persistence, are expected to have invested a huge number of hours in practising by the age of twenty (Sloboda, Davidson, Howe and Moore, 1996). Researchers have tried to calculate the total amount of practice hours that highly skilled musicians have invested. Ericsson, Krampe and Tesch-Romer (1993) carried out a study in which they aimed to estimate the total amount of formal practice hours undertaken by violinists in different levels, until their early twenties (by the age of 21). Results showed that by the age of twenty-one, musicians categorised in the group of the highest skilled violinists had spent around 10,000 hours in practising privately, whereas less accomplished students spent half of this amount in comparison. Sosniak (1985) reported similar results, based on a study of 21 emerging concert pianists. According to her findings, across a period of fifteen years, expert musicians had invested several thousand hours of practice before reaching a high level of performance.

It has been argued that the amount of practice time can vary across different ages and levels of expertise. Research demonstrates that, as musical expertise develops, the time spent on practising is likely to increase (Hallam, 1992). Hallam (2001a) found that an increased amount of time is evident during the formative years of childhood. However, results indicated a tendency for the children to increase the length of practice sessions instead of the frequency of practice sessions or practice days. Sloboda, Davidson, Howe and Moore (1996) report similar findings, while they also found that individual differences, in relation to achievement, may influence the time spent on practising. According to their results, high achievers increased their practice time throughout the years of study, while, in comparison, a stable and low level of practice time was found for low achievers. Motivation to practise thus seems to be directly linked with achievement. Students committed to achieving their personal goals are more likely to devote greater amounts of time in deliberate practice, since it is the key to acquiring high levels of expertise.

It is noteworthy that an increase in the amount of practice is particularly evident after entrance to conservatoire or university (Jorgensen, 2008; Lehmann, 1997). Musicians that take the decision to follow a professional career as performers usually increase their practice time, due to an escalation in technical demands, as well as the nature of the repertoire and the

environmental demands (Hallam et al., 2012; Burt-Perkins, 2008; Lehmann, 1997; Hallam, 2006). Students in higher music education are expected to practise regularly, so practice becomes an activity that students need to fit into their daily or weekly plan (Jorgensen, 2004). After graduating from a higher music academy, musicians begin to work as professional performers and the amount of practice time may decrease, although it may be more focused when learning new repertoire. Hallam (2006, p.121) concludes that 'skill maintenance requires less practice time than skill acquisition'. Thus, an increase in practice time can be considered as a characteristic of the skills acquisition process.

However, the amount of practice time may vary over specific periods. Hallam's (2001a) study indicated that 95 % of the novices and advanced students that participated in the research reported an increase of practice during the period of preparation for examinations or concerts, especially during the last few weeks before the event. In addition, Lehmann and Ericsson (1998) found that another activity that caused an increase in practice time is an upcoming or recently concluded weekly lesson. In contrast, studies demonstrate that the time spent on practising usually decreases during holidays, even in the case of high achievers (Jorgensen, 2008; Sloboda, Davidson, Howe and Moore, 1996). Parents can have a great influence in this case, as their constant emotional support can increase levels of motivation to practise (Creech, 2010; Margiotta, 2011). Practical support can also be offered in families where parents or siblings have a musical background (e.g., professional or amateur musicians), either by organising different types of musical activities or even assisting children's practice (Upitis et al., 2015; Hallam, 1998; Margiotta, 2011). Teachers also need to take into account factors that influence quantity of practice, and constantly provide support by encouraging students to stay committed in this process (Concina, 2019). This, in turn, points to the desirability of teachers, parents and students to have shared goals (Manturzewska, 1990; Creech, 2010). If there is tension in the relationship, perhaps this will not be as effective.

In addition, research shows differences in the way that musicians structure their daily practice sessions. Ericsson, Krampe and Tesch-Romer (1993) found that experts tend to organise their practice sessions by following a structured daily programme. They report that conservatoire students preferred to practise early in the morning when their minds were fresher and thus, they believed that they could concentrate better. After the morning session, there was a tendency to rest in the afternoon, and then they continued their practice in the evening (ibid). The total average of practice time during the day did not exceed four to five hours. Results indicated that experts are likely to use a range of time management and organisation strategies for their practice sessions. However, in the case of young children, time management strategies are barely adopted. Teachers, therefore, should provide opportunities for the children to develop knowledge and understanding of these strategies as these seem

to take years to develop. There is also the need for parents to understand and support such regimes, as this is an important predictor of a successful development (Creech, 2010).

2.6.1.3 Parental Involvement

Parental involvement can take multiple forms, with the most common being encouragement for regular practice (Margiotta, 2011). In such cases, the parents are not involved as active members in their children's private practice. Instead, they act in an advisory role by reminding their children that they have to practise, as it is unlikely to take responsibility for their own learning (McPherson and Davidson, 2006). Hallam (1998) suggested that it is very common for young children to forget what and how they have to practise in their homes. The parents of young children usually have a central role in reminding them to practise, whilst in some cases they might also remind them what they have to practise for the next lesson (Hallam, 2001b). However, a study undertaken by McPherson and Davidson (2002) indicated that, although the majority of the mothers engaged their children by reminding them to practise their instrument, this behaviour tended to decrease over time. It seems that this type of parental support is perceived to be essential only in the early years of learning an instrument. This might be due to the fact that children at a young age have little in the way of organisation and planning skills and so they are not in a position to take responsibility for their own learning (Hallam, 2001b). As McPherson and Davidson (2006) claim, it could take years for a child to take responsibility for their own learning and that, until they do, parents are typically encouraged to be involved in their children's practice time. A more recent study conducted by Upitis et al. (2015) revealed that one of the most common reasons that students stopped taking instrumental lessons was a lack of parental support for their practice. Parental support and involvement can, therefore, have a great influence upon their children's practice. However, the way that parents approach their children about practise may influence their motivation in general. For example, Hallam (2001b, p.13) found negative attitudes of children towards 'parental pressure' or 'parental interference' in practice, as it created 'resentment and annoyance'. This leads one to believe that parents who approach their children in a more sensitive way are more likely to motivate them.

In some cases, more active parental attitudes may be evident, such as setting practice schedules with their children (Upitis et al., 2015). In some scenarios, behavioural support may also be offered in the home-environment, although this behaviour is more expected when parents have a musical background (Margiotta, 2011). It may involve supervision of practice, or organisation of various music-related activities (Grolnick and Slowiaczek, 1994). Barry (1992) examined the effects of structured practice on older brass and woodwind students between school Grades 7 and 10. The experiment included two types of practice context,

structured practice and free practice. Students assigned to free practice were asked to practise an ètude in any way that they wished for ten minutes. In contrast, students that were in the group of structured practice were supervised by an adult, who directed the student throughout the practice session. Results indicated that the practice of the students from the structured practice group was more effective in relation to musical performance.

However, although active adult supervision has been significantly linked to positive effects (Barry, 1992; Lehmann and Ericsson, 1997), not all parents have a musical background and therefore, this type of support may not be available to all children. Although parents with no musical background may be willing to supervise the practice of their children, this type of support seems rather risky as they are 'often unable to communicate the correct message to their child when it comes to practicing' (Margiotta, 2011, p.17). This might suggest that in such cases, parental support can be more effective when it takes the form of emotional support (e.g., encouragement to practise, provision of care and love). As Margiotta (op. cit.) argued, this also benefits the child-parent relationship in general, as it increases possibilities for a strong bond to be created.

A positive relationship between parent-child-teacher can have positive effects at this point, as the teacher can guide parents in what type of support to provide (Chardos-Camilli, 2015). However, it has been reported that the amount of parental support changes over time. Results from a study by Chardos-Camilli (op. cit.) showed that, as the student's length of practice increases, the need for a specific type of parental support decreases. It is suggested that the best way parents can support children at older ages is through emotional support, otherwise some writers argue that there is the danger that children might feel 'controlled' by their parents and, as a result lose interest (Creech 2009; Hallam, 1998; Margiotta, 2011).

Parental support and involvement can therefore have various benefits on the children's learning. In some cases, parents may value other activities or subjects to be more important (Teklos, 2011), and – as a result – not provide opportunities to learning an instrument. Parental attitudes and behaviours towards instrumental learning can be influenced by their value of music education (Shiakou and Belsky, 2013), including awareness of its benefits on the child's development (e.g., cognitive benefits). This is particularly evident in Cyprus, where instrumental learning takes place mainly within a private context (outside school) and parents need to pay monthly tuition fees (Lamprianou and Lamprianou, 2013). This resonates with earlier questions regarding the extent to which parents support the idea of learning an instrument, especially when the social-economic status of the family cannot afford to pay for private lessons.

2.6.1.4 Length of practice sessions

The duration of practice sessions seems to vary with the age and the expertise of the learner (Hallam, 1998). Research has illustrated that expert musicians tend to prefer relatively short practice sessions throughout the day instead of longer practice sessions (Ericsson et al., 1993). However, the nature of the task can have a great influence upon the length of the practice sessions. Small and simple tasks are often associated with short practice sessions, while more complex and challenging tasks require longer sessions (Barry and Hallam, 2002). Apart from the nature of the task, the age of the learner can also have a significant influence on the length of practice. Research shows that older children tend to practise longer compared to younger students (Hallam, 2004). As children become older and more experienced, they tend to increase the length of their practice sessions, reported to be linked to being more able to maintain concentration for longer period of time (Hallam, 1998).

The amount of practice time may also be influenced by the type of instrument. Jorgensen (1997) examined 141 students that had been enrolled in a four-year undergraduate programme in Norway. The group of instruments that were included in the study were brass, piano, strings, woodwinds and 'others' (accordion, guitar and percussion). He found that piano players spent a higher quantity of time on practice, followed by string players. The 'others' group (accordionists, guitarists and percussionists) were found to practise less than string players, but more than woodwind players. Finally, brass players were found to practise less than all the other groups. In addition to differences between instrumental categories, Jorgensen found differences between specific instruments in each of these groups. Violinists were found to practise more than double bass players, while saxophone players were found to practise more than trombone players. In the case of woodwind, flute players were found to practise more than clarinet players. The nature of the instrument thus may influence the amount of time spent practising, that is, the physical, the cognitive and the technical demands of an instrument may influence the total accumulated time of practice (Nielsen, 2004). Although this doctoral study focuses only on younger piano students, it is possible that cognitive and technical demands will also influence the amount of time spent on practising. As a result, commitment and persistence are more likely to be found in the case of higher level students, as these characteristics are often found in experts' practice (Hallam et al., 2016).

2.6.2 Quality of practice

Research has demonstrated that the quality of practice sessions has a direct influence on the effectiveness of instrumental practice, while the quantity by itself does not (Miksza, 2012). Although the quantity of practice has been shown to be an important element, without quality, practice sessions are unlikely to be efficient (Concina, 2019). Spending hours on repetitious

practice without using effective strategies cannot help musicians to maintain progress. Therefore, the behaviours and the strategies used by musicians whilst practising are believed to influence to a large extent the effectiveness of the practice session.

Research on the quality of practice has focused on the behaviours and actions of musicians while practising, by examining applied practice strategies, and with observations as a method being the most common used. Studies have been conducted on students between the ages of 6 and 18 years (Sloboda, Davidson, Howe and Moore, 1996; Hallam, 2001a; Leon-Guerrero, 2008), young beginners (Pitts and Davidson, 2000) and conservatoire students (Nielsen, 1999, 2008; Jorgensen, 2002), and focusing on a variety of musical instruments such as the piano, violin, organ or the recorder. In addition, comparative studies have also been conducted to examine the similarities and differences between novice and advanced musicians (e.g., Gruson, 1988; Hallam, 2001b; StGeorge et al., 2012). Although authors take different perspectives in their research, they all provide valuable insights into effective practice behaviours and attitudes, as well as considerations or issues related to this activity.

Studies have also demonstrated that the development of appropriate strategies can take years (McPherson and Renwick, 2001; McPherson, 2005). It seems that the strategy used develops simultaneously with expertise, since students are reported gradually to develop better practice habits, as they become more experienced (Hallam et al., 2012). A broad research literature within and outside music suggests the importance of deliberate practice in enhancing practice quality (Ericsson et al., 1993; Ericsson, 2008).

2.6.2.1 Metacognition

A repertoire of effective practice strategies appears to develop gradually, but also simultaneously with musical expertise as, over time, musicians adopt even more profound strategies while practising (Ericsson et al., 1993). With appropriate support, they are likely to develop metacognitive and self-regulatory skills, where they plan, monitor and evaluate their own learning (Hallam, 2001b, 2006; McPherson and Zimmerman, 2002; Barry and Hallam, 2002). Metacognition has been defined as 'the individual's thoughts and beliefs about learning and about knowledge and the translation of this into regulatory behaviours' (StGeorge, Holbrook and Cantwell, 2012, p.244). As students become more self-regulated, they are more able to identify their personal strengths and weaknesses, the nature of the task to be completed, available strategies, and they are able to evaluate their progress toward the specific goals that they set.

Research has demonstrated that musicians at different levels of expertise vary in their knowledge and deployment of self-regulation strategies. Hallam (2001b) examined the development of metacognition in musicians from novice to professional level and her findings indicated a significant difference between the two concerning their skills. She found that expert musicians have well developed metacognitive skills, as they were able to identify their own strengths and weaknesses, assess task requirements and develop strategies to overcome particular task difficulties and 'optimise performance' (Hallam, 2001b, p.21). In contrast, children demonstrated less metacognitive awareness. Although some children had developed a range of strategies, they did not have a well-defined focus in optimising their performance.

This might lead one to believe that, although children might develop a range of strategies, in most cases they are still not able to control, regulate and choose the appropriate strategy from their practice repertoire. Therefore, the inference is that instrumental teachers need to support their student's development of metacognitive skills by encouraging discussions related to general metacognitive understanding. In this way, teachers can help their students to become independent and autonomous, which are seen as essential characteristics of an expert musician (Hallam and Creech, 2010).

2.6.3 Effective Practice Strategies

An exceptional level of performance implies that the expert musician has a high level of skills in identifying and choosing practice strategies that can help them achieve specific target goals (Papageorgi et al., 2010). This suggests that an examination of their behaviours and actions while practising can reveal important information about the processes that they follow. It is thus not surprising that researchers have focused on the individual practice of expert musicians, with the aim of identifying effective practice strategies (Hallam, 2006; Jorgensen 2004; Jorgensen and Hallam, 2009).

Practice strategies reported in the existing literature on the quality of instrumental practice tend to fall into several categories. Jorgensen (2004) proposes four strategy types that musicians use while practising, based on his view of 'practice as self-teaching': planning and preparation strategies, executive strategies, evaluation strategies and metastrategies (see Figure 2.6). Similarly, Nielsen (1999) classified two main learning strategies in instrumental practice: primary strategies (selection, organising and integration strategies) and the support strategies. According to him, primary strategies:

'…influence directly the learners' acquisition of new knowledge by being concerned with the cognitive processing of textual material, while support strategies influence indirectly the learner's acquisition of new knowledge by focusing on the learner's state of mind' (e.g., maintaining concentration, mastering anxiety and securing the efficient use of time).'

(Nielsen, 1999, p.277).

More recently, Jorgensen and Hallam (2016) have sought to map practice strategies based on past literature, by taking into consideration all the reported elements of instrumental learning. 'Planning strategies', 'strategies for the conduct of practice' and 'strategies to evaluate practice' were the suggested three main categories. Various types of practice strategies fall into these categories, each of them being significant for the effectiveness of the practice. The following sections will explore a range of practice strategies that are reported to be effective in individual instrumental practice. Concepts from past literature are adopted and discussed. Subsequently, a selection of these is used as a framework for the analysis of the collected data in this fieldwork (see Chapter 3).
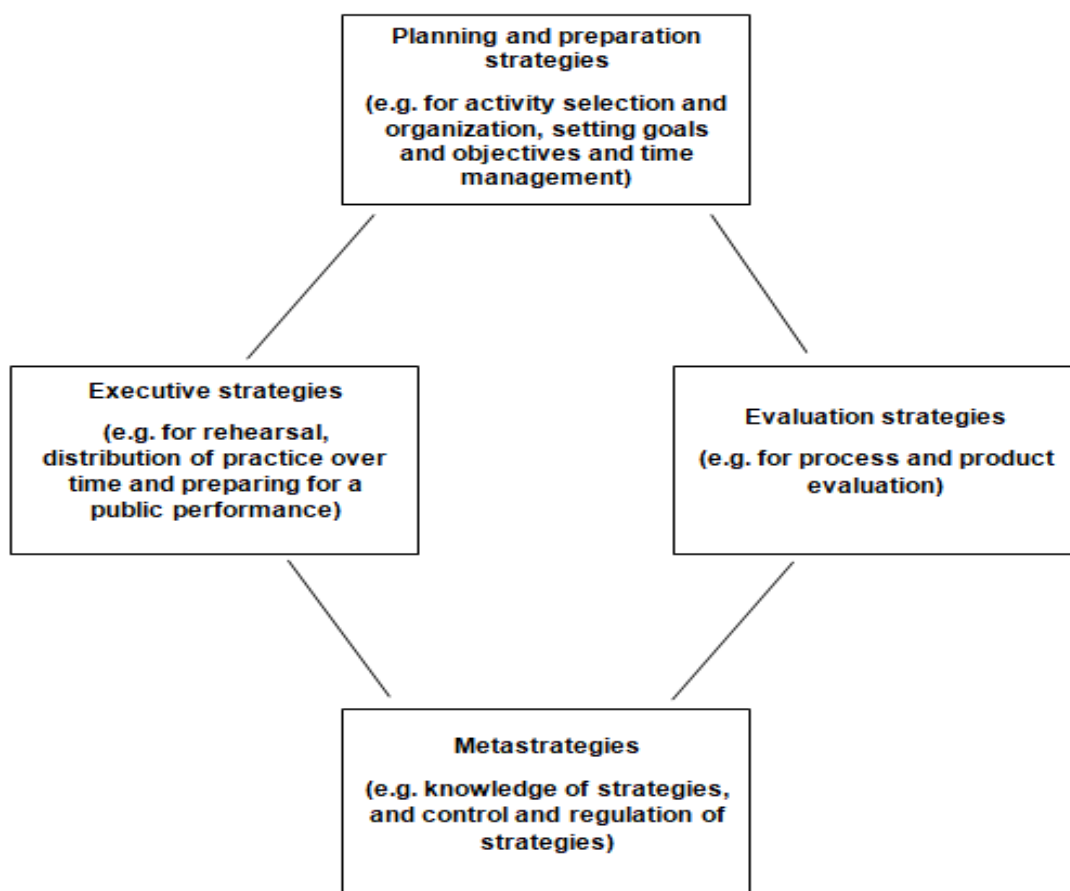
Figure 2.6 A model of strategies for individual practice (Jorgensen, 2004, p.86)

2.6.3.1 Organisational and time-planning strategies

Organisational strategies include activities that musicians undertake intending to prepare and organise each of their practice sessions. Expert musicians tend to prepare prior to their practice sessions by setting specific task goals depending on what they want to achieve. Such goals have been identified as 'short-term' goals, as they usually include what musicians hope to accomplish in an individual practice session (Little and Ployhar, 1985). Preparation strategies may also be used for 'long-term' goals, based on what they desire to accomplish in future practice sessions weeks or months later (McPherson and Zimmerman, 2002).

One of the strategies that has been suggested is to keep track of what is to be learned, such as with the use of a practice notebook (Gledhill, 2001). Based on McPherson's (2005) suggestions, students can use a practice notebook to take notes about what they have to practise (e.g., specific elements of a piece) and how to practise (e.g., what strategies are available to be used). Students may also use a notebook at the end of their practice session to report any problems or difficulties they experienced during their session, as well of what needs further practice (Harris and Crozier, 2000). In such cases, teachers can also use the notebook in the subsequent lesson and provide the student with essential help. This strategy is reported also to help students set short-term goals for the subsequent sessions and monitor and control their own learning. Apart from keeping track of what has to be learned, children can also use notebooks with the aim to organise their practice sessions.

Burwell and Shipton (2013) investigated the practice of eight undergraduate students in the second and third year of their studies. They offered the students three seminar sessions, each providing guidelines about strategic approaches to practice, rehearsal and performance. Students were asked to carry out practice sessions by following structured practice schedules based on the '15 minute rule' framework – they were free to practice anything that they considered to be worth practising during 15 minutes. Students were also asked to keep practice schedules and reflect on a weblog; they were also interviewed more than once. Findings demonstrated that all participants showed enthusiasm for the 15 minute rule as this helped them to organise their practice better. Specifically, students found it beneficial to keep track of what they were practising, as they reported that it helped them stay focused on their short-term goals.

Keeping track of what is to be practised can also contribute to the organisation of practice. Thus, it is considered important for practitioners to follow a sequenced and logical manner while practising (Jorgensen and Hallam, 2009). In the cases of children, McPherson (2005) found that they tend to organise their practice sessions with a logical sequence. They initially

played the pieces that they were assigned to practise, and then focused on pieces that they already knew, or enjoyed playing. Although findings of this study indicated that this group of students practised more effectively by using organisational strategies, this might not always be the case. Young children may not be in a position to organise their practice successfully. As McPherson (2005) notes, teachers have a key role in modelling such strategies so as students develop knowledge and understanding on how to use them while practising at home. Parents, as a next step, have a key role in encouraging their child to adopt these strategies while practising at home (Margiotta, 2011; Creech, 2010) However, active parental involvement may not always be possible (see section 6.2.1.3 for more).

Research into highly skilled musicians revealed behaviours in relation to the organisation of their practice. One common attitude is to start practice sessions with warm-up exercises, followed by technical exercises and lastly the repertoire (Hallam et al., 2012). Although warm-up exercises are perceived to be an important element in practising due to their benefits (Colson, 2012), studies have indicated that individual differences can impact musicians' willingness to include these in their practice (Hallam, 2001b). However, the type of the instrument influences directly musicians' attitudes towards this activity. Musicians who play woodwind or brass instruments for instance, are more likely to do warm-up exercises, as it is part of the procedure of adjusting the instrument (e.g., pitch level and reeds). 'Getting the breath mechanism working properly' and 'limbering up muscles' may be additional reasons for including a warm-up in their practise (Colson, 2012, p.65). Research on classical piano students also indicated the importance of warming up as it benefits in preventing muscle injuries, especially in the case of small-handed pianists who are more likely to be injured (Degrave et al., 2020; Ling, Loo and Hamedon, 2016). Thus, students awareness of the benefits of warming up can help them gain knowledge and understanding in the importance of using organisational strategies.

Additional organisational and time-planning strategies may include dividing daily practice into morning and afternoon sessions, by practising different material in each session. Results from Ericsson, Krampe and Tesch-Romer's study (1993) support this, as they found that experts tend to practise scales in the morning sessions. Practising technique during the morning seems to be a common phenomenon for expert musicians, as it enables them to concentrate better at that time of the day (Hallam et al., 2012). However, in the case of children, using this strategy might not always be feasible. A busy schedule after school time may result in having limited or no time left for practising on their instruments (Myung, 2001). As Ilari (2018) argues, overscheduling is often a negative result of concerted cultivation, a concept of musical parenting. In their effort to stimulate their children's development through a wide range of activities (Ilari, 2013), parents may limit opportunities for children to be equally productive in

all subjects.

2.6.3.2 Error Correction Strategies

Error correction strategies are the most commonly reported, especially in the practice of lower-level learners. Strategies that fall in this category are mainly based on repetition and are used with the aim of correcting mistakes on notation or rhythm. Hallam (1997) investigated musicians between the ages of 6 and 18 years with the use of observations and interviews. Based on the results, six levels in the development of practice were identified. At the first level, the task requirements were incomplete, while at the second level students usually played through the whole piece without making any corrections. At the third level, students began to correct some of their mistakes by repeating single notes, while at the fourth level they began to repeat short sections. At the fifth level, they moved on to practising larger sections *en route*. Lastly, at the sixth and final level, students' practice was found to be more sophisticated, as they identified difficult parts by playing the whole piece, and then practised by isolating these parts. The proposed theory, based on the results from this study, offers a significant advance in our knowledge and understanding of how practice can change over time and how students behave and act while practising at their homes. Furthermore, it essentially provided an insight for educators, as it enables easier identification of the student's current level. This may lead to providing essential support accordingly, which subsequently will help them reach the maximum level of practice development.

Findings also indicated differences between novices and higher-level students, with one of the significant findings concerning the student's ability to recognise mistakes. Hallam (op. cit.) concluded that it is a common phenomenon for novices and beginners not to be able to identify their own mistakes while practising. Results from a longitudinal study on self-regulation in children's practice support these findings. McPherson and Renwick (2001) observed seven children between the ages of seven and nine while practising over a three- year period. They found that beginners tended to play through the piece a couple of times without correcting all of their mistakes.

The above studies demonstrate that young children usually spend their time practising relatively inefficiently, since they are often unaware of their mistakes. This might be due to the fact that young children do not have appropriate schemata developed, and as a result they are not able to evaluate their progress (Hallam et al., 2012). It is believed to be extremely important for musicians to be able to acquire an internal representation of a piece of music that they are learning, so as to recognise any mistakes (Jorgensen and Hallam, 2016). Various studies have indicated that there are many strategies that children may use to enhance the

development of appropriate aural schemata. One commonly used strategy is reported to be the use of recordings, as listening to the piece that they are learning can have positive effects upon them. However, a study conducted by Jorgensen and Hallam (2009) showed that this is not always the case, as the effects of this strategy may vary with different students. However, there is an essential need for teachers to provide such opportunities to their students, especially in the cases of beginners who are still in the process of exploring effective strategies (Hallam et al., 2012). By knowing what the piece should sound like, the possibilities for the student to identify mistakes are reported to be higher and so more able to start selecting possible strategies and monitor their progress (Hallam and Creech, 2010).

2.6.3.3 Strategies for the conduct of practice

Strategies for the conduct of practice include strategies that musicians apply while practising a musical piece. A strategy that expert musicians include in their practice repertoire is variable practice, such as encountering the same task in a variety of different ways (Welch, 1985). According to Jorgensen (2004), variable practice can be very beneficial for achieving specific task goals, either short-term or long-term. In addition, musicians may use this strategy to develop or improve a specific technique (Costa, 1999). Practising difficult parts of a musical piece at different pitch, tempi or articulation of rhythms can be very effective, especially for children at a lower-level of expertise, possibly for the reason that it helps them to acquire more easily the mental representation of the piece that they are learning (Hallam, 2006).

Another strategy that has been demonstrated to be very beneficial is gradually increasing the tempo (Drake and Palmer, 2000). This strategy is particularly advantageous for musical pieces that have to be played at speed. Usually, highly skilled musicians tend to begin practising the piece with a slow tempo, and they gradually increase the tempo as progress is noted. In such cases, students initially learn the piece very well, and then they work on final adjustments, including the final performance tempo. This enables learners to concentrate better on working on the final tempo since mistakes on notation and rhythm are less likely to occur. Jorgensen (2004) suggests two more strategies concerned with the target tempo used in the performance: i) to find an alternative tempo between a slow and a faster tempo, and ii) to practise the piece at the final tempo from the beginning. However, the second strategy is not particularly suggested for musicians who are not experts, as they will have too many things to cope with at the same time and it is likely that the results will be negative.

Another strategy that is reported as effective is 'counting aloud' whilst playing (Maris, 2000). The counting procedure includes the usage of note values or rhythmic syllables, or sequential pulses. Such a strategy is highly recommended for low-level students, as they are encouraged

to count aloud for rhythmic accuracy. Singing and counting at the same time can also be very effective for learners, so as to cope with difficulties in rhythm or notation (Lisboa, 2008; Casas-Mas et al., 2018).

2.6.3.4 Learning a new Musical Piece: Isolation of parts and playing the whole piece

Musicians may use different approaches while learning a musical piece. However, there seems to be diversity in the attitudes of low- and high-level skilled musicians, demonstrating that their current level of expertise can strongly influence this process. Chaffin and Lemieux (2004) found that experienced instrumentalists initially create a 'big picture' of the new piece and as a next step, they reflect on how they would like to perform the piece. Similar findings were found in studies with high-level skilled musicians (Lettberg, 2011; Lisboa, Chaffin and Logan, 2011), indicating that interpretation was one of the first categories that participants reflected on, in their initial stages of practice. All studies suggested that these abilities could take years of experience as they demand critically reflective thinking. However, there are some useful strategies available for students to use in their early years of development. The use of different recordings can be very useful in creating a picture about the interpretation of a musical piece (Nielsen, 2004). Listening to a variety of versions of musicians' performances gives the opportunity to the students to set their goals and strategies accordingly.

Strategies related to how to practise a new piece of music are also available. There seems to be diversity in belief as to whether musicians should practise the whole piece or break down the piece into small parts (Jorgensen, 2004). However, there is considerable evidence that the second strategy is likely to be more efficient, as it is often evident in the practice of expert musicians (Hallam, 2001b). Hallam (op. cit.) found that professional musicians initially acquire an overview of the piece, either by careful examination, or by playing the piece through, and then they divide the piece according to the structure of the music. Those parts identified as difficult are usually divided into even smaller sections; however, the level of difficulty of the piece can influence that decision. After breaking down the piece into several parts, professionals work on each part separately until mastery is achieved. When progress is noted, the final stage is to link the parts together and to practise the entire piece (Barry and Hallam, 2002; Nielsen, 1999).

2.6.3.5 Strategies to master difficult parts

Specific practice strategies are also available for musicians who are seeking to master (for them) difficult or challenging parts. Instrumentalists tend to use two different strategies while practising, although these are associated with specific levels of expertise (Jorgensen, 2004). The first strategy that is considered to be rather ineffective is to play through the entire piece

several times without focusing on the difficult parts to correct mistakes (Renwick and McPherson, 2002). Previous research illustrated that this is particularly evident in the practice sessions of young inexperienced children (McPherson and Renwick, 2001). Pitts and Davidson (2000) examined cognitive strategies used by three novice brass and woodwind players aged nine and ten, and they found that the most common activity that children undertook was to play through the piece without stopping to correct their mistakes, nor to focus on difficult parts. As a result, they concluded that young children often ignore the auditory feedback from their playing. Results were consistent with that of Hallam et al. (2012), indicating that young children tend to use ineffective strategies when it comes to difficult parts, even if they repeatedly make the same mistakes. Specifically, they mostly showed a tendency on playing through the entire piece without correcting their mistakes. In the cases when they recognised a mistake, they often returned at the beginning of the piece, or simply corrected their errors as they played through the piece (Hallam et al., 2012). However, it seems unrealistic to improve the more challenging parts of the piece as it does not provide opportunities to face difficulties.

The second strategy is a combined approach, and this is considered to be appropriate for mastering difficult parts. Students play through the whole piece and when they identify difficult parts, they focus on these until improvement takes place, by practising them en route (Jorgensen and Hallam, 2009). If they recognise in the future that they are still facing difficulties, they focus on those parts again until mastery. This strategy is usually applied by highly skilled students, although it may be evidenced in the practice of novice players.

2.6.3.6 Mental Practice Strategies

Mental practice has been identified as one of the most efficient strategies and, thus, it is suggested by many researchers and practitioners. Mental practice has been defined as 'the cognitive or imaginary rehearsal of a physical skill without 'muscular movement' (Jorgensen, 2004, p.92). It is an alternative to the playing approach in which musicians have to put in a lot of mental effort. It has been suggested that mental practice allows musicians to focus on the cognitive aspects of music performance, without being 'distracted' by exercising motor control (Jorgensen and Hallam, 2009, p.269).

Mental practice can be more effective when it is strategic and goal-directed so as the learner remains entirely focused on the task. In addition, actual engagement with the task prior to the mental sessions can enhance the results, as the learner has already created an idea of what to cope with. Lastly, it is recommended that the mental sessions need to be short, as engagement in this activity can be challenging (Barry and Hallam, 2002). In addition, research

shows that a combination of mental practice and physical practice is more effective than physical practice alone. Hence, combining mental and physical practice can improve both learning and memory (Clark, Williamon and Aksentijevic, 2012).

In a three-year longitudinal study, McPherson (2005) examined the quality of mental strategies that children—aged between seven and nine—adopted whilst performing. Based on the results, children were observed to draw on a range of mental strategies so as to learn a piece from memory, with the highest achievers applying the most sophisticated mental strategies (e.g., linking the sound of the melody to instrumental fingerings). According to McPherson, children who applied musically appropriate mental strategies were more likely to succeed than students who did not. Such findings imply that by teaching students appropriate techniques of mental practice, their achievement is also enhanced. Students, then have to be encouraged to use such mental strategies in their practice, especially when they are practising how to play a piece from memory.

2.6.4 Discussion

The above sections aim to provide an insight for the reader into what is considered to be effective practice strategies within the field of music education. Elements from the theories discussed in relation to musical expertise and practice development were used as a framework in the design of this doctoral thesis. In addition, they were applied to the creation of various research and assessment tools. More detailed information about the research process can be found in Chapter 3.

All of the strategies reported in this chapter are considered to be more (or less) effective in individual practice. Each serves different purposes, as some may be used to improve specific aspects of musical understanding, develop technique, learn a new piece, or memorize repertoire. Over time, with support, students should be able to identify the purpose of their practice and, therefore, choose appropriate strategies. However, although strategies tend to be considered as serving a specific purpose, their effects may vary upon learners. It is not expected that each strategy will have equal results for all instrumental learners (Nielsen, 2001). Some learners may find it extremely valuable to use a specific strategy to achieve their goals, whilst—for others—such a strategy may not have the same positive impact. This might be due to various factors, including individual characteristics as a learner (weaknesses and strengths) and also educational background and years of experience. Therefore, it is noted that there are various influences involved in the selection of practice strategies. This hypothesis was supported by the findings from a study undertaken by Hallam (2001b). According to the results, all professional musicians used a range of practice strategies in response to their needs, but—most interestingly—results indicated individual differences in

some aspects of their practice. She found differences in the regularity of practice and its content, the type of technical work undertaken, and the participants' preferences to begin their session with a warm-up. As this study showed, although all musicians have acquired a professional level, they used different type of strategies based on their awareness of what strategies work best for them.

In addition to individual differences, changes in the current skills of musicians influence the effectiveness of specific strategies. The effects of specific strategies tend to alter as they become more experienced (Nielsen, 2004). When this is the case, students should be able to identify alternative practice strategies available to them and replace or combine the old strategies with more effective ones (Lehmann and Ericsson, 1997). Learners should, therefore, evaluate regularly their repertory of practice strategies, depending on their progress over the time, so as to enable constant improvement. Teachers' guidance can also be very valuable in this process, as they can help their students to overcome such difficulties. When progress is no longer sufficient, teachers can act by suggesting alternative strategies that are considered effective. Rather than seeing this in a negative way, students may also be encouraged to see this as an opportunity to expand their practice strategy repertoire.

Taking into consideration all the above, some general conclusions are that practising effectively is a learning activity that requires extensive involvement and experience, often in the context of guided and structured support by an expert. As musicians develop their musical expertise, they should build a repertory of appropriate practice strategies. Nevertheless, the development of metacognitive skills is extremely important so that students learn to use these strategies wisely. Appropriate metacognitive skills allow the learner to be aware of many available practice strategies and understand when, why, and where they can apply these strategies. Such decisions depend on their monitoring and evaluation of their learning outcomes in relation to the goals they set.

However, since the development of metacognitive skills is considered to be closely linked with the development of musical expertise, children usually are not in a position to practise as effectively as they might. Therefore, the implication is that instrumental teachers have a crucial role in assisting their students to learn how to practise efficiently. Teachers should offer their students various opportunities to learn how to adopt a metacognitive approach in their practice in order to become independent and autonomous learners. A notebook was reported to be a valuable training tool that teachers can use to assist their students in gaining confidence and developing independency as learners (Harris and Crozier, 2000; Barry and McArthur, 1994). Past research has shown that it can positively influence students' quantity (Wagner, 1975) and/or quality of practice (Madsen and Geringer, 1981; McPherson, 2005; Green, 2007; Dade,

2013). Research undertaken by Barry and McArthur (1994) indicated that notebooks can specifically aid in the development of effective practice strategies, especially in the case of young and less experienced students. Similar results were found by Weaver (2005), as findings showed that when teachers provided a written assignment, students used the suggested strategies more precisely. A notebook can therefore aid in developing a proper practice repertoire, as teachers can model and demonstrate practice strategies via written notes. A notebook can also be used to enhance students' memory in regard to what was assigned to practise at home (Green, 2007; Harris and Crozier, 2000) as young students have the tendency to forget due to their short-memory skills (Hallam, 1998).

At the same time, a notebook can be used by teachers as a method of communication with parents. In discussing parental involvement, Green (2007) argued that notebooks can help parents to be actively involved with the practice process such as by asking questions whether material has been practised. In addition, this method can be used to provide feedback for the parents regarding their children's progress. In general, using a notebook as a strategy can have various positive effects upon children's learning (Weaver, 2005). However, it has been argued that usage of notebook is a method that often reduces significantly as the level of expertise increases (Barry and McArthur, 1994) for various reasons. One of the reasons suggested for this is that it might in some cases interfere with the teacher-pupil relationship, as more advanced students may experience feelings of not being trusted to take responsibility for their own practice. In discussing this argument, Gledhill (2001) claimed that it is important for teachers to encourage their students to keep their own notes rather than to provide them with a specific practice format to follow. This teaching method seems to aid on the development of independency as a learner, while it offers opportunities for the students to learn how to reflect on their own practice and more generally, to self-regulate their practice.

All these practice behaviour characteristics are expected to be found in learners who decide to make a full commitment to the music profession (e.g., conservatoire level), indicating the importance of reaching a high level of skills in practising (Siegel, 2005). Taking into account these expectations, one of the key roles of instrumental teachers is to help students to acquire a high level of practising skills, as this would possibly open doors for further development. Provision of practical (e.g., feedback on practice) and emotional support (encouragement and demonstration of keen interest in practice), are thus seen as essential elements in teaching (Ruzek et al., 2016).

In addition, parental support in children's learning, and specifically in home practice, has an important role in their musical development. Parents who provide any type of parental help (emotionally and practically) can benefit and enhance children's motivation to be involved in such activity. However, external influences may influence the extent to which parental involvement is evident. The parent's socio-economic status, their cultural background and their attitudes towards instrumental learning may influence to a great extent the amount of support that they offer to their children (Margiotta, 2011). As discussed in previous sections, the financial status of the family is argued to be one of the major factors that have an influence, since pressures and worries may lead to no involvement or unsupportive behaviours (op. cit., 2011). This is particularly the case in Cyprus, since some parents may face difficulties in offering their children the opportunity to learn an instrument in a music conservatory due to their limited income. This is perhaps one of the many reasons why parents may choose to send their children to 'state music schools'.

2.7   Relationship of lessons and subsequent practice sessions

Although researchers have made suggestions based on their study results about effective practice strategies or teaching methods, it has to be noted that they tend to focus mainly on one of two topics. Specifically, studies have had a keen focus on both quality and quantity of practice, with the level of expertise, achievement and attainment being the main elements of interest, or they have focused on teaching methodologies used by teachers in the context of private lessons.

However, there is limited research on how one-to-one instrumental lessons and students' private practice in between such lessons might be related. Specifically, only three studies have investigated the relationship between instrumental lessons and the subsequent practice sessions. The first study that examined this relationship was conducted by Koopman et al. (2007) in the context of conservatoire education. Six case studies were used and examined with the use of observation, questionnaires, logbooks and interviews. Observational data included four lesson videos from each teacher, and three weeks' videos of the student's subsequent practice sessions. All participants were trained at the Royal Conservatoire of the Hague and were in their second year of their conservatoire education. The instruments specialisations were recorder, classical singing, jazz singing, violin, oboe and flute. The results revealed a strong relationship between the lesson content and the students' private practice. The researchers found that private practice was clearly connected to the behaviours and actions that were applied in the previous lessons. Students focused on difficulties that came up during the lessons, based on their teacher's homework instructions about specific approaches, and also on homework feedback that they received for previous home practice.

Overall, an emphasis on private practice during the lessons led to more structured practice. In addition, the researchers found that teaching style had a significant influence over the student's practice. Data showed that although the master-apprentice model (see Koopman et al., 2007, for more on this) was dominant, teachers also used other approaches that had an impact on the results. In such cases, teachers presented practice strategies, and encouraged students to act independently. Koopman et al. (2007) concluded that teaching methods in relation to practice are extremely influential over the nature of a student's private practice.

Another study on this topic was conducted by Barry (2007) in the context of a college. The participants of this study were three college-level music instructors, and 12 of their students. The musical instruments that were included in this experiment were low brass, woodwinds and strings. A qualitative methodology was applied, with the use of videotaped observations and questionnaires. All of the music lessons were videotaped by the teachers, and the subsequent practice session by the students. All of the participants completed the procedures over a controlled time frame of 48 hours. In addition to the videos, specially designed questionnaires were used, one for the teachers and one for the students. Questionnaires revealed information about the participant's background information, their practice narratives, and their approaches in practice. The results from all the data indicated a strong relationship between teaching styles and the subsequent private practice sessions. Specifically, observations revealed three different teaching styles, with the teachers indicating a variety of techniques during the lessons. However, the results showed that students used only a few of these techniques while practising, with the exception of those that the teacher gave emphasis to during the lessons. Barry (op. cit.) concluded that when teachers repeatedly emphasise practice techniques through conversation, particularly through demonstration, the possibilities for the student to apply the strategies while practising are higher.

A more recent study was conducted by Chen (2015), with the aim to identify what (i) strategies were recommended by the teachers and how students practised in the subsequent sessions, as well as (ii) what strategies had a direct influence over the students' improvement of performance. The study was conducted in the context of colleges and universities, with the participants being five professors and ten students. Each piano professor was asked to recruit two piano-major undergraduate students, with one of the two students being either in their first or second year of college, and the other being in the third or fourth year. The methods used for collecting data were mainly video-taped observations of a piano lesson and three subsequent practice sessions. A survey was also provided for the students at the end of the practice session to gather information about each student's piano experience, background, and practice routines. The results indicated that the teacher's methodologies and the student's practice directly influenced the student's performance improvement. Factors that affected

performance improvement in relation to teaching were teacher knowledge of the student's abilities, the student's degree, length of study with the current teacher, modelling, talk, demonstration and communication. Factors related to the student's behaviours were hours of practice, system of analysis of the piece, practice strategies, identification of errors, solve of errors and concentration. In contrast, the student's sight-reading abilities, years of being a piano student, practice routine and practice priority, as well as the teacher's degrees and experience appeared to have no influence on student's performance improvement.

2.8   Summary

The need to explore this topic further is evident from the literature, as it is a significant part of the process of instrumental education. Combining the two main topics of the literature review (expertise and practice) can lead to a better understanding of what teaching methods can have better effects for each level of developing expertise. Despite individual differences, further research on how students respond to different teaching methods can assist in our understanding of their development as musicians. Past research on this topic has mainly focused on a specific level of expertise in the context of college and university levels. Examining the relationship of lessons and practice in a wider context, including various levels of expertise, would enhance our knowledge and understanding in the field of music education in order to how best support instrumental learning. There are no reported studies in the literature that are focused on children and young people concerning the relationship between lesson content and private practice.

Chapter 3
Methodology and Methods

3.1 Introduction

This chapter presents the methodology and the methods that were used in this research. First, an applied research paradigm is discussed along with methodological considerations. A part of this chapter is also dedicated to the two pilot studies, where the aims and key aspects are reported. Methods of data collection are then presented, along with a discussion about their advantages and limitations. Researcher biases are also discussed, with reference to any challenges that were faced during the research. Presentation of the tools used for the main study analysis is also part of this chapter (e.g., observation checklist). Lastly, the chapter closes with a discussion on specific strategies used to answer the three research questions successfully.

3.2 Research Paradigm

The philosophical assumption of the researcher as well as the methods that will be used by researcher form the research design. From an epistemological perspective, pragmatist researchers seek to understand and solve or improve practical problems that are part of the real world (Kaushik and Walsh, 2019; Duram, 2012). They focus on the nature of human experience, and they are interested to understand the relationship between behaviours and their consequences (Kaushik and Walsh, 2019). According to pragmatists, there is no absolute truth or reality; instead, they embrace the view that each person has different experiences and, as a result, their worldviews differ. Meanings are shaped based on past experiences and subsequently produced beliefs of predictable outcomes for similar situations (Kaushik and Walsh, 2019). They suggest that 'meaning is inseparable from human experience…Each person's knowledge is unique as it is created by her/his unique experiences' (op. cit., p.4). According to pragmatism's point of view, these experiences stand only at the given/specific time; if actions change, consequences will also change as the outcomes would differ. One of the main aims of pragmatic studies is to understand the factors that influence people's actions in a given situation (Duram, 2012).

This research takes a pragmatist approach by seeking to investigate a socially situated issue within a Cypriot context. This study is concerned with getting answers about factors that may be involved in students' behaviours whilst practising and understanding possible reasons why they choose to take specific actions while involved in this activity. Both internal and external factors are examined, so as to understand interrelationships between lessons and home practice. Results can enhance our limited knowledge and understanding of how instrumental teaching in private musical conservatories in Cyprus influences students' experiences in practising.

To fulfil the goals of this pragmatic study, a mixed methods approach was used. Mixed methods is inherently pragmatic, and it enables the researcher to interrogate particular questions with the most suitable research methods (Feilzer, 2010). Both quantitative and qualitative methods were therefore used, as it is suggested that they would provide a more holistic perspective of the problem that was investigated (Eyisi, 2016). This study used an abductive reasoning approach, through two different pilot phases, an element which is fundamental in pragmatist studies. Deductive and inductive aspects helped the researcher to be actively involved by reflecting on different approaches to theory and data (Feilzer, 2010). Specifically, a deductive aspect (Johnson and Onwuegbuzie, 2004) was evident through the testing of hypotheses. All hypotheses were initially formed through an extensive literature review, and—at a later point—pilot studies were used to examine whether expected elements were evident. An inductive pattern was also part of this research, as one of the goals of undertaking the pilot studies was to discover additional patterns to those gathered from the literature review. An additional goal was to test whether the chosen methods for the data collection and data analyses were appropriate.

Pragmatist studies are often regarded as a type of research design that offers to researchers the highest possibility to answer their research questions (Johnson and Onwuegbuzie, 2004). For this study, the triangulation of data helped the researcher to enhance validity and reliability, as it provided the opportunity to have more substantial evidence for interpretations. In discussing mixed methods and triangulation, Onwuegbuzie and Leech (2007, p.240) argued that it allows the researcher to have 'an adequate representation of the underlying phenomenon'. It therefore diminishes possibilities to miss insights and understanding of the phenomenon that is being investigated. It can also cover up weaknesses of a method used in the study by emphasising the strengths of other methods (Johnson and Onwuegbuzie, 2004). For these reasons, the researcher considered this approach to be the most suitable for the present study.

3.3 Methodological considerations

The way that researchers approach problems while seeking answers has been defined as 'research methodology' (Taylor, Bogdan and DeVault, 2015). The paradigm applied by the researcher plays a key role for such decisions. From the very beginning, it guides the researcher to solve any actions taken, as it relates to the beliefs and values regarding the nature of reality and knowledge (Kaushik and Walsh, 2019). Reflecting different philosophical roots, a researcher's worldview and the aims and purposes of the study shape the methodology that will be applied for the research (Ridenour and Newman, 2008). In turn, the methodology then orients the conduct of the research, guiding the researcher on any decision concerning the choice of participants/sampling, and approaches data collection, and analysis (Kothari, 2004). For many years debates have existed regarding the merits of different paradigms (notably constructivism and positivism) along with various research approaches common to each (notably qualitative and quantitative). However, as Morgan (2014) notes, some researchers have looked to move on from these distinctions, instead focusing on paradigmatic pragmatism and efforts to 'mix' methods for best effect. The following sections situate the case study approach within this pragmatist context, and identifies the benefits and challenges associated with the various qualitative and quantitative research methods it combines.

For the purposes of the present pragmatic research, case study (Morgan et al., 2017) was considered to be the most suitable approach for the reason that it could provide details of teaching and learning within a Cypriot context. Specifically, it offered the potential to identify similarities and distinctive features of students in relation to their practice and their musical development. In addition, examination of the teachers' behaviours and actions could establish important information about their perceptions as a whole, and any factors, if any, of influence. This advantage is one of the reasons that pragmatic studies embrace usage of this method (Mills, Durepos and Wiebe, 2012). Although it is recognised that it can be difficult to generalize from a small number of case studies (Englander, 2019), this method can contribute to social research by investigating areas of human behaviour that cannot be examined with quantitative methods (see below) (Queiros, Faria, Almeida, 2017). Over the past decades, case study has become a widely used approach for researchers, although it has been subjected to a number of criticisms. However, at the present time, it is a very popular method applied in various fields and especially in education, psychology, history and medicine. A case study has been defined as an extensive study of an individual or a group of people, within a specific setting (Ruddin, 2006; Gustafsson, 2017). More recently, Yin (2014, p.18) defined case study as a 'systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest'. It is, therefore, offering the opportunity to examine in depth a specific

phenomenon within its real-life context, through detailed analysis of a small number of events or conditions (Idowu, 2016; Zainal, 2007). Case studies allow researchers to focus on questions of 'how' and 'why', while they also examine possible factors that may directly influence the phenomenon that they investigate (Baxter and Jack, 2008). Case study has also been described as an intensive study, indicating that it investigates a limited sample, but in detail, with the collection and, therefore, analysis of a large amount of data (Wikfeldt 2017; Jacobsen, 2002). A limited sample provides an opportunity for the researcher to investigate and analyse complex events, by also exploring any possible factors that can have an impact (Starman, 2013). Although these factors can lead to strengths regarding validity, generalizability is considered one of the main disadvantages of the case study approach (Wikfeldt, 2017). Because of the limited number of participants, many have claimed that the possibilities for reliable findings are very low (Idowu, 2016) and, as a result, it has been argued that this is restricting researchers from developing a theory based on their findings. Despite an apparent difficulty of generalizing results, case studies are still considered to perform well in comparison to quantitative or 'large n' studies if appropriate forms of quality benchmarking are applied, e.g., through triangulation with other research findings (Yin, 2014).

Qualitative research is 'an approach that produces descriptive data – people's own written or spoken words and observable behaviour' (Taylor and Bogdan, 1998, p.6). In this case, the researcher looks in-depth at social and human behaviour in specific settings, aiming to investigate the meanings that people attach to things in their lives, based on their experiences (Taylor, Bogdan and DeVault, 2015). Thus, qualitative research can be used to examine any factors that influence human behaviour in a particular manner and the reasons behind this specific behaviour. Furthermore, by discovering their inner experiences, the researcher can also identify how meanings are shaped through and in culture (Rahman, 2017). The processes of this type of research thus involve collecting data from the participant's setting, identifying themes from the data analyses and then making interpretations of the meaning of the data (Creswell, 2014, p.4).

Quantitative research is an approach being used to 'test objective theories by examining the relationship between variables' that can be measured (Creswell, 2014, p.4). This approach focuses mainly on experiments and other systematic methods, with measurement and statistics being central in this process. Usage of statistical data is thus seen as a saving time tool, as analysis can be calculated and conducted with the use of different packages of software (Connolly, 2007).

The main difference between the two approaches is that qualitative researchers have a strong interest in exploring, discovering and understanding the detail of human behaviour, while quantitative research intends to 'develop and test hypotheses and the generation of models and theories that explain behaviour' (Wayne, 2010, p.1). While both types of research have their advantages, they also have their limitations. For instance, qualitative methods have been criticised for their reliance on small sample sizes (Rahman, 2017) which reduce the potential for generalising findings beyond the original context (Ochieng, 2009). Similarly, quantitative methods are regarded by some as less effective for the reason that they cannot capture participants' behaviours and emotions and hence they may miss important elements (Queiros, Faria and Almeida, 2017). There is also the disadvantage that quantitative methods lack the means of identifying the causes and the effects of behaviours and, therefore, a reliable conclusive reason for the existence of numerical results of a study (op. cit., 2017). Another major disadvantage is that methods examine elements considered as issues (e.g., questionnaires and surveys) only if they are known *a priori* (Nykiel, 2007). For that reason, it is often considered to be a less effective method when investigating a new phenomenon (Johnson and Christensen, 2008). Lastly, one of the main challenges is that quantitative research needs a large sample size to derive findings with appropriate statistical power levels. To enhance reliability and validity, pragmatists look to combine quantitative and qualitative methods. Instead of using one methodology, they seek to draw on the strengths of each type, and at the same time they minimize their weaknesses (Johnson and Onwuegbuzie, 2004). In general, they are driven by the idea to answer the research questions and 'brush aside the quantitative/qualitative divide' (Feilzer, 2010, p.14).

For the purposes of this doctoral study, a mixed methods approach was therefore considered to be suitable, as it would aid in a better understanding of the findings, but most importantly it would contribute to validity and reliability of results (Tashakkori and Creswell, 2007). Also, although a small number of participants were used, a combination of the two approaches held the promise of revealing valuable practical details and also contributing to the development of knowledge in relation to a Cypriot context. In an effort to define mixed methods research, Johnson et al. (2007, p.123), argue that:

> *'it is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.'*

More specifically, Creswell and Plano Clark (2011) suggested that a combination of qualitative and quantitative approaches allows researchers to create a more holistic picture when examining research questions regarding real-life contextual understanding, multilevel perspectives and cultural influences. Using a mixed methods approach thus enables the researcher to gain a deeper understanding, compared to a single approach (Queiros, Faria, Almeida, 2017). Mixed methods approaches could also be interpreted as a form of 'triangulation' and researchers have referred to it as the main advantage of this approach, as this can enhance the validity of the results (Flick, 2018; Jonsen and Jehn, 2009). Triangulation is the process of collecting and analysing different types of data on the same topic to discover any interpretations. One of its benefits is a 'cross-check verification of data' collected from different type of methods (Mouselli and Massoud, 2018, p.8). However, the process of integration can be challenging for researchers (Doyle, Brady and Byrne, 2009). Another difficulty of mixed method research is that it requires additional time due to the collection and analysis of different types of data (Creswell and Plano Clark, 2011). Both qualitative and quantitative approaches were used to gather and also analyse the main data collected via observation.

Specifically, the following statistical tests were employed so as to examine factors of influence. The SPSS software was also used to examine Pearson's correlations. The Pearson correlation is used to investigate the relationship between two variables (Gravetter and Wallnau, 2007; Gerber and Finn, 2005). For the purposes of this research, Pearson's correlation was computed to assess the relationship between the students' level of expertise and each of the practice-related elements that were found from the video analysis. T-tests were also undertaken in SPSS, for a comparison between the two teachers. The t-test is a statistical precise method of comparing the means of two groups often used in research projects investigating the differences of different variables (Munro, 2005; Kim, 2015). In the present research, t-tests were used to examine the differences between the two teachers in relation to the number of instructions that they provided to their students. In addition, they were used to compare how precisely instructions were followed by the students of each teacher in the subsequent practice sessions. Abductive and inductive reasoning were elements of this process, as Pearson's correlation analyses offered the opportunity to test the hypotheses and see whether these were in agreement.

One of the major challenges for using quantitative methods for the current research was that the sample was small. Quantitative research is strongly related with large, often randomised samples, and it is used to arrive at statistical generalizations about a population (Rahman, 2017). However, in the present study, the researcher was aware that it was difficult to generalize results due to the small numbers of participants. Instead, the study looked at the

phenomenon of home-based practice and how it is related to the lessons for a particular group of people. Specifically, this research aimed to arrive at valid claims about the phenomenon of piano practice which is situated in a specific setting (Cyprus) and not results to be representative of all instrumental learners. However, although generalizability was not applicable for the type of this research, results could be used for the interpretations of similar situated research. For this doctoral study, quantitative methods were used with the goal to enhance qualitative results found from observations and videos. Statistical analysis and specifically a Pearson's correlation analyses was considered suitable as it could provide important information about the level of degree that different variables were related (e.g., level of expertise and advisory comments) (Queiros, Faria and Almeida, 2017). On the other hand, nuances of individual human experience could be lost with numerical aggregation, especially when it comes to 'practice' which is such a complicated activity. So qualitative methods and specifically the observations and semi-structured interviews were considered to be the most suitable methods to use, as these two would reveal important information about participants' experiences, perceptions and behaviours as well as information about their features.

3.4 Pilot studies

Pilot studies have been defined as small sample experimental trials conducted to test particular research instruments intended to be used in the main study (Teijlingen and Hundley, 2002; Lancaster, Dodd and Williamson, 2004; Thabane et al., 2010). One of their main benefits is that they are designed to guide researchers in relation to the procedures of the main study, while they can also help them to be prepared and prevent possible problems or difficulties that may occur (Connelly, 2008). Mixed methods are considered to be the most suitable approach for pilot studies, and by implementing a pragmatic framework one can aim to provide the best possible answers and increase possibilities for the main study to be successful (Donald, 2018). Epistemologically, pilot studies are often linked with pragmatic philosophy (Brody, Barnes, Chodoh, et al., 2020; Onwuegbuzie and Leech, 2007; Donald, 2018). One of the main characteristics of pragmatists is that they look towards abductive reasoning through pilot studies to strengthen the validity of study. Moving back and forth between deduction and induction help researchers to reflect and make decisions, and also to be actively involved by making connections between theory and data (Donald, 2018; Feilzer, 2010; Kaushik and Walsh, 2019).

For this pragmatic study, two pilot studies were undertaken. The first pilot study was designed with the aim to help the development of the research tools for the main study. To enhance validity of results, the pilot study was conducted in a similar context as the main study. Both pilot study participants were piano students at two different levels of expertise and age, and

they were based in Cyprus. The research methods that were used for data collection and analyses were observations and semi-structured interviews, and they were designed based on elements derived from a comprehensive review of literature. Ten-minute observations took place of the students practising a piece of their choice. The session was recorded with the use of a video-camera and then was seen and discussed by the researcher and the student in an informal context. Emerging themes (e.g., practice strategies) from the observation and interviews analyses were used to create research tools for the pilot-study-II. Specifically, results from the pilot study-I aided the design of the observation checklist, while they also allowed the researcher to refine the research tools that were used for the observations, ensuring their validity within the study context.

Pilot study-II was also undertaken in Cyprus, with the participants being two female piano students at two different levels of expertise (ABRSM-Grade 3 and Grade 5). Two different teachers participated, one for each student, and the choice of the teachers was made, based on specific requirements; they had to be qualified proficient pianists and to have teaching experience of at least eight years. Participation was agreed in advance, with appropriate ethical approvals and consents. Three methods were used for the pilot study-II: (i) videoed observations of two consecutive lessons, (ii) videos of the practice sessions that were carried out in between the two lessons[2] and (iii) semi-structured interviews with the students and the teachers. All participants were interviewed separately, after the two weeks of lessons. The teachers' interviews were used to reveal information about teaching methodologies and beliefs in relation to practice. Interviews with the two students were designed so as to gather information about their practice habits and attitudes. The combination of the two sources aimed to enhance validity and reliability of results.

A micro-analysis of action and time (one-second intervals) was undertaken, with the use of a specially designed observation checklist. The checklist was created based on the literature review and the pilot-study-I, and it was used in analyses of both lessons and home practice sessions. For the interviews, a thematic analysis was undertaken with NVivo (qualitative data analysis software). Results from the observations aided significantly in the identification of actions and behaviours of teachers and students, while they also reveal possible factors influencing the relationship between the lessons and the practice sessions. The students' level of expertise was found to have a great impact, as well as the teaching approaches used during the lessons (e.g., references to future practice, emphasis of specific strategies, demonstration and amount of instructions). Results from the interviews revealed information about a

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[2] Both students were provided with a video-camera and they were asked to record all of the practice sessions that they carried out at their home.

teacher's perceptions, as well as factors influencing the relationship of lessons and sessions (e.g., student's age, level of expertise and willingness to cooperate by following instructions at home).

Via abductive reasoning, the two pilot studies allowed the researcher to gain a deeper understanding of the research context and to assess the validity of the research methods selected for the main study. It also aided in identifying the possible participants and musical private conservatories in Cyprus for the main study. Finally, results also aided decisions about the design of the main study.

3.5   Methods of data collection and analysis in the main study

As a result of the experiences of conducting the two pilot studies, the following methods were selected for the main research phase:

- A critical review of published literature was undertaken with regards to instrumental practice and the development of expertise. Elements that were found from previous research were used to develop the framework of this pragmatic study, as well as the methods of collecting and analysing the data.

- Case study observations and videos of children learning the piano in Cyprus were made to examine the behaviours and the strategies adopted during their lessons, and how they might be related to the subsequent home-based practice sessions. Examination of behaviours aimed to discover meanings of human actions and to acquire knowledge and understanding of the relationship between actions and their consequences (Kaushik and Walsh, 2019).

- Semi-structured interviews with each student separately were undertaken to examine their perspectives as well as their practice behaviours and actions in private practice. This method was intended to enhance understanding of the realities in relation to how students shape meanings based on their experiences (Feilzer, 2010).

- Semi-structured interviews with each teacher separately were also undertaken to enhance results related to their student's practice and reveal information about their teaching methodology in relation to practice. Moreover, this approach was used to understand the teacher's perceptions and acquire a more holistic analysis by identifying relevant factors involved in their actions in the given situation (Duram, 2012).

Methods were selected with the aim to answer all research questions of this pragmatic study. The researcher acknowledged the value of quantitative and qualitative research methods and the consequences of this type of research. Usage of mixed methods allowed triangulation of more than one source and, therefore, increased possibilities for the results to be valid (Johnson and Onwuegbuzie, 2004; Mouselli and Massoud, 2018). Overall, investigation of the research problem from various perspectives helped the researcher reflect the study's outcomes with confidence in the validity of the findings (Kaushik and Walsh, 2019).

3.5.1   Non-participant Observations

Observation was the main method of data collection in this research for various reasons. It has been defined as the method that enables researchers to describe events, behaviours and actions in a specific setting with the use of their five senses (Kawulich, 2005). For pragmatists, observation is one of the main methods used in research, since it provides the opportunity to understand how people experience specific situations (Kaushik and Walsh, 2019). This is one of the major advantages, as researchers have a direct access to social interactions within specific settings (Mills, Durepos and Wiebe, 2012). As Muijs (2010) notes, observations can enhance accuracy to a large extent, since it is often difficult for participants, in this case teachers and students, to reflect objectively on their behaviours and teaching styles.

Nonparticipant observation (Kawulich, 2005; Mills, Durepos and Wiebe, 2010) was the form of observation that was used for data collection in this research. For this type of method, the researcher is known and recognised by the participants for having the role of the observer, however, interaction with the participants is as limited as possible (Angrosino, 2007). This method provides unique insights into the setting being investigated, compared to those gathered via self-report methods (Mills, Durepos and Wiebe, 2012). For this study, non-participant observations within the setting of lessons took place. The researcher observed all of the lessons by taking field notes (op. cit., 2012). This strategy was used to capture key elements noted during the lessons, including behaviours, methods, and strategies used by the teachers and the students. Field notes aided in the data analyses, as key themes were identified a *priori* of the time analyses. Another strategy that was applied was the use of video recordings during the lessons and practice sessions. Video recordings were considered to be a great value, for multiple reasons. Firstly, the usage of videos can secure incidents that might have been missed of forgotten during the observation (Mills, Durepos and Wiebe, 2012; Williams, 2008). In this case, it was considered essential because the researcher was examining a large number of incidents (=108 behaviours and strategies), from which more than one could have taken place at the same time. In addition, the pilot investigations had confirmed that it was impracticable not to use a video camera, for the reason that data would

need to have been analysed per second. Lastly, video recording allows the researcher to revisit data at any time that she desired (Mills, Durepos and Wiebe, 2012). The researcher considered this to be a particular advantage, as it enabled both quantitative and qualitative analyses at a later stage of the research.

Whilst there are many advantages to nonparticipant observation using video recording, there are also some potential limitations and challenges for researchers to consider. One of the main problems is that usage of a camera might affect participants' behaviour. This raises particular concerns in the field of music education, since it may influence the way that the lesson is being taught by teachers as well as the students learning (Bautista, Tan, Wong and Conway, 2019). It was one of the main challenges that the researcher had to face in both data collection and analyses. The researcher was aware that observing and video-taping the lessons and the practice sessions could lead to a 'Hawthorne effect' (Onwuegbuzie and Leech, 2007; Lockyer, 2008). This term refers to participants' altered behaviour and actions because of their awareness that they are being studied (McCambridge, Witton and Elbourne, 2014; Fernald et al., 2012). Specifically, researchers found that participation in research may change behaviour (increased productivity in the original, factory-based study) due to the fact that participants consciously take into account the researchers' expectations (Oswald, Sherratt and Smith, 2014; Wickstrom and Bendix, 2000) and act accordingly. In other cases, participants may not be willing to share truths for personal reasons (Lockyer, 2008).

In this research, the challenge was to limit changes in any customary behaviour as much as possible, especially in students' quality and quantity of practice, which is a personal and usually private activity. For example, there was the risk for some students to alter their practice habits in order to meet socially situated perceptions of what was considered to be 'appropriate' (e.g., following teacher's instructions). The researcher was also aware that there was the risk of changed behaviours by the teachers and the students during the lessons, especially since they were also observed by the researcher at that time. 'Observer bias' was also taken into consideration, a term which refers to when the researcher's interpretations of data are influenced unconsciously by their personal characteristics, such as their sex, age, or even personal experiences, beliefs, attitudes and values (Mills, Durepos and Wiebe, 2012; Lockyer, 2008; Mouselli and Massoud, 2018). One of the pragmatic strategies that the researcher used to increase the validity of data analyses was prolonged engagement (Onwuegbuzie and Leech, 2007). The researcher decided to undertake the research for four consecutive weeks, which was considered to be a reasonable and sufficient period of time. The goal was to provide the participants with the opportunity to become used to the presence of the researcher as an observer. It would also enable the researcher to identify important changes in participants' behaviour within the period of time that the research was undertaken. Although a still more

extended period of time could have enhanced validly and reliability of data even further, the time was chosen based on available windows of time that the researcher had for data collection, and most importantly analyses.

In addition, the researcher arranged a meeting prior to the research with each participant separately to provide the opportunity for the participants to feel more familiar and become comfortable with the presence of the researcher. Another goal was to make the researcher's intentions clear, a strategy used so as to reduce the effects that the researcher can have on the participants (Onwuegbuzie and Leech, 2007).

An additional strategy that was applied for this pragmatic study to enhance the validity of results was triangulation, a term which refers to the usage of multiple independent methods/sources to study the same phenomenon (Johnson and Onweuegbuzie, 2004; Feilzer, 2010). One of the main advantages of triangulation is a 'cross-check verification of data' (Mouselli and Massoud, 2016). It provides the opportunity for the researchers to reflect and be more confident on interpretations/conclusions made through data analyse (Onwuegbuzie and Leech, 2007). Usage of three methods enabled a checking of consistency of results, a strategy that enhanced data validity and reliability. In addition, the validity of results was examined through cross-checking with the teachers' and the students' answers in the interviews. Particular attention was given to the answers of each teacher that could verify students' behaviours identified from the videos and observations, and vice versa (students of teachers).

All the main-study data were collected and collated into a database for subsequent analyses. For the analysis of the observations and the videos of the studio-based lessons and the home-based sessions, designed protocols adapted from previous research were used (Saunders and Welch, 2012; Welch et al., 2012). Designed observation checklists were created in the Microsoft Excel programme and used to analyse micro-events. Again, reflecting the nature of abductive reasoning, the development of the final observation checklist was a long procedure that continued until it was possible to create the best match in the categories required to answer the research questions. Revision of the checklist was undertaken several times in the course of preparing for the main fieldwork, as the identification of all of the categories required the completion of three different phases through the research: a) review of literature, b) pilot-study-I, and c) pilot-study-II. In addition, final adjustments were made, based on the opening results from the main study. Video analysis revealed 108 different categories of behaviour and strategies which were classified into different groups accordingly (see Appendix I). However, it has to be noted that some categories were used exclusively for the practice sessions, while others were used only for the lessons.

An analysis approach adapted from previous research (Welch, et al., 2012) was applied, so as to enable easiest identification of the categories that were used in each case. Each category was coded according to a specific colour as this would enable visual identification. The behaviours and strategies that were used during the lessons were coded with the colour red and the practice sessions to the colour green. Both colours were used for the categories that were expected in the two settings. Using this approach enabled the researcher to identify visually what behaviours and actions were taken in the lessons and the practice sessions. All the incidents were analysed at one second intervals, with the use of the video recordings. The videos were initially analysed on a printed version of the observation checklist. This included written notes about the actual seconds that each category example lasted. All data were finally modified in the Microsoft Excel programme, with the time interval in each cell being 30 seconds. In each cell the total amount of seconds was inserted, based on how long each category lasted.

Two main tools of measurement were then used for the final results of each category. The total amount of time found for each category was inserted in a column next to each row so as to have results of how much time was used in each case. All of the totals were converted into averages, to enable comparison of all case studies, and were inserted in another column. In addition, totals of the repetition of the times that each category occurred throughout the whole lesson or session were also counted and converted into averages.

Initially, all of the lessons and the practice sessions were analysed separately by using different Excel sheets. At a later point, all of the excel sheets were inserted into two different Excel files – one for the lessons and one for the practice sessions – so as to gather all of the information of all the case studies together. New sheets were created, with all of the total averages of time, as well as the total average of instances for each week (see Appendices III and IV). These tables aided the comparison of all students as they enabled identification of the extent to which each category was evidenced by the students.

A range of tools were developed to identify the relationship of the lessons and home-based practice. Initially, all of the instructions that were provided by the teachers during the lessons were collected and transcribed for each of the student's lessons. Specially designed tables were used so as to support the identification of any relationship between the lessons and the sessions (see Table 3.1). One table was created for each week, which contained all of the teacher's instructions during that week's lesson. Different columns were used for each practice session that was carried out throughout the week, with the instructions being identical in each of it. With the aim to identify which of the suggested strategies was not evident in each session, a red colour was used. The usage of a colour helped in the visual identification of the

instructions that were not followed over the week.

Table 3.1 Example of a table created for identification of the relationship between the lessons and home-based practice.

	Instructions	1st
Due Piece	Practise a specific part at a slow tempo so as to be able to play it at a fast tempo.	x
	Focus on a part and play at a slow tempo.	x
Examination Piece	The student has to use red colour so as to mark all the themes with the letter 'T'.	x

The total number of the instructions that the teacher provided in each lesson was counted, as well as the instructions that were followed by the student in each week. All of the numbers were then converted into averages to enable a comparison for each of the six students. All data were then inserted into a table that included the total averages of the four weeks found for each case study (see Appendix VII). The creation of this table aided considerably in the comparison of the six case studies.

In addition to the assessment of the development of expertise, the research required a measure of assessing the level of the student's development regarding their home-based practice. Assessing the student's development of practice aided a deeper examination of the quality of their practice sessions. By using Hallam's (1997) model, the level of the student's development was identified based on the strategies that they used whilst practising (see Chapters 6, 7 and 8). All data found from the observations and the videos were then matched according to the student's level of expertise to identify whether this might be a factor of influence.

Table 3.2 Hallam's (1997) six level development of practice

Strategy Level	Task oriented strategy
1	Task requirements incomplete
2	Play material through, no corrections
3	Play material through, correction of single notes
4	Play material through, repeat of short sections
5	Play material through, practise large section en route
6	Initially play the material through, identify difficult passages and then practice of them in isolation

The observation checklist was the main tool that was used to identify the developmental level of the students. All of the practice strategies that were related to Hallam's theory were selected and isolated in the Microsoft Excel programme into new worksheets. Two additional categories were added to the observation checklist based on Table 3.2. The first category was 'playing the whole piece' without stopping to isolate difficult parts. The other category that was added to the observation checklist was 'playing with the use of strategies', and it was used when students practised a piece by focusing on difficult parts instead of playing throughout the piece. Written notes that were made during the analysis in relation to this were also used to identify the level of the student's development of practice.

3.5.2   Semi-structured Interviews

Semi-structured interviews, also defined as interview 'in depth' (Morris, 2015; Minichiello et al., 2008; Wengraf, 2001), were used for the completion of this research. As Esterberg (2002, p.87) stated, semi-structured interview is a method that enables the researcher to 'explore a topic more openly and to allow interviewees to express their opinions and ideas in their own words'. Semi-structured interviews are considered to be particularly valuable in pragmatic studies (Rathbun, 2008). Its nature allows the researcher to examine participants' experiences that might have played an important role in shaping meanings. In addition, it can provide important information about relevant factors of influence (e.g., teachers, family members and friends). Moreover, results from videos and observations could be triangulated, significantly increasing the validity of results and conclusions. In addition, the researcher could assess information collected from each participant, by cross-referencing information given from other participants (e.g., Student A and Teacher A). Specific attention was given to the comments that were related to behaviours and actions. This method required preplanning of themes of questions in advance and preparation to improvise questions as part of the conversation (Schuh, 2011).

Tomlinson's (1989) 'hierarchical focusing' approach was adopted for the design of the semi-structured interviews. As proposed, it is extremely important initially to identify the centre aspects and elements of the topic, as this allows the researcher to have a clear conception of what is to be explored. Results from the pilot study-II enhanced the process of identifying the key themes that were used for the semi-structured interviews. Themes were then used for the creation of a concept map, which subsequently enabled the researcher to identify various sub-categories, which were later used for the design of the questions (see Table 3.3).

Table 3.3 Themes and categories identified for the design of semi-structured interviews

Main themes	Semi-Structured Interviews: Main sub-categories
Nature of student's home-based practice	Usage of practice strategies
	Quantity of practice sessions
	Length of practice sessions
	Concentration while practising
	Parental involvement
Teaching methods related to home-based practice	Reference to previous practice
	Reference to future practice
	Usage of notebook
	Notes on the score
Relationship between lessons and home-based practice	Self-regulating behaviour
	Relationship between the lessons and the practice sessions

By following Tomlinson's (1989) suggestions, a 'top down' approach was adopted, with the aim to minimize any framing for this type of interview. According to this approach, the interviewer should initially provide the opportunity to the interviewee to express their opinion by asking a more general question, moving on to more defined questions, when necessary, with the target to cover specific topics. A table with a list of open-ended questions was created, allowing flexibility in the interviewees' answers and any possible directions for discussions. Two different lists of questions were used for the design of the student's and the teacher's semi-structured interviews (see Appendices V and VI).

Alongside these advantages, semi-structured interviews are also associated with a range of potential challenges and limitations. One of the most common biases that may occur is when the researcher effects participants' answers through the way that they ask questions (e.g., misleading, misunderstanding), tone, or even body-language (e.g., gestures) and facial expressions (Mouselli and Massoud, 2018). Additional factors that can have an impact are the interviewer's sex, ethnicity, age, social class and the level of education (Waterfield, 2018). The researcher was aware of all the above and tried to respond accordingly by avoiding gestures or body-language movement as well as vocal expressions that could lead to specific answers. In addition, specific attention was given to the wording of the questions, while designing the interviews. The type of questions was also carefully created to allow the participants to express themselves by expanding their answers.

Another strategy that the researcher applied was to build a friendly environment for the participants having an informal discussion in prior of the interview. Semi-structured interviews were conducted with each student separately. All interviews were arranged when the observations and the video-taping of private practice sessions were completed so as to avoid any influence on the student's behaviour while practising. The interviews were arranged at the musical conservatory where the students took their piano lessons, based on a criterion of familiarity, i.e., that the students should feel comfortable in a friendly environment. All interviews were held in private, free from distractions, in a room with no other present people apart from the researcher and the student. The interviews were audio-recorded to enable the analysis at a later point. The researcher ensured that all students felt comfortable by stressing that all interviews would be anonymized and would not be used in any way such that students could be identified. In addition, the researcher provided an explanation to the students about the importance of the interviews, as well as their contribution to the study. It was considered to be extremely important for the participants to feel comfortable to discuss and also to give accurate answers about themselves and others. One more strategy was used so as to enhance the likely truthfulness of participants' answers. The researcher was ready to challenge the participants (Mouselli and Massoud, 2018) by asking them to expand the topic or giving examples.

After data collection, all semi-structured interviews were initially translated from the original Greek and transcribed accordingly. Then, all data were analysed in NVivo (Qualitative Data Analysis Software) by applying thematic analysis. With the use of transcriptions of the interviews, codes were created, and themes were identified (see Appendices V and VI). Overall, using semi-structured interviews had many advantages, with the most important being that it provided stronger evidence for conclusions (Johnson and Onwuegbuzie, 2004)

3.6   Quality benchmarks and the management of researcher effects

Validity and reliability are two common concepts that researchers employ to help ensure the quality of their research. As Kumar (2011) notes, validity ensures that the procedures applied by researchers are correct to lead to answers to their questions. The term reliability 'refers to the quality of a measurement procedure that provides repeatability and accuracy' (op. cit., p.26). As Noble and Smith (2015, p.34) point out, recently some researchers have moved away from these specific conceptualisations, instead preferring alternative terms more closely reflecting their 'philosophical positions and purpose'. For instance, qualitative researchers may instead use terms such as truth value, consistency. Yet, as Noble and Smith also acknowledge, in the 'broadest context (ibid.) the concepts of validity and reliability remain applicable to qualitative researchers, not least because accurate and valid data are essential

ingredients for a successful study. As such, it was felt that these criteria were important to establish the credibility of the current research.

Researchers can use a variety of strategies so as to enhance reliability and validity according to the type of research. As noted, one of these strategies is to undertake pilot studies, as they can contribute significantly in the development of a successful study (Donald, 2018). Researchers can test and reflect on research methods, while they can also appropriate research tools of data collection and analyses. These steps maximize opportunities to a great extent on collecting strong evidence, which is one of the main targets while conducting research.

The following sections summarise the specific efforts undertaken by the researcher to enhance the quality and validity of the findings through the management of researcher effects in relation to each research question.

3.6.1 Research Question One: What is the nature of the relationship between one-to-one studio-based instrumental lessons and home-based private practice?

The investigation of the relationship between studio-based instrumental teaching and home-based private practice is a topic that needed to be explored in depth. For this reason, case studies were chosen as a method for this pragmatic research. This method allowed a micro-analysis that revealed detailed information of behaviours in lessons and private practice and possible factors of influence. Micro-analysis of events could not be achieved without the use of case-studies, as the chosen procedure was time-consuming.

The researcher also chose to undertake a short-term longitudinal study so as to enhance possibilities for the results to be seen as reliable and valid. A four-week period was chosen, for multiple reasons. It could reveal important information about the student's daily routine, which could be used as interpretations about the student's characteristics as well as their practice habits. In addition, it provided the opportunity for the participants to familiarize themselves with the procedure and, most importantly, feel comfortable while taking part in the research. There was also potential to minimize observation bias such as the 'Hawthorne effect', resulting in increasing validity and reliability.

Specific consideration was given to the chosen methods for data collection. Observations were the first method that was chosen, for the reason that it could provide the best insight of how the lessons were carried out. Particular attention was given to any approaches that the teacher used in relation to 'practice'. However, even though the observations were used to gather information, the length of the lessons did not aid in collecting detailed data. As discussed above, the observations aid mainly in identifying the categories that would be analysed at a

later point. For that reason, the usage of a video-camera during the lessons was considered essential as it would enable measurement of the time used for each activity at different points during the lesson. Video usage was crucial so as to allow a micro-analysis to take place at a later point of the research. The researcher ensured that in all of the cases, the video camera was placed in the room diagonally to enable visual mapping of the teacher and the student properly in the same shot and of the piano that they were playing.

Regarding the methods selected to collect data for home-based practice, the use of video was the only method that was considered appropriate to use. All of the students were provided with a video-camera along with a stand and they were asked to video-tape all of the practice sessions that they carried out at their homes in between their lessons. The researcher explained to all the students how to use the video-camera, and each was asked to place it in a position that would enable visually recording the behaviour on the piano keys. Apart from students, parents were also notified about the procedure, and they were kindly asked to remind their children that they had to use the video-camera while practising. Specifically, the parents of the youngest students were asked to provide help when necessary, especially at the beginning of the research when the procedure was most novel for them. In addition, the students were asked to bring the video-camera to each subsequent lesson to allow the researcher to transfer all the data from the previous week. Several reasons informed the decision to collect the data securely at the beginning or the end of the lessons. The first reason was to avoid any loss of data as the usage of videos was an uncontrolled method. An additional reason was to have confidence in the validity of the data. Since the number of practice sessions for each week would relate to one specific studio lesson, the researcher wanted to ensure that all data were related and valid.

3.6.2 Research Question Two: To what extent and how does the nature of the lessons influence how students use their time whilst practising?

The methods that were used were observations and videos of the four lessons, videos of the student's home-based practice sessions and semi-structured interviews with each student and teacher separately. To answer this research question, specific attention was given to the collection of data regarding the teaching methods used during the lessons. This type of data would enable a deeper understanding of teachers' perceptions, behaviours, and actions and their impact on students' learning.

With the aim to study the influence of the lessons upon the student's practice, an examination of two different teachers was considered to be likely to support enhanced results. For that reason, the usage of two different focused groups was applied. One teacher was used for each set of students, and each teacher had three students of different Grade levels. A

comparison of two different teaching environments would enable a stronger identification of any differences regarding whether the applied teaching methods influence student's practice. In addition, it would allow the researcher to examine the consistency of the teacher's perceptions, behaviours and actions in their students' lessons. During the observations, specific attention was given to the provision of direct and indirect instructions about future practice.

In addition, semi-structured interviews were used to reveal additional information about participants' perceptions, beliefs, and attitudes related to those extrapolated from the observations. Interviews focused mainly on different aspects of practice (e.g., teaching methods used in lessons and their effectiveness), so as to enhance data found from the analyses of the observations and videos. Lastly, interviews focused on the students' practice habits to examine strategies that they tended to use while practising and to what extent these were related to the teacher's instructions.

3.6.3 Research Question Three: Is the level of expertise a factor of influence in the relationship between studio-based lessons and home-based practice?

The level of expertise was assessed based on the ABRSM (Associated Board of the Royal Schools of Music) criteria. The ABRSM is a widely recognised system of examination internationally, providing the opportunity to identify the acquired level of the students' current competency based on the results of their examinations and also the Grade level of the pieces being studied. The ABRSM examinations include eight different Grade levels, with the final and most challenging being Grade 8.

With the aim to answer this research question, three levels of expertise were used for the research: Grade 1, Grade 5 and Grade 8. The rationale for choosing these specific levels of expertise was that they provide a range of expertise using the ABRSM criteria. The Grade 1 students are considered to beginners, Grade 5 students are intermediate students and, lastly, Grade 8 students are advanced and are considered to be highly skilled. In order to be able to examine the impact of the level of expertise of the students, it was decided that the teacher of each group of three Grade level students had to be the same. In this way, the teaching methodology, as well as the environment of the lessons, might be similar if not identical for each of their students. In addition, in order to enhance results for this research question, another set of three students that had the same (but different) teacher between them were used as comparative participants, making six students in total. All of the participants that were used for the main research were different from the pilot study-II, including the two teachers.

A comparison between the two students at each Grade was then possible, so as to examine differences and similarities between them. At a later point, a comparison of all of the students was made, so as to explore two points. The first was to consider any differences and similarities between them. Another point that could be explored was whether the teaching methods appeared to influence any relationship between the lessons and the practice sessions, taking into consideration the students' level of expertise. All of the data outcomes from the six students were inserted into tables created in Excel for analyses with SPSS, so as to enable the comparison of all students.

3.7   Consideration of Ethical Issues

This section describes the steps that were followed to develop an ethical framework for this doctoral research. Ethical issues were taken into consideration in all stages of the research, by taking account of the ethical guidelines of the British Educational Research Association (BERA, 2018). The research was designed by considering ethical issues in relation to the nature and context of the research, the procedures adopted to gain access to participants, the group of participants that were chosen, the methods of data collection and also usage and reporting of data. Creating an ethical framework enhanced validity and reliability of data, but most importantly it ensured protection of participants (Busher, 2002).

In seeking to fulfil the research purposes, participation of children under the age of eighteen was required. Specifically, the nature of the research involved children and young people at different ages (between ten and seventeen), which raised particular ethical issues. Therefore, the researcher worked to prevent any potential risks of potential harm of the children while designing the research. As Boddy et al. (2013) remind us, young children are vulnerable while participating in the research and thus particular attention needs to be given. The researcher followed various steps in order to protect the participants, such as explaining to the children what will happen to them if they agree to participate. At the same time, another goal of the researcher was to inform all children about the benefits of the research (Alderson and Morrow, 2020). Specifically, they were informed (during a private meeting prior to agreement) that their participation contributes to increasing knowledge of the subject (Aguinis and Henle, 2008).

The context of the research also raised ethical issues, as it was undertaken within two different settings. The first setting was the home environment of each participant, in which they had to practise individually. The home-environment was a sensitive element in the research, especially since it required the children to video-record themselves in a setting in which the researcher was not present. Research in a home environment automatically involves high possibilities to witness interactions with other family members, which they may not wish or feel comfortable to be published (Schmidt, 2014). The researcher was, therefore, prepared to

respond accordingly by ensuring participants that all data would be protected, and, if they wished, their data would not be used and erased (Busher, 2002; Aguinis and Henle, 2008).

The second setting was private lessons within a musical conservatory based in Cyprus. The researcher initially had to gain permission from the director of the conservatory. A meeting was arranged so as to provide all the essential information about the study and its potentials. The researcher informed the director that confidentiality and privacy were two of the elements that were a priority for this study (Iphofen, 2011). To minimized risks of identification, an agreement with the director was made on how data would be anonymized and reported at a later point (Kaiser, 2012). Due to the fact that the total number of private conservatories is not so high, and also because this type of school belongs to the CMSA, the researcher wanted to protect the conservatory from being identified.

Following the agreement with the director of the conservatory, the choice of participants was the next step. The nature of research had specific requirements in terms of participants. Specifically, it involved participation of two teachers, and each had to have three students at specific levels of expertise (Grade 1, 5 and 8). After confirming that the conservatory could meet these requirements, the director informed all of the teachers and students along with their parents about the research and took their consent to arrange a meeting with the researcher. After 'in principle' agreement to participate in the study, informal meetings were arranged along with the researcher and each student separately, so as to provide detailed information about the research (Moore, 2019). All meetings were held in a quiet place at the conservatory, and the researcher ensured that there was enough time to answer all questions from participants. Considering that the child is the participant, the researcher made sure that agreement for participation derived from them and not the parents. As Boddy et al. (2013) advice, this is an important element in research with young children, as at times parents may not give the opportunity to their children to decide themselves. During the meetings the researcher gave attention to the children's behaviour (both verbally and body language) so as to detect any signs of feeling pressure or stress. In addition, the researcher allowed time for the participants to decide whether they wanted to participate or not, by informing them that they did not have to answer at that specific point. As previously suggested (Boddy et al., 2013), it is particularly important to give opportunities for the participants to deny taking part in the research, as some of them may feel uncomfortable or embarrassed to refuse.

One challenge for the researcher was to ensure that the research procedure was understandable for young children (Cook, 2020). It was extremely important for the children to understand the purpose of the study, including who was undertaking in it and why it was being undertaken (Alderson and Morrow, 2020; Boddy et al., 2013).

During the meeting, consent forms (Anderson and Corneli, 2018; Moore, 2019) were also provided to the children that included all the essential information of the study procedure (See Appendix II). Consent forms provided a full explanation of the purpose, the participants, and the study research methods (McBride, 2018). Detailed information on the procedure (lessons observations, video-recordings of home practice and interviews) was also provided. Due to the fact that the consent form was addressed to children, special consideration was given to the design. The researcher ensured that the language used was appropriate and clear with the use of simple sentences. All information was given by using requests in a friendly way so as to be appealing (Aguinis and Henle, 2008; Boddy et al., 2013).

The nature of the methods raised particular ethical issues, as there was the risk for the participants to feel discomfort and stress (Busher, 2002). The researcher ensured that there was clear to all participants that, if they would agree to take part of the study, they had the right to change their mind and to withdraw at any time for any or no reason (Alderson and Morrow, 2020). The consent form also informed them that anonymity and privacy was guaranteed and that any decision to participate in the study depended merely on them (Aguinis and Henle, 2002). In addition, participants were encouraged to ask any questions at any time and so the contact details of the researcher, was also provided. Lastly, a signature from the child/young person was required as part of the agreement. Legal guardians of the students were also asked to sign the consent form, as did each student's teacher. All participants retained a copy of the consent form. By ensuring that consent was given from each of the persons involved in the study, the researcher ensured that she was able to use all the data collected. Schmidt (2014) reminds us that this is an important part when using video or audio recordings, as with no permission of all participants, data cannot be used.

During all of the phases of the research, the researcher gave particular attention to the anonymity of the participants. As Iphofen (2011) reminds us, using pseudonyms or aliases for each participant is one of the most important elements while conducting research. The researcher used alias for the students and the teachers based on a) their roles in the conservatory and b) the Grade level of the student (e.g., SA1=Teacher A's student at Grade 1 level). The strategy to use these aliases so as to refer to the participants ensured anonymity, and also indented to remind the reader the student's level of expertise (Given, 2008). The researcher provided an explanation of the process to the director of the conservatory and the participants and also guaranteed that not real names would be used in any stage of the research.

The methods of the research also raised other ethical issues. First of all, a critical element was that the research would not put any of the participants at risk. Based on the nature of the methods, the possibilities for the children to experience distress or discomfort while being observed or videoed were higher (Schmidt, 2014). To avoid such cases, the researcher reminded participants that they had the right to change their mind and to withdraw from the study (Aguinis and Henle, 2008). In addition, the researcher was alert to any signs of harm (e.g., emotional distress) so as to respond accordingly. This included stopping the procedure to protect the child, an action which Boddy et al. (2013) suggests when researchers considered it to be necessary.

For the semi-structured interviews, the researcher was aiming to build a mutual respect and trust between her and the participants. As Alderson and Morrow (2020) suggest, this is one of the most important elements in interviews. Since practising at home is a private activity, it involves sharing personal information and possibly relevant feelings that may not be considered 'appropriate' (e.g., not to practise regularly). In order to prevent obtaining invalid information, the researcher tried to create a friendly environment where participants would feel safe to talk openly, and also reminded the participants that all data would be anonymized, and no identification would be possible. However, confidentiality was also taken into consideration, as the researcher respected all participants' right to share as much information they wished. As Kostovicova and Knott (2020) remind us, although this can be challenging for the researcher, it is an important principle while conducting an interview. The researcher used various strategies to deal with these ethical issues. A permission to use audio recording was also asked in prior to the interview, so as to prevent any ethical issues. During the interview, the researcher encouraged participants by talking clearly but not too loudly as this could ensure protection of data (Alderson and Morrow, 2020). Once again, the researcher was checking for sings of harm in participants behaviour (verbally or body language).

At a later stage of the research, the researcher gave an emphasis on other ethical considerations, such as data reporting. As Aguinis and Henle (2008) argue, reporting results may raise ethical issues, and thus researchers need to consider them carefully. In order to prevent such issues, the researcher looked closely data, and used accurately data as the opposite could cause misrepresentation of results. Triangulation of data helped significantly this process, as all data were cross-checked with the use of multiple methods (Johnson and Onwuegbuzie, 2004; Mouselli and Massoud, 2018).

Chapter 4
Situating the case studies within the Cypriot music education context

4.1 Cypriot Educational Background

In Cyprus[3], there is a fundamental dichotomy within the context of instrumental teaching and learning. For many years the educational system has been running in a private setting (Hasikou, 2019), although over the past 15 years instrumental education is also provided at state specialized music schools (Teklos, 2011). Although music lessons are part of the state school (=not specialized in music) curriculum (Smith, 2015), education lacks in providing opportunities to learn an instrument. More specifically, the Ministry of Education offers music lessons in both Primary and Secondary public schools[4]. In Gymnasiums, music is a compulsory subject for all students and classes are twice per week for Grades A and B, and once for Grade C. In Lyceums (higher Secondary education), music becomes an optional subject for Grades B and C (Teklos, 2011). In this setting, music lessons are two or four times each week, depending on the option of the students[5]. Music lessons follow a specific curriculum which focuses mainly on music history (e.g., ancient Greek music, Baroque, classical and Romantic periods) and some theoretical and practical aspects of music (e.g., reading of notation, recognition of rhythms, singing and the use some class instruments[6]) (Stavrides, 1995; Teklos, 2011). Apart from the lessons, public schools offer opportunities for children to be involved in extra voluntary activities, such as choir, school orchestra and philharmonic orchestra (Stavrides, 1995). However, none of these activities, as well as the music lesson in classes, offer tuition on how to learn to play an instrument of their choice. An exception is the 'recorder', which is taught as part of the music lessons to all of the students,

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[3] In 1974, Turkey invaded and occupied 37% of the island, forcing the Greek inhabitants to flee to the South abandoning their homes and properties. Since then, Cyprus is divided into two parts: Greeks Cypriots and Turkish Cypriots. This doctoral thesis refers specifically to the educational system of the Greek side of Cyprus.

[4] In Cyprus, Primary schools have six different grades. Secondary education is then divided into the Gymnasiums and the Lyceums. Gymnasiums are considered to be lower Secondary education and have three different grades (A, B and C). Lyceums are upper Secondary schools and consist of three grades, with C being the higher (Cyprus Ministry of education, culture, sport and youth: http://www.moec.gov.cy/dme/en/index.html)

[5] Students have the option to choose some of the subjects that they desire to attend, including the subject of music. The Ministry of Education gives two options for the students, either to take classes two times or four times per week.

[6] Class instruments may include some percussion instruments and the recorder.

as a group, in both Primary and Secondary schools[7] (Teklos, 2011). The Ministry of Education perhaps chose the specific instrument with an ideology that it is affordable for all of the students, since students need to buy the instrument (Stavrides, 1995). Nevertheless, music lessons do not offer the opportunity for the children to receive any further formal instruction on other type of instruments.

An exception is the 'mousika gumnasia' and 'mousika lukeia' (lower and upper Secondary schools) which specialize in music, and they were established in 2006 by the Ministry of Education (Smith, 2015). At present, there are five different music schools, one in each city of Cyprus and they are considered to be whole-day schools[8]. This type of public school is non-profit as it is fully funded by the Ministry of Education (MOEC, 2021) and offers general education (e.g., mathematics, language) in the morning, whilst they also provide complete music education in the afternoon (e.g., harmony lessons, history of music, ensemble playing, and choir singing). In addition, the students also receive private lessons on two instruments of their choice, with one being their main. These schools aim to provide opportunities to the children to gain knowledge and develop high-level performance skills so as to be able to pursue a professional career in the domain of music (Teklos, 2011). However, this type of school offers only a limited number of positions for students to study there, and in order to be accepted, applicants have to pass an examination and an audition on their instrument (MOEC, 2021).

Prior to the establishment of the state music schools, instrumental learning in Cyprus took place only within the private domain, mainly for the reason that the system in public schools lacked provision of such opportunities for students (Smith, 2015). At the present, even though music schools contribute by providing opportunities to children from lower and middle-class families to receive free formal instrumental instruction, a large number of students choose to take lessons in the private domain. A study conducted by Teklos (2011) examined student's attitudes towards musical learning in Cyprus. Results showed that the majority of the students considered learning in private conservatories to be more rewarding compared to state secondary schools. According to students' answers, instrumental lessons within a private context offer a wider range of opportunities to develop high level skills and knowledge, while they also considered the teachers who work there to be more professional. Similar findings were found in a more recent study (Hadjikou, 2021), as students' negative attitudes were found

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[7] Learning how to play the recorder is a compulsory activity in music lessons. However the recorder is the only instrument that is being taught formally during music lessons.

[8] The Gymnasium music schools in Cyprus are: 'Mousiko Grymnasio Leukwsias', 'Mousiko Gymnasio Lemesou', 'Mousiko Gymnasio Larnacas', 'Mousiko Gymnasio Ammoxwstou' and 'Mousiko Gymnasio Paphou'.
Lyceum music schools are: 'Mousiko Lukeio Leukwsias', 'Mousiko Lukeio Lemesou', 'Mousiko Lukeio Larnacas', 'Mousiko Lukeio Ammoxwstou' and 'Mousiko Lukeio Paphou'

toward music lessons in lower Secondary schools. Results from the above studies demonstrate a common attitude within the Cypriot community, suggesting that the majority of the children who wish to learn how to play an instrument begin taking private lessons at music conservatories on weekdays after school, or Saturdays (Papageorgi, 2007). A music conservatory is also known as an 'odeon', a Greek word that describes a music building that is privately owned and offers tuition in a different types of instruments. The word 'odeon' derives from the Greek word 'ωδείο', the name of an ancient Greek covered theatre or concert hall that was used for musical performances and poetry (Gates, 2011, p.431).

A conservatory is a private profit-making enterprise running independently from the public schools' curriculum. Each music conservatory has its own policies regarding tuition fees and the education that they provide (e.g., instruments taught, length of the lessons). The majority of the conservatories offer tuition in a one-to-one context, with the length of the lessons being 30 to 60 minutes. However, the existence of autonomous music conservatories may raise issues, with the most important being the reliability of this part of the educational system. One of the biggest challenges is the fact that conservatories do not have a specific curriculum to follow, and unfortunately, at times, they may not provide appropriate education to the children. With the aim to overcome such difficulties and to ensure that students receive balanced instrumental instruction in this context, the majority of the conservatories adopted an ideology to use syllabuses from widely recognised examinations, such as the Associated Board of the Royal Schools (ABRSM) and Trinity College as a foundation of their education (Papageorgi, 2007; Skoutella, 2015).

4.2 Historical outline of music conservatories

From a historical perspective, the tendencies described above derive from the cultural influences that Cyprus experienced over time. It is reported that the island's geographic location has benefitted from other adjacent European cultural centres in the arts field, including music (Kallis, 2017; Smith, 2015). In addition, the British colonial past of Cyprus has affected the educational system significantly, resulting in the music conservatories being deeply rooted in Cypriot society (Stavrides, 1995). Social benefits were noted, as Cypriots embraced the cultural attitudes of the British colonizers' lifestyles (Skoutella, 2015). Introduction to Western classical music was considered to benefit cultural status, as it was initially available to selected members from the elite society, such as distinguished personalities (Hasikou, 2015). Private social events, such as classical concerts, took place in British dignitaries' houses by musicians from other countries (e.g., Greece, Italy and Germany) (Stavrides, 1995). In addition, these musicians began offering piano, violin and music theory lessons to Cypriot urban elites. During the first decade of the twentieth century, Cypriot musicians who received education in

European counties returned to the island to offer instrumental lessons (Hasikou, 2019). Soon, the establishment of private music conservatories (odeia) was evident, and so instrumental instruction became apparent also for the middle-class society (Hasikou, 2015; Stavrides, 1995). All music conservatories were private enterprises, and well-known musicians managed them. The employment of other Cypriot musicians who received education in Western Classical music soon followed, aiming to embed this tradition into the culture (Smith, 2015). As Hasikou (2015) reports, students' concerts regularly took place, and a number of different types of orchestra were created (e.g., philharmonic orchestra). Over the years, the number of private music conservatories increased, offering students private lessons for a wider range of instruments, as well as group or private music theory lessons (Kallis, 2017).

Kallis (2017) categorised chronologically the main phases in the evolution of musical training in Cyprus (see Table 4.1). The three phases indicate that music education was considered a privileged activity of the Cypriot citizens for many years. In 1927, one of the first music conservatories that offered a more 'complete education' (private instrumental lessons and music theory lessons) was established, although it was open mainly to the more elite members of society. By 1960, musical training at music conservatories became more accessible to the middle class. Although access to education was diminished significantly by the Turkish invasion in 1974, from 1990 it has been reported that a more 'professional era' took place, with Cypriots gradually beginning to receive music instruction systematically (Kallis, 2017, p.2). This period is characterised by children having a wider range of opportunities to receive formal instruction, often aiming to acquire a high level of knowledge and skills and eventually achieve a place at a university.

Table 4.1 Kalli's (2017) three defined phases of Cypriot music educational system.

1927 - 1960	Period in which art music and music education was a privilege of the urban elite
1960 - 1990	Creation of a robust middle class which was seeking the cultivation of its youth
1990 - today	Professional music career era

For many years, music conservatories operated autonomously until the 'Cyprus Music Schools Association' (CMSA) was founded in 1992 (CMSA, n.d.)[9]. It remains the only association that the Ministry of Education of Cyprus has acknowledged, a major step since— for many years—the Ministry did not show any interest in regulating private musical conservatories (Smith, 2015). The Association has over 20 registered members and is made up of music conservatories that teach five instruments or more (CMSA, 2020[10]) with their education being based mainly on Western Classical music (Papageorgi, 2007). Another requirement for the association's membership is for the employees to be qualified with a higher education degree and to offer a specialisation in one or more instruments.

The aim in setting these requirements is to reduce the possibility of having music conservatories that cannot provide what is regarded by the Association to be a 'proper' education to the students. Yet, at the present time, this is one of the biggest issues for education within this context. This is due to the fact that all of the established music conservatories are private organisations, thus there are no standard requirements for employment. Instead, each founder of a conservatory is entitled to have their own policies on this matter. Although most of the employed teachers have a high-level qualification and musical background, having such a non-controlled educational system raises questions about the quality of children's learning, especially when we consider that the numbers of musical conservatories have increased rapidly over the last decade. For example, in some conservatories, the highest qualification of some employees is Grade 8 or 'Diploma' certificates from ABRSM, Trinity or Greek examinations (Papageorgi, 2007). However, although musicians have reached some level of musical expertise in such cases, they do not have higher-level qualifications (e.g., university level) and, perhaps most importantly, they did not receive any pedagogic training (Stavrides, 1995). In an effort to diminish such concerns, the CMSA has set a requirement for its members to have teachers who are experienced and appropriately trained (CMSA, 2020).

One of the key roles of the Association is to provide opportunities for the students to be involved in a range of musical activities every year. Such activities may include participation in concerts and competitions that take place all over Cyprus and abroad. The Association also provides opportunities for the children to learn how to work together in groups by joining choirs and orchestras of the conservatories with the aim to perform in larger ensembles. In addition,

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[9]https://www.facebook.com/%CE%A3%CF%8D%CE%BD%CE%B4%CE%B5%CF%83%CE%BC%CE%BF%CF%82-%CE%A9%CE%B4%CE%B5%CE%AF%CF%89%CE%BD-%CE%9A%CF%8D%CF%80%CF%81%CE%BF%CF%85-Cyprus-Music-Schools-Association-521254758077680/?ref=page_internal.
[10] Personal correspondence as made with the administration of the 'Cyprus music school association'.

the organisation of a range of seminars and classical music master-classes takes place every year (Teklos, 2011), with the aim to provide further opportunities for the students to gain more knowledge and skills as musicians (CMSA, 2020).

In general, the Association seeks to ensure that all member conservatories offer an education based on Western Classical music, whilst they also provide opportunities for their students to learn music of other genres, such as traditional, popular, or jazz (Smith, 2005). The ABRSM examinations are one of the most common types of assessment used in conservatories in Cyprus (Papageorgi, 2007). One of the main reasons for using these syllabuses is that teachers consider that this examination system can offer opportunities to the children to acquire high-status certificates, which can also be used by young people who wish to apply to universities abroad (Skoutella, 2015). While the majority of the Cypriot conservatories support the idea of focusing mainly on Western classical music (by using mainly ABRSM syllabuses), some local music conservatories feel that this is 'against their national sentiments and their status as local musical enterprises' (Skoutella, 2015, p.178). Aiming to support this ideology, they cooperate with music schools based in Greece, and they use a specific graded examination system designed by these Greek organisations. This type of examinations is considered to have the same level of difficulty as British examinations (Papageorgi, 2007). In discussing Greek examinations, Skoutella (2015) pointed out that other universities in countries abroad do not recognise such certificates; therefore, children are encouraged to study at a university in Greece. According to her, this examination system has enabled children from lower-middle-class families to have the opportunity to study music in Greece, where fees and the costs of living are much lower than in other counties.

Although this viewpoint has had an impact on a range of Cypriot musical conservatories, at the present time, the majority of these conservatories use the ABRSM examination system to equip children with the knowledge and skills that are perceived to be essential (Teklos, 2011; Papageorgi, 2007). Therefore, the material taught in music conservatories is based on a large extent on the syllabus provided for the ABRSM examinations. In addition, there can be a teaching focus on other musical material, although this depends on the educational curriculum and the philosophy to which each conservatory subscribes. Nevertheless, one of the roles of the CMSA is to ensure that all registered members provide what is regarded to be proper Western classical music education to all their students (CMSA, 2020).

Apart from the educational role, the association also provides support with practical issues that individuals may encounter at the conservatories (e.g., such as related to organisation of examinations, or concerts). However, its role does not involve setting specific company

policies for the conservatories, since they are all considered to be private, profit-making organisations (CMSA, 2020).

4.3   The Musical Conservatory that participated in the Study

The musical conservatory that was chosen for this research is an active member of the CMSA and has had a reputation for offering high-quality instrumental education. Over this time, its students have participated in different musical competitions in Cyprus and internationally. In addition, it is an active member in various musical events organised by the CMSA every year in Cyprus, aiming to provide a wide range of opportunities to all of its students. Some of the instruments that are taught in the conservatory are piano, voice, classical, acoustic guitar and drums and other percussion instruments. Additional instruments are taught; however, they have been redacted in this text to prevent any identification of the conservatory. As Iphofen (2011, p.96) suggested, this is a strategy that researchers may use to 'deflect anyone seeking to identify participants'. As he suggested, researchers can change some key information that may lead to identification during the process of reporting. While using this strategy in the current study, the researcher carefully chose what information to redact, so as to protect the participants' privacy.

The conservatory offers teaching based mainly on Classical Western music, and it also focuses on other genres. Once again, the provision of more details on the genres taught is redacted to protect the anonymity of the conservatory. It also offers exam preparation to the students for different types of music exams, such as ABRSM. The researcher chose not to include other type of exams, due to ethical issues. Each conservatory in Cyprus offers specific types of exams, as the choice depends mainly on the conservatory director. Provision of more information could, therefore, risk identification of the conservatory. However, reporting that the conservatory used ABRSM examinations was unavoidable due to the nature of the research. Nevertheless, the risk for identification was considered to be unlikely due to the fact that this type of examination is offered in the majority of the conservatories in Cyprus. All instrumental lessons in the conservatory are private and are provided to pupils for one hour per week. In addition, it offers opportunities to the students to join as members of the choir and participate in a range of concerts that are organised each academic year.

Teachers who are employed at the music conservatory are required to be experienced musicians who hold a higher education degree in Music (preferably at master's degree level) and specialise in one or more instruments (Conservatory Founder, 2020). It is also preferred that teachers have a background in music education, either by being qualified with any type of degree in music education, or by having undertaken courses or modules in higher

education. In addition, the performance skills of the employees are assessed during interview, where applicants for teaching roles are asked to perform.

During each academic year, the conservatory strongly recommends its teachers to participate in various training workshops and seminars that take place in Cyprus. Organisations such as the British Council (2021) and the CMSA and universities offer various seminars each year in which teachers can be involved. The focus may vary from educational to performance aspects of music, aiming to provide diverse opportunities for teachers to expand their knowledge and skills both as educators and musicians. The approach applied by the Conservatory is mainly suggested by the CMSA, and it aims to offer opportunities to the teachers to be constantly informed about different aspects and developments in relation to music education.

4.3.1 Assessment

At the participating musical conservatory, the assessment takes place by using multiple methods. The main assessment is derived from the results of ABRSM practical examinations, which take place every year. A high mark is one of the main goals for all of the students in the conservatory. In addition to the ABRSM, there is an internal examination system that takes place at the end of each academic year. An external examiner visits the conservatory and examines all types of instruments, offering the opportunity to the children to be examined in additional types of musical material (such as Greek music), distinct from those in the ABRSM syllabus.

In addition, the participating musical conservatory organises another type of assessment, known as 'inspections'. The CMSA encourages this type of assessment as it finds it to be very effective for students. Twice a year, the director of the conservatory organises weekly inspections, in which students are asked to perform in front of other students and teachers in the style of an informal concert. Students present a full repertoire of three music pieces. They are also assessed on specific scales or technical exercises dictated mainly by the ABRSM syllabus of each Grade level. The students receive feedback about their playing and about their progress in general. This is a method applied by all of the conservatories that are part of the CMSA, and it is perceived as an opportunity for the students and their parents to receive formal feedback for their progress throughout the academic year.

4.3.2   Participants in the Research

The participants for the main study were six children/young people who had been learning how to play the piano within one-to-one contexts (see Table 4.2), along with their two respective teachers. All participants were chosen from the musical conservatory introduced above (see section 4.3). The choice of the teachers and the students was made after a meeting between the researcher and the director of the music school.

Specific attention was given to the selection of the teachers, with the final choice being made according to their qualifications and based on informed and voluntary consent to participate (see section 3.7). Both teachers that were chosen were considered to be proficient pianists, based on their highest qualification. They were both qualified with a higher education degree in Music with a specialization on the piano instrument. Another criterion for choice was their teaching experience, as it was decided to have experience of teaching students at different Grade levels for more than eight years. Both of the teachers who participated had more than ten years of teaching experience as piano tutors.

The selection of the students was made according to their reported level of expertise and to ensure an equal balance from amongst the student of the two participating teachers. The identification of the acquired level of the students was made primarily from the successful results from their last examination. However, the detailed mark profile of the past examination was not used as a criterion in selecting the six student participants. Usage of this type of document would also raise ethical issues, as some individuals may not wish to share this type of information and as a result their decision to participate to be influenced (Aguinis and Henle, 2008).

For the purposes of this study, all children that participated represented an ascending categorisation of Grades starting from beginners to more advanced learners (i.e., Grades 1, 5, 8). However, although the level of expertise was the identical according to Grade level, the age and the gender of the children and the years of playing were not set as participation criteria.

In all, each of the two teacher participants had three student participants at three levels of expertise. The initial letters 'A' and 'B' were used to clarify the teachers and the codes TA and TB have been used to refer to them accordingly for the remainder of this thesis. In the case of students, participants codes included a number which refers to the Grade level of the student (e.g., Grade 1, 5 or 8). Thus, for the rest of the thesis SA1 refers to Teacher A's student at Grade 1 level, SB1 to Teacher B's student at Grade 1 level, SA5 to Teacher A's student at

Grade 5 level, SB5 to Teacher B's student at Grade 1 level, SA8 to Teacher B's student at Grade 8 and lastly, SB8 to Teacher B's student at Grade 8.

Table 4.2 Demographic Profiles of all Students

Student	Grade Level	Age	Gender	Years of Playing
SA1	Grade 1	10	Female	3 years
SB1	Grade 1	10	Female	5 years
SA5	Grade 5	13	Female	7 years
SB5	Grade 5	14	Female	7 years
SA8	Grade 8	17	Male	10 years
SB8	Grade 8	16	Male	9 years

4.4 Summary

Chapter four provides an insight into the contextualisation of the research. The educational background is explored and provides an overview of how instrumental teaching and learning takes place in Cyprus. Historical aspects are explored, as well as their influences on Cypriot educational system. Lastly, the chapter presented the participants of the current doctoral study (conservatory, students and teachers).

Chapter 5
Grade 1 case studies

5.1 Introduction

This chapter focuses on data collected from two children at the beginning of their experience of piano learning. Both were studying for their Grade 1 (ABRSM) awards in a private music conservatory in Cyprus. Chapter 5 reports the nature of a set of observed and video-recorded piano lessons in the music conservatory, followed by the private practice behaviours at home– as videoed by each individual. Each case is reported separately, and then a comparison is made between the two in the summary section at the end of the chapter. The data from the videos (and observation notes collected throughout the lessons) were classified into different categories of teaching and learning (as reported in the Methodology chapter), whilst a similar analysis approach was taken for the video data from the home-based practice sessions.

Supporting tables with information covering matters such as teaching material, structures of lessons, teaching approaches, interaction between teachers and students, quantity of practice sessions, and practice strategies used by students while practising can be found in Appendices VIII and IX. Appendix VIII refers to SA1 and Teacher A and Appendix IX to SB1 and Teacher B.

5.2 Grade 1: Case study 1

SA1 is a ten-year-old girl from Cyprus and she was in her fourth year of Primary school. The major instrument for her is the piano, but she was also taking singing and theory lessons. She had taken one-to-one piano lessons for three years with her teacher (TA) at the music conservatory. At the time of the research (2013), she was preparing for the Grade One (ABRSM) piano examinations, which would take place during the upcoming May. Specifically, she and TA worked on the three set pieces of repertoire from the book 'ABRSM Grade One Pieces', whilst they also focused on the scales and arpeggios/broken chords from the book 'ABRSM Grade One Scales, Arpeggios & Broken Chords'. The musical pieces that SA1 was learning for the examinations were the following:

- 'Moderato' No.2 Op.26 by A.F. Gedike
- 'Das Ballett' No.19 by D.G.Turk
- 'Chattancoga Choo Choo' by Harry Warren & Mark Gordon.

In addition to these three examination pieces, another piece of music was included in one of the lessons, the 'Minuet' from the opera 'Don Giovanni' by Mozart. The selected repertoire indicated that TA was holding a positive attitude towards Western Classical music material, which would be in line with previous arguments that this is often the case within Cypriot musical conservatories (Skoutella, 2015).

5.3 Findings from the observed lessons and videoed home practice

5.3.1 Enjoyment of Practice

SA1 was found to be a passionate young student, who had enjoyed learning the piano over the past four years. She was enthusiastic about her lessons and reported that the piano was one of her favourite subjects. In addition, her comments showed that she perceived practice as particularly enjoyable and that she was highly motivated to be involved in this activity.

> *'I like practising the piano! In general, this is one of the few subjects that I really enjoy studying.'*

However, the interview demonstrated one major factor that influenced the extent to which SA1 enjoyed practising. Based on her comments, liking the pieces was seen as a motivation for her to practise more regularly. In contrast, SA1 lost interest to practise when she did not like the pieces that were assigned to her.

> *'It depends on what piece I have to practise. It is really simple for me. If I like the piece, then I also like practising it at home. But when I don't then…I won't practise so much.'*

The choice of the piece was, therefore, a crucial element of the lessons for this student. SA1's interview revealed information about the procedure of choosing pieces during the lessons. Results were consistent with findings from previous research suggesting that the selected repertoire can have an impact on the student's motivation to practise (Renwick and McPherson, 2002).

> *Researcher:* *'How do you usually choose the pieces with your teacher?'*
>
> *SA1:* *'She usually plays the pieces for me and then she asks me which ones I like.'*
>
> *Researcher:* *'So you get to choose what pieces are you going to learn?'*
>
> *SA1:* *'Most of them!'*
>
> *Researcher:* *'What about the exam pieces?'*

> *SA1:*   *'I was the one that I chose the exam pieces. The pieces that are not from the exams repertoire...my teacher usually chooses these pieces for me.'*

The above comments showed that her teacher provided an opportunity to the student to choose the exam pieces, which were the pieces that she needed to give more emphasis to while practising. Her teacher used this teaching method as a motivation for her student to be engaged in practise on a regular basis (Renwick and McPherson, 2002). Taking into consideration that practising is usually not seen as an enjoyable activity, the findings suggested that liking the pieces could stimulate the SA1's interest to practise more often.

5.3.2 Summary of the four lessons

In every lesson, the material used varied, although the prime focus was on the pieces and scales (see Appendix VIII.1). Analyses showed that in all of the lessons, TA spent more time on the pieces. However, this time varied considerably between the four lessons, with the percentages ranging from 38% to 66%. In contrast, the time spent on the scales was found to be more similar between the four lessons, although percentages were lower (typically half) compared to 'pieces'. TA also focused on 'sight reading' in two of the four lessons and spent identical amount of time on this activity (=16%). 'Aural tests' were evident in two of the lessons only, although the time varied. Lastly, similar amounts of time were classified in the category 'other' for the four lessons.

TA used a very similar pattern in her lessons, although usage of some of the material varied (e.g., sight reading). Specifically, the first three lessons began with the same material, which were the scales and the pieces (see Appendix VIII.2). However, additional material used in the lessons varied. The fourth lesson was the only one with a different sequence, as the teacher initially focused on the pieces, then on the scales and finally on the aural tests.

5.3.3 Teaching of specific practice strategies

During the four lessons, TA constantly advised her student to use strategies (see Appendix VIII.3). Results showed that she mainly recommended strategies 'verbally' (total=552). Advisory comments were strongly linked with the provision of feedback on what needed improvement as, in most cases, the teacher suggested a specific strategy to correct the perceived mistake at that time. This method was found to be a type of demonstration on how to correct mistakes whilst practising at home. The strategies that were promoted more often by the teacher match the categories 'error correction strategies' and 'focus on difficult parts'.

Findings demonstrated that TA was also advising strategies 'non-verbally' to her student (see Appendix VIII.3). However, this method was used much less compared to 'advisory comments' (total=71). In these cases, she encouraged usage of strategies mostly by playing on the piano, or singing the correct note or part while they were working on a piece. 'Finger pointing on the score' was also found to be used by the teacher so as to demonstrate to the student from where she had to start playing (=repetition).

5.3.4   Reference to Previous Practice

In all of the lessons, TA referred to previous practice with the aim to gather information about the student's home practise (see Appendix VIII.4). Results showed that she was asking a) whether the student practised a specific piece or scales, or what she practised during the week in general, and b) what strategies she used while practising a piece in general, or a specific part of a piece. Discussions were found either before or after the student had finished playing a musical piece or scales. Students A1's answers from the semi-structured interview also support these findings, as she stated that her teacher usually referred to previous practice during the lessons.

> Researcher: *'Does your teacher usually ask about how you practised at your*
> *home during the previous week?'*
>
> SA1:   *'She might ask me 'Did you practise at a slow tempo? Did you*
> *practise this piece?' Specifically, the question that she asked*
> *me in the last five lessons is 'Did you practise at a slow tempo?'*
> *For example, she keeps telling me that I have to practise at a*
> *slow tempo one of my pieces and so, this is the question that*
> *she usually asks before or after playing the piece.'*

TA used three different categories when referring to previous practice: 'what' and 'how' the student practised and 'demonstration (see Appendix VIII.4). She mainly gathered information about 'what the student practised', as this was evident in all of the lessons. She also asked questions about 'how the student practised', although such discussions were found only in the third and the fourth lessons. The following example illustrated that the teacher opened a discussion about how the student practised a piece that was not improved. In this case, the student's performance was the factor that influenced TA to open a discussion about previous practise.

Extract taken from the Third Lesson

[The student finished from playing the third piece from the examination book.]

> *'Tell me what you think. [The student does not reply.] Is this how you practise at home? Do you play it at a slower tempo than this? Because this is not slow. This is almost the final tempo. That's why you can't play it correctly. You have to play the piece like this [the teacher starts demonstrating on the piano by playing and singing the piece at a very slow tempo.] so as to play the rhythm clear.'*

Apart from these discussions, the teacher also used another method to collect information about the student's practice. During the first lesson, she asked the student to illustrate how she practised by playing on the piano. The teacher used this method to gain a deeper understanding of how SA1 practised at home and to help her accordingly.

Extract taken from the First Lesson

[Teacher asked from the student to play a part of a new piece (Minuet) that she had to practise at home. Discussion took place after the student had finished from playing the piece.]

> TA: *'Show me how you practised at home. [The student does not give an answer] Did you practise it?'*
>
> SA1:   *'I practised it but I can't play it fluently.'*

5.3.5   Reference to Future Practice

Although the teacher made some limited reference to the past, she gave a little more emphasis on providing information for future practice (see Appendix VIII.5). The teacher referred to future practice by explaining to the SA1 'what' or 'how' to practise for the next week, or by providing explanations to the student of 'why' she had to use the recommended strategies. She also gave instructions on 'practice time'; however, this category was used only in the first and third lessons. Reference to any of these categories was found whilst they were working on a piece or scales, or after they had finished working on it. The following extract was taken so as to demonstrate how TA recommended strategies for home practise. In this case, instructions were given based on the student's performance during the lesson.

Extract taken from the Fourth lesson

[Discussion takes place after the student played once the piece.]

> *'You have to practise this piece at a very slow tempo at home. Like this. [The teacher begins to demonstrate on the piano how she has to play the piece.] I prefer that you practise once like this rather than playing the piece a thousand of times at a fast tempo. You have to improve the rhythm…Try again to play at a slow tempo.'*

[The student played the whole piece along with the teacher.]

> *'The rhythm was correct now! You have to practise like this only. Ok?'*

[Student nods her head in agreement.]

In the following example, the teacher gave instructions to the student about what she had to practise, while she also provided information about the elements that she had to focus on. The teacher also made written notes on the scales book, as a reminder for the student.

Extract taken from the First Lesson

> *'At home, practise at a fast tempo from now on. [The teacher also makes notes on the scales book.] Work on the crescendo, diminuendo and the hands position.'*

Results showed that, although TA referred to future practice several times (total=54) in every lesson, averages were rather low (=1.71%). One explanation for that is that the teacher provided brief and straightforward instructions for each piece separately. Most of the instructions were given after they had finished working on the piece, or the scales, and it was in a form of a summary of what SA1 had to do for the following week. However, SA1 mentioned that, although verbal instructions for future practice were provided to her in every lesson, she might not remember precisely all of the suggested strategies when she practised at home.

> SA1:   *'During the lessons I usually understand what strategies I have to use at home, but then, when I go home I might forget what I have to do.'*
>
> Researcher: *'And what do you do in such cases?'*
>
> SA1:   *'I usually begin playing the pieces and from my mistakes I might remember what my teacher asked me to do.'*

Although she has a few years of experience as a learner, her comments illustrated that she was still not in a position to remember everything that she discussed with her teacher during the lessons. Results demonstrated the need of additional teaching methods in SA1's lessons. As findings showed, in some cases written notes were used along with verbal instructions, with the aim to enhance the student's memory.

5.3.6 Usage of Notebook

Usage of notebook was not found in the lessons of SA1. The student felt that using a notebook at this Grade level was not an activity that she would request, as she did not find it to be extremely helpful at this point of her learning. Her comments revealed her enthusiasm about playing the piano during the lessons, as she mentioned that she prefers spending time on playing rather on keeping notes about future practise.

> *'This is the first year that we do not keep notes in a notebook...If I had the choice, I think I wouldn't choose using a notebook because time would be lost on writing down things rather than spent on playing.'*

However, SA1 mentioned that, although a notebook was not used during the lessons, her teacher tended to make notes on the score about future practice.

> *Researcher:*   *'Do you always remember how you have to practise at home?'*
>
> *SA1:*   *'Yes…but when I don't, the easiest solution to my problem is to take a look at the notes that my teacher makes on the score.'*
>
> *Researcher:*   *'How often does she make notes?'*
>
> *SA1:*   *'In every lesson she keeps drawing circles around notes that I keep playing wrong… if you see the music scores, you will see things like 'count aloud' and 'play at a slow tempo. This actually helps me a lot on remembering what I have to do at home.'*

As SA1 stated, marking the score is a teaching method that she finds to be helpful. Keeping notes on the score helps her remembering what and how she was asked to practise at home. Videos from the lesson showed that the teacher was using this method, either to mark 'what to practise' (total=3) or 'how to practise (total=10) for the next week' (see Appendix VIII.6). All notes were brief and simple, usually by marking on the score (e.g., with the use of additional symbols such as * and !). In general, the percentages were low, as the activities did not last for long when they were used.

5.3.7 Quantity of Practice Sessions

SA1 videoed 17 practice sessions during this period of four weeks and reported that each practice session was on video (see Appendix VIII.7). Results indicated that she carried out three sessions in the first, second and fourth week, and that she practised eight times in the third week. According to SA1's statements from the interviews, she reported that she tended to practise three times per week. One possible factor for the sudden change during the third week is likely to be the increased parental involvement during the lesson. For the third lesson, the child's mother was invited to observe the lesson by the music conservatory. The invitation to the parent was expected to be scheduled before the research began, but the parent was unavailable at that time. As a result, the visit was re-scheduled when the research was underway. At this point, it has to be noted that parental participation is an activity that the conservatory organises once a year for all of the students. In the case of the other five research participants at the conservatory, such participation had been organised before the research had begun.

There were some ethical considerations at this point. The researcher preferred the lessons of the participants to be similar with regards to the people involved during the lesson, as this would enhance validity. However, it was considered by the researcher to be inappropriate to interfere into the participant's schedule as this may have cause changes in the participants' behaviour (Bautista, Tan, Wong and Conway, 2019) and so the lesson with the parent was decided to be included normally in the analyses. Instead, the researcher used data as it was an opportunity to discover the impact of additional external influences.

Parental involvement at the lesson clearly had an impact on the practice itself, since it was noted more in home practice after the third lesson. The first week, parental involvement was noted only once, with the percentage of 0.36%, whilst for the next week it was not evident at all. After the mother participated in the third lesson, 'parental involvement' increased a lot while the student was practising at home. In total, the mother was involved six times while SA1 was practising. The percentages were marked to be a lot of higher compared to the previous weeks, especially for the third session at 77.78%, even though it was noted only once during the session. For the other sessions the numbers were 19.86% (one time) for the eight sessions and 11.70% (four times) for the first session. Parental involvement was also evident during the third session at five different times with a percentage of 8.07%

Video data revealed that parental involvement took place in various ways, with—in the case of SA1—her mother observed to be listening and commenting on her playing. As SA1 reported during the interview, her mother—apart from participating as a listener—might also take the role of a teacher/critical friend so as to provide practical support, although she does not have

a musical background. As the results suggested, different types of parental support were provided (e.g., actively supervise) to encourage SA1 to be involved in home-practise (Margiotta, 2011).

> *'Sometimes my mother is my audience! She likes to sit on a chair and listens of me playing the piano…She might also help me to prepare for my exams! Once, for example, she helped me by asking me to play specific scales.'*

Parental support seemed to enhance SA1's involvement in home practice (*cf* Margiotta, 2011). Findings indicated that the mother's presence during practice was not only willingly but was also evident after a request by the student. Based on findings, the mother's presence had a positive influence over the student, as she was found to be motivated to practise more throughout the week when mother was present. SA1 also referred to her mother's involvement as reminding her to practise; however, according to SA1's statements, she took responsibility for her own practice most of the time.

> *SA1:*   *'There are times that I go to the piano and practise on my own, but there are times that my mum reminds me that I have to practise.'*
>
> *Researcher:*   *'Most of the times, which of the two will happen?'*
>
> *SA1:*   *'To go and practise without having my mother reminding me that I have to practise.'*

Based on the above findings, it would seem that the mother had a tendency to act in an advisory role by reminding SA1 to practice. This finding echoes Hallam (2001b), who also found this type of parental behaviour in young children's home practice. In the case of SA1, parental practical and emotional support was evident, and it had a positive influence on the quantity of her practice. However, the extent to which parents are willing to be actively involved to their children's practice depends largely on their attitudes towards music learning. Although previous research has indicated that Cypriot parents tend to encourage music practise on a daily basis due to its positive effects on children's development (Shiakou and Belsky, 2013), this might not always be the case. Some children may not receive this type of support from their home-environment. One of the reasons may be that parents consider other activities or subjects to be more important that music practice (Teklos, 2011) and as a result, the practice time diminishes. In addition, parents who face difficulties to support their children's tuition financially are more likely to be passive or unsupportive, due to external pressures or worries (Lamprianou and Lamprianou, 2013; Margiotta, 2011; Howe and Sloboda, 1991). Taking into

consideration that parental support is one of the key elements for the child to maintain a positive attitude to practice (Creech, 2010), this might lead in decreasing the student's motivation in general.

5.3.8 Length of Practice Sessions

Findings from the home-based videos showed that, during the four weeks, the home practice sessions that SA1 carried out varied in length (see Appendix VIII.8). The shortest practice session was found to be 03:43 and the longest 22:48. However, the longest session was an exception, since the second longest session was less at 13:06. In general, she carried out short sessions as she was expected to do. Statements from the interviews suggested that SA1 agreed with her teacher to practise for a specific time on a daily basis. However, results indicated that she did not followed instructions, as practice sessions were mostly shorter in time.

> Researcher: *'Did you discuss with your teacher about a specific time that you have to practise each week?'*
>
> SA1: *'Yes. Every day, 20 minutes. Although I do not always follow her instructions (laughing).'*

The research literature suggests that students tend to experience increased anxiety levels when an event is near (Papageorgi et al., 2013) and this usually results in increased practice time. In addition, as a Grade 1 student, she was unlikely to have developed autonomy yet and, therefore, was expected to base her practice on her teacher's instructions at times when she felt pressure. Somewhat surprisingly, according to the recorded data, SA1 did not follow the instructions, since she carried out only three sessions on the same day before the concert. In this case, it might be inferred that SA1's personal characteristics (e.g., self-esteem) appear to have had a great influence on practice time.

Statements from the interviews showed an additional factor influencing the length of her practice sessions. According to her, the length of her practice sessions might be influenced by other responsibilities. Based on her statements, school responsibilities might reduce her practice time throughout the week.

> *'If I have other private lessons in the evenings, if I practise, I won't practise for long. For example, on Tuesdays and Fridays, I do not practise…For this week, I know that I can't practise because I have to study for tests that I have at the school. It depends how much time I have free in the evenings.'*

This shows that piano practise is not seen as an activity that should be undertaken daily, but only at times when her schedule is more flexible. This has been observed to be a common phenomenon within the Cypriot community, since private tuition in the afternoon time is part of the student's daily lives (Lamprianou and Lamprianou, 2013). Students usually have an overloaded schedule, which can influence in a negative way children's length of practice sessions (Ilari, 2018).

5.3.9   Concentration while practising

Despite her young age, SA1 videotaped all of the sessions on her own, without the help of her parents. In addition, she seemed to be the only student having fun whilst videoing, as she was found to be singing, talking to herself and also talking to the researcher (in the latter's absence) before beginning her practice (e.g., friendly talk like wishing the researcher 'Happy Valentine'). She was also found to be talking to her parents during the majority of her sessions (average=4.01%). Her talking was found to be both related to and irrelevant to practice. Specifically, she was distracted while practising a few times, during the first, third and fourth week (talking to others about irrelevant things). Lastly, distraction was also found at times when she stopped playing and began moving around in the room (average=1.75%). In general, she was found doing other things which were irrelevant to practice (e.g., talking to her teddy bear) 3.17% of the total average of the sessions (see Appendix VIII.9) indicating that she was not able to maintain concentration for a long period of time (Hallam, 1998).

5.3.10   Usage of Strategies

SA1 was found to be aware of a range of practice strategies (total=25) while she was practising (see Appendix VIII.10). Her practice sessions included practising the pieces by playing mostly 'the whole piece' without stopping (=49.73%) and 'playing with the use of strategies' (=16.78%). She had the tendency to play the piece without breaking it into smaller parts, a behaviour that was perhaps to be expected from theories outlined in Chapter 2, based on her level of expertise (*cf* Jorgensen, 2004; Hallam, 2001b). She also spent 7.45% on 'playing scales', either by playing the whole scale or a part of it. Apart from the scales and the pieces, she also spent time during the first three weeks on 'playing a technical exercise' that her teacher had taught her (=2.18%).

SA1 used all of the strategies from the 'error correction' category except for one, the 'repeat trill'. However, as her pieces did not contain any trills, she used all of the strategies that applied to her chosen pieces. As SA1 was expected to do, she tended to correct mistakes by using the strategy 'repeat note(s)' (=5.08%). She also used 'SBF' (=3.37%), 'repeat part' (=2.91%), 'repeat bar' (=2.46%) and 'repeat chords' (=1.65%). In terms of the theory reviewed in Chapter

2, this behaviour was in line with her level of expertise, as it is often reported that low level students tend to correct their mistakes mostly with 'error correction' strategies (Hallam, 1997).

Strategies for the conduct of practice' were also evident, except three: 'variable practice', 'sing the notes' and 'sing a part in her head'. 'Use of metronome' (=12.04%) was the strategy that was used more from this category followed by 'increase gradually the tempo' (=1.18%), 'count off' (=0.10%), 'say the notes while playing' (=0.65%), 'count aloud' (=0.63%) and 'closed eyes' (=0.38%) (see Appendix VIII.10). During her practice sessions, some more effective strategies from other categories were also noted. SA1 was found to be using the strategies 'focus on part' (total=4.85%) and 'focus on bar' (=1.05%) so as to improve reading of notation or rhythm. Playing at a 'slow tempo' was also found (=29.62%), followed by 'regular tempo' (=27.81%) and 'fast tempo' (=17.74%), play with the 'right hand' (=12.22%) and 'the left hand' only (=1.70%).

She also used three types of body movements that seemed to aid in counting. She used 'tapping foot' (=0.40%), 'head movement for counting' (=0.82%) and 'clicking tongue' (=1.95%) so as to keep the beat while playing. 'Counting aloud' was evident at all times while she was using any of these three strategies. Overall, during the four weeks she showed a preference on using the strategies 'slow' (=29.62%), 'regular tempo' (=27.81%), 'fast tempo' (=17.74%), 'play with the right hand only' (=12.22%) and 'use of metronome' (=12.04%).

Analyses indicated that she used a range of strategies considered in the literature to be effective (Jorgensen, 2004; Barry and Hallam, 2002; Lisboa, 2008; Casas-Mas et al., 2018). Findings from the interviews revealed a factor that might influence application of strategies. According to her comments, she might avoid using specific strategies because she finds them to be uninteresting.

> Researcher: *'Do you usually follow the instructions that your teacher give in relation to practise?'*
>
> SA1: *'Sometimes no…For example I find some strategies to be very boring…I usually use them when I reach a point that I really have to use them so as to get better. So yes, there are times that I might use them, but not so often.'*

Her comments indicated that the student might lose interest in practising with the use of specific strategies. However, although she did not like using these strategies, she recognised that these strategies could help her to make progress. Findings from the interviews also revealed that the student felt that the way that she practised had changed over time. Her

comments suggested that the student was still in the process of building a repertoire of effective practice strategies.

> SA1: 'The first year, I wasn't practising so often because the pieces were easier. The second and the third year I spent more time practising.'
>
> Researcher: 'Do you feel that the way that you practise this year changed at all?'
>
> SA1: 'Yes. For example, use of the metronome. This is the first year that I learned how to use it.'

5.3.11 Identification of mistakes

Analyses showed that SA1 had already acquired an internal representation of the three pieces, given that she was able to identify most of her mistakes whilst practising. In contrast, results indicated that when she practised the 'Minuet' that was a new piece, she was less able to identify the mistakes that she made. Therefore, it would seem that the usage of strategies in her practice can change, depending on how well she knows a piece of music. Findings were similar to those of McPherson and Renwick (2001), who found that young children rarely corrected their mistakes while practising.

5.4 Relationship between the observed Lessons and videoed Home Practice

The tables used for the following sections show the relationship between the instructions and the practise sessions that SA1 carried out at home. The symbols '√' and 'x' were used to indicate whether the student has followed the instructions in each practise session or not. In the cases when an instruction was not evident in any of the sessions, it was considered to be an instruction that was not followed by the student throughout the week. These instructions were also marked with a red colour for easier visual identification for the reader.

Findings revealed the student's perspective about the relationship between the lessons and the private practice. Based on the student's comments, her practice is usually linked with her lessons. In general, she is highly motivated to make progress over time, with the aim to be praised by her teacher. Her enthusiasm about being praised about her playing showed the power and the positive effects that can perhaps have over young children.

> Researcher: 'Do you feel that the lessons influence in any way the way that you practise at your home?'
>
> SA1: 'Yes!'

Researcher: *'How?'*

SA1:   *'During the lessons I correct my mistakes with my teacher. This help me to understand my mistakes…and so when I go home, I try to correct them…In general, my main goal is for my teacher to tell me a 'Bravo'. That means a lot to me, because she does not say it so easily.'*

5.4.1 First Week

During the first lesson, TA gave direct instructions for home practice six times (see Table 5.1). Beginning with the scales, she suggested working on the scales' dynamics, working at a 'fast tempo' and 'say the notes while playing'. Analyses showed that Student A followed instructions for tempi, however, she did not use the strategy 'say the note while playing'.

For the examination pieces, the teacher provided direct instructions for the first piece only, by specifying that she had to practise at a slow tempo so as to improve some elements. At the end of the lesson, she also made a general comment on the three pieces to remind the student to practise all of the pieces at a slow tempo. SA1 followed instructions related to tempi in all of her sessions, except from the second session. However, it has to be noted that in this session, she did not practise the first piece. The teacher also advised her to learn the new piece 'Minuet', but once again, SA1 did not practise this piece at all during the whole week. In summary, SA1's was influenced by her teacher's instructions, as she followed four out of six (=66.66%).

Table 5.1. First week instructions and home sessions for SA1 (red=teacher directions for practice that were not followed by the student)

Instructions		1st	2nd	3rd
Scales	Say the notes while playing the scale.	x	x	x
	Practise at a fast tempo.	√	√	√
	Work on the dynamics.	√	√	√
First Piece	Slow tempo.	√	x	√
General Comment	Slow tempo.	√	√	√
Minuet	Learn the piece.	x	x	x

5.4.2   Second Week

During the lesson, all instructions were given after they had finished working on each element. The teacher gave instructions for the scales, by pointing out that she had to work on the stability of the tempo. She also gave an emphasis on the minor melodic scales, as these were perceived to need a lot of improvement. Analyses showed that, SA1 did not follow her teacher's instructions consistently, as she did not practise the scales at the second and the third sessions (see Table 5.2). The only session she worked on the scales was the first, when she barely spent one minute on them (=13.90%) and did not practise the minor melodic scales. The single instruction that was followed in the first session only, was to work on the stability of the tempo by using strategies such as 'playing with separate hands' and 'focus on one scale'.

Table 5.2. Second Week instructions and home sessions for SA1

	Instructions	1st	2nd	3rd
Scales	Practise with the aim to play at a steady tempo.	√	x	X
	Practise the minor melodic scales.	x	x	x
First Piece	Slow tempo.	√	√	√
Second Piece	Practise until to see an improvement.	√	√	√
	Start by focusing on a specific part - do not start practising from the beginning.	x	x	x
	Practise at a very slow tempo until to play the piece without making any mistakes.	√	√	√
Third Piece	Practise at a very slow tempo so as to improve the rhythm.	x	√	√

The teacher then was found to be giving instructions for each of the three pieces separately. For all of the pieces, the teacher made reference to the tempo by saying that SA1 had to practise by playing only at a slow tempo during next week. SA1 followed the instructions regarding the tempo, except once (first session) when she played the piece at the regular tempo as well.

Another strategy that SA1 was advised to use was to start practising this piece by focusing on a specific part instead of playing the piece from the beginning. However, this strategy was not used in any of the three practice sessions. In addition, reference to practice was made three times to stress the importance of improving specific elements (notation and rhythm). SA1 followed this advice, since she was found to be working on the rhythm or the notation when needed. In general, during the second week SA1 was related to her teacher's instructions, as she followed five out of seven instructions (average=71.42%).

5.4.3   Third Week

During the third week, TA gave instructions about the dynamics of scales right after they had finished working on them (see Table 5.3). However, analyses showed that SA1 did not practise the scales during the whole week.

Table 5.3. Third Week instructions and home sessions for SA1

	Instructions	1st	2nd	3rd	4th	5th	6th	7th	8th
Scales	Work on the scales and improve the dynamics.	x	x	x	x	x	x	x	x
First Piece	Slow tempo.	√	x	x	x	x	√	√	√
	Focus on part and repeat a lot of times-Bars 13-16.	x	x	x	x	x	x	x	x
Second Piece	Slow tempo.	x	x	x	x	x	x	x	x
	Count Aloud.	x	x	x	x	x	√	x	x
Third Piece	Slow tempo.	x	x	x	x	x	x	√	x
	Count at the fourth beat of every bar (she doesn't has to count all along but she must say 'four' at the fourth beat).	x	x	x	x	x	x	x	x
	Focus on a specific part: Bars 13-14.	x	x	x	x	x	x	x	x
Sight Reading	Play the first part of the piece only.	x	x	x	x	x	x	x	x

For the pieces, instructions were given either while they had been working on them or afterwards. The teacher asked SA1 to 'focus on a specific part' and play at a 'slow tempo' for the first piece. Even though she worked on this piece during most of the sessions (five out of eight sessions) she did not use this strategy. However, she played the pieces at a slow tempo in all of the sessions, except one.

For the second piece, TA gave advice to practise at a 'slow tempo' and to 'count aloud'. Although the teacher emphasised the importance to use these strategies, SA1 did not practise at a slow tempo, and she barely used the strategy 'count aloud'. Likewise, she did not follow any of the instructions regarding the third piece, although she practised the piece in three sessions. Finally, SA1 was advised to work on her sight reading skills by playing a specific part of a new piece from her book 'ABRSM Grade One Musical Pieces'. However, playing this piece was not evident. In general, the student's practise was barely related to her teacher's instructions, as she used only two out of the nine suggested strategies (=22.22%).

5.4.4 Fourth Week

During the fourth week (see Table 5.4), TA began by giving instructions for the scales, saying that SA1 had to work more on the Major and minor scales with the 'use of a metronome'. Based on the results, not only she did not use the strategies, but she omitted practising the scales at all during the whole week.

In addition to the scales, TA also suggested the usage of a metronome for the pieces. For the first piece, she stressed the importance of practising at a specific tempo only ($\flat$ =140) at this point in time, by explaining that it would have a negative effect if she practised at the regular tempo only. The same advice was also recommended for the third piece by asking her to play it only at a very slow tempo so as to improve the rhythm of the piece. Even though they discussed this repeatedly during the lesson, SA1 did not follow the instructions for the first piece, since she was found to be playing the piece at different speeds (slow, regular tempo and fast) and not only slow. For the use of the metronome, she was found to be following instructions only in two out of three sessions.

In contrast, she followed all of the recommendations for the third piece, as she was found to be practising this piece at a slow tempo only. Similarly, SA1 used all of the suggested strategies for the second piece, since she used the metronome and changed the metronome's tempo to a lower tempo. In general, SA1 applied almost several of the suggested strategies, as she followed four out of the six directions from her teacher. The total average that was found for this week is 66.66%, which is equal to the first week.

Table 5.4. Fourth Week instructions and home sessions for SA1

Instructions		1st	2nd	3rd
Scales	Work on the similar motion scales.	x	x	x
	Metronome ♩=140.	x	x	x
First Piece	Metronome ♪=100 Play only at this tempo. Do not practise at the regular tempo.	√	x	√
Second Piece	Metronome (♩=70).	√	√	√
	Changed the tempo to slower with the use of metronome → (♩=64).	√	√	√
Third Piece	Practise at a very slow tempo. The teacher explains that is more effective to play only once at that tempo rather many times at a fast tempo in order to improve the un-steady tempo.	√	x	x

5.4.5   Self-Regulating behaviour

SA1 showed variable self-regulatory behaviour while practising, as she tended to correct mistakes mainly with strategies from the 'error correction' category. Other strategies that were more effective were used as well, but fewer times. This showed knowledge of some effective strategies and an understanding of how they might be used. However, she appeared to lack awareness of what can work best for her and, therefore, how she could improve faster. Based on Hallam's (1997) suggestions of the six levels of development of practice, SA1 was at the fourth level, as she mainly practised by playing through the piece and correcting mistakes mainly by repetitions of group of notes or short parts.

SA1 depended on her teacher's instructions to a great extent, since she often practised by using the most of the suggested strategies (average=56.74%). Although her teacher was not using a notebook to write homework, the notes that she made in the actual musical scores and related to future practice were used in most home sessions. SA1 chose to use a range of strategies, even when she did not follow her teacher's instructions, suggesting a certain level of independence as a learner. According to her statements, she might consciously choose not always to follow the instructions of her teacher.

> *Researcher:*   *'In general do you follow the instructions of your teacher about*
> *practice?'*
>
> *SA1:*   *'Sometimes yes, and sometimes no.'*
>
> *Researcher:*   *'Why is that?'*
>
> *SA1:*   *'Because…for example, practising slowly, is a bit boring.'*
>
> *Researcher:*   *'So it depends on how much you like using a specific*
> *strategy?'*
>
> *SA1:*   *'Yes…if I reach a point throughout the year I have to use a*
> *strategy to make progress, then I will use it….There are times*
> *that I might use a strategy that I don't like, but most of the*
> *times I won't.'*

Findings suggest that SA1 chose not to use some strategies that were suggested by her teacher, depending on how much she enjoyed using them. Her comments indicated that she often preferred to use strategies that she considered fun and enjoyable rather than using those that she perceived as more difficult to put into practice, as they required more concentration in their application. This is perhaps an important element in SA1's practice. It seems that

motivation to use strategies is based mostly on enjoyment rather than on aspiration to improve by the end of the session (*cf* Renwick and McPherson, 2002). This implies that, at this stage of her learning process, she was still not in a position to recognise directly the importance of using particular recommended strategies that would have aided on a faster progress. On the other hand, her comments showed that although at times, she might be able to identify the importance of some strategies, but she would still consciously choose not to choose them.

5.4.6 Summary

TA gave 28 pieces of advice for home practise and SA1 applied 15 of these, just over half. The equivalent average that was found was 56.74%. Overall, results suggested that she tended to follow the most of the teacher's instructions while practising, with an exception of one of the four weeks.

5.5 Grade 1: Case Study 2

SB1 is a ten-year-old female student from Cyprus and she was currently in the 5th Grade of a Primary School in Nicosia. She had been taking private piano lessons for five years at the musical conservatory with TB. At that time, SB1 was also taking theory lessons at the conservatory. The length of the piano lessons was one hour per week, with the aim of passing Grade One (ABRSM) examinations by the end of the academic year. The preparation for the exams included learning three musical pieces from the book 'ABRSM Examination Pieces: Grade One' the scales from the book 'ABRSM Scales and Broken chords, Grade One', and working on sight reading and aural tests. However, sight reading and aural tests were not evident in any of the lessons. The three musical pieces that she was learning for the examination were as follows:

- 'Das Ballett' by D. G. Turk
- 'Sailor's Song' by Felix Swinstead
- 'March' by Dmitri Shostakovich.

Apart from the examination pieces, she was also working on other pieces, which were assigned by her teacher. The musical pieces that she was learning during the period in which she was participating in this research were:

- 'Landler' by Franz Schubert ('D')
- 'Arioso' by W. A. Mozart ('E')
- 'Elegy' by Cart Reinecke ('F')
- 'Exercise no.23' ('G')
- 'Έχω απόψε ραντεβού' ('H'-Greek song)

SB1's lessons focused on a great extent to Western Classical music (Skoutella, 2015). However, the musical conservatory also provided opportunities for the student to learn music from other genres (Smith, 2015). Specifically, SB1 had to learn a Greek popular song ('H') for a concert that the conservatory was organising.

5.6   Findings from the observed lessons and videoed home practice

5.6.1   Enjoyment of Practise

Findings revealed that SB1 was a hard-working and organised student, as she was always prepared for each lesson. She was also found to be very passionate about learning the piano, and she was highly motivated to practise at her home. Interview data enhanced findings from the videos, while her comments also demonstrated her love for music.

> *Researcher: 'Do you enjoy practising?'*
>
> *SB1:   'Yes! I like playing the piano and listening to the beautiful*
> *melodies that I learn to play*.'

Student's B comments also indicated that she was more motivated to practise when she was learning musical pieces that she liked. In contrast, practise was not particularly an enjoyment activity when she worked on pieces that she did not find interesting. However, her comments indicated that this was a factor that did not influence her involvement in practising at home.

> *'I really enjoy playing the pieces that I like! When I don't like the piece, I just practise because I have to, but I don't really enjoy doing it.'*

Results, therefore, demonstrated that the choice of the pieces appeared to be a strong influence in her enjoyment of practise. This is in line with the findings of Renwick and McPherson (2002), suggesting that the nature of the repertoire influences students' drive to practise. Interview data also showed that this factor had an impact on the organisation of SB's practise.

> *Researcher: 'Do you follow a specific order of material while practising at*
> *home?'*
>
> *SB1:   'It depends on what I want to begin my practise with. For*
> *example, do I want to begin with the nice pieces or with other*
> *pieces?...Sometimes I play only the pieces and after a while*
> *the scales…I practise the scales almost every time, but I*
> *always practise the pieces.'*

Although previous research (McPherson, 2005) showed that children tended to organise their practice sessions by focusing initially on assigned pieces and then on the pieces that they enjoyed, results from this doctoral study indicated that this might not always be the case. Specifically, results demonstrated that SB1 did not follow a specific order while practising, as she was practised based mainly on her current mood. This suggested that although she was aware of strategies on how to organise her practise, she did not always practise in a sequence that might be logical to her teacher, or to other advanced musicians (*cf* Jorgensen and Hallam, 2009).

Although these organisation strategies are reported to be important (Jorgensen and Hallam, 2009), results suggested that TB avoided advising her student to practise by following a specific order of material. According to TB, this could have negative effects on some of the students, as they may feel discouraged to practise.

> Researcher: *'Do you advise your students to follow a specific order of material while practising?'*
>
> TB: *'No…Maybe I should have advised them to practise the scales first, but I don't want them to feel that they always have to do that, because at the end they might not practise at all.'*

In addition, the student's interview revealed information about her preferences while practising. According to her, she was more motivated to practise the pieces that she enjoyed rather than other material. Her comments also revealed information about the choice of the pieces during her lessons. As results showed, her teacher's approach had a positive influence on the student, as she was found to be highly motivated to practise systematically at home.

> SB1: *'I prefer playing beautiful pieces and not for example those boring pieces that are technical exercises. These pieces don't motivate me to practise, but the others do.'*
>
> Researcher: *'How do you choose the pieces with your teacher?'*
>
> SB1: *'My teacher plays the pieces on the piano so as to listen to them and then I choose. But this does not happen with all of pieces. Sometimes my teacher chooses some of the pieces. Usually, these are the pieces that I don't like.'*

In addition, her comments revealed information about parental influence. According to SB1, her parents often provided support by being involved as listeners. As she reported, this was the only activity that her parents could contribute, as they did not have any musical background. In contrast, she showed higher-levels of motivation to practise along with other family members that were musicians as she perceived such involvement to be enjoyable. This showed that social interactions and practical support had a positive impact on SB1's practise. Having this type of support (=practical) seemed to directly influence her attitude towards practising, suggesting that it could perhaps increase her engagement significantly if her parents had a musical background (Grolnick and Slowiaczek, 1992).

> SB1:   *'My parents just listen…because they don't know anything about music, neither my mother nor my dad…But when my uncle or my aunt visits us at home, they know how to play musical instruments, and so they sit with me, and when I make a mistake they help me to correct them.'*
>
> Researcher: *'Do you feel that this is helpful?'*
>
> SB1:   *'Yes!'*

In addition, results showed that other types of parental involvement stimulated SB1's interest to practise at her home. Her parents provided emotional support mainly by encouraging her to be actively engaged in this type of activity. These attitudes and behaviours have been regarded as relatively common in Cyprus, since parents who provide instrumental lessons to their children consider music to have a central role in their development (Shiakou and Belsky, 2013). Encouraging home practice is, therefore, a type of support that is rather expected in such environments. In addition, parents are often thrilled by the idea that their child will acquire qualifications that can help them in the future (e.g., entry in a university, find a job) (Lamprianou and Lamprianou, 2013). As a result, emotional and practical support is constantly provided so as to enhance children's involvement in home-practice.

5.6.2 Summary of the four lessons

TB spent the most of the lesson time on the musical pieces (see Appendix IX.1). Percentages were found to be very high compared to the other categories, ranging between 53% and 73%. 'Focus on the scales' was also found in all of the lessons, but with lower averages of time (8% up to 17%). 'Other' was the last category that was evident in all of the lessons, with the percentages ranging from 3% to 15%. The rest of the material was used only in some of the lessons by the teacher. Specifically, 'sight reading was evident in three lessons, with the

highest percentage being 17%. Lastly, the time spent on 'aural tests' was less apparent, (8% and 10%) while no time allocation was found in the second and third lessons.

The pedagogic content structure was different in each of the four lessons, as TB did not use a specific pattern of elements whilst teaching (see Appendix IX.2). The first point noted is that during all of the lessons, there was a focus on the pieces more than once (two or three times). Based on the analysis, it can be seen that TB was grouping the eight pieces of music. In all of the cases, the three pieces from the examination repertoire (Pieces 'A', 'B' and 'C') were grouped together, as the teacher and student always worked on these by playing one after the other (but not in the same order). The rest of the pieces ('D', 'E', 'F', 'G' and 'H') were mostly used as another group, as they focused on these at a different point of the lesson. An exclusion from this was the third lesson, since they focused on all of the pieces at the beginning of the lesson, apart from the 'H' that they worked on at the end of the lesson. In between the two groups of the pieces, they focused on other material ('scales', 'sight reading' and 'aural tests'). Another point that was noted about the scales and the pieces was that, during most of the lessons (three out of four lessons), the focus was initially on the pieces and then on the scales.

5.6.3 Teaching of specific practice strategies

TB spent the greatest proportion of time verbally in encouraging her student to use a strategy (total=296). She mainly used advisory comments when she provided feedback on what needed improvement (see Appendix IX.3). She also recommended specific strategies while the student was playing, by telling the student to use these at that moment, so as to correct a mistake that she had made while playing. Findings suggested that TB usually spent time working along with the student to demonstrate proper usage of the suggested strategies.

> *'I always try to have free time to work along with my students in the lessons, and to be able to say to them that this is the way you have to work at home. They might respond by saying ok but sometimes I know that they don't really remember what they have to do, and so I ask them to show me how they will do it.'*

Her comments indicated that she preferred to combine advisory comments with demonstration so as to ensure that her student used the strategy appropriately. Comments from the SB1's interview verify these findings, while they also revealed information about her preferences.

> *SB1:*   *'Sometimes she plays along with me on the piano…I prefer when she demonstrates to me…I understand it better.'*

In discussing the introduction to new strategies, similar findings were found. According to SB1, demonstration enhanced understanding of how to use a strategy at home. The following discussion took place when the student was asked about the methods that her teacher was using to introduce a new strategy.

SB1: *'She explains to me, and she also shows to me on the piano.'*

Researcher: *'Is it usually clear to you how and when to use this strategy?'*

SB1: *'Yes, if she demonstrates to me on the piano, I will understand it.'*

TB also recommended strategies non-verbally in all of her lessons (total=31). In this case, three different approaches were evident: a) usage of body-language, b) demonstration on the piano, and c) singing. However, non-verbal behaviour was rarely used, as the highest percentage was 0.47% in the fourth lesson (see Appendix IX.3).

5.6.4   Reference to Previous Practice

Reference to previous practice was hardly found (total=6), although it was evident in all of the lessons (see Appendix IX.4). TB showed more interest about 'what' and 'how' Student B has practised. Discussions about 'what' was practised took place in all of the lessons (total=4), whilst less reference was made about 'how' SB1 has practised (total=2). On the contrary, no time allocation was found for the categories 'practice time' and 'ask to demonstrate how the student practised'. During the interview, she commented that discussions about previous practise were often part of her lessons.

TB: *'I might ask 'did you practise this week?' And they will reply by saying yes or no and how much did they practise. I usually begin with quantity, how many days did they practise, for example 'did you practise all of the pieces or did you focus on parts?'…It depends. I will ask, maybe not in every lesson but I try to refer to it often.'*

Researcher: *'What are the reasons you are referring to previous practise?'*

TB: *'For some students, I refer to previous practise because I want to know…I will usually refer at the beginning of the lesson when the student did not practise much in the previous lesson. If they also play a piece and I see that it did not improve, I will ask again about how much they practised at home in general, not*

specifically for that piece. Or if the scales were not ok, I will ask 'Didn't you practise the scales?'

TB's comments demonstrated that reference to previous practise depended on how well the student played the piece in the lesson. In discussing about previous practise, SB1's comments revealed that she was in a position to identify that such discussions could take different directions based on how well she was able to play the material that she was asked to practise at home. These comments also indicated important information about TB's attitudes in relation to references to previous practice. It seems that, at times, TB used the notebook to see the last entry as a reminder of what was asked to be practised. As Green (2007, p.101) suggested this is one of the benefits of keeping a notebook.

'My teacher might ask me what I practised, but not always. Because she keeps notes on the notebook and also, she can understand based on how well I played the pieces…She usually asks me questions.'

The following extract was taken from the fourth lesson to demonstrate an example of how TB referred to previous practise based on the student's performance. In this case, TB opened a discussion after the student had finished from playing a music piece. The teacher then provided feedback to SB1 on what needed improvement, while she also gathered information about how the student practised at home.

TB: *'The rhythm is not very steady. Did you practise with the metronome?'*

SB1:   *'Yes.'*

TB: *'You should always do so, ok?'*

In addition, data from the teacher's interview enhanced findings in relation to how reference to previous practise took place in her student's lessons. As TB commented, SB1 liked to take the initiative and open a discussion about the difficulties that she faced during the previous week.

'There are times when the student might tell me 'I faced difficulties on this'. SB1 for example, usually wants to notify me by telling me 'I practised this, and I couldn't improve these bars'…Because she is a student that when she practises something she usually makes a progress, in terms of notation and rhythm at least. So, in these cases she would tell me 'I didn't succeed to improve this part', she wants to keep me posted. Other students don't. It depends on the student.'

Data showed that SB1 was a highly motivated student who tended to follow her teacher's instructions when practising at home. Her teacher's comments suggested that she was committed to reaching her weekly goals, and at the times when she faced difficulties, she tended to ask for help.

5.6.5 Reference to Future Practice

Reference to future practice was more frequent compared to reference to previous practice, although the percentages were again low, as they did not exceed 10% of the overall of each lesson (see Appendix IX.5). Discussions included 'what' (total=39) and 'how' (=40) the student had to practise for the next week as well as 'why' (=11) she had to practise this way. TB showed more emphasis on 'how' SB1 had to practise for the next week', as she often included suggestions on specific strategies that could improve specific elements.

The following extract was taken as an example to demonstrate how TB advised the student to use specific strategies at home. In this example, she initially asked the student to play the piece 'G' and then provided verbal feedback based on her playing. She then worked along with the student by using a metronome, so as to demonstrate how to practise at home. Reference to future practise was made multiple times throughout this procedure, although it was found to be in the form of brief comments. A more detailed explanation was given after they had finished working on the piece, while written notes were also provided.

> *'In general, you have to practise this piece at 50 (=bpm). And you have to work on it so as to be able to play it on the '55' on the next lesson. This should happen gradually. For the parts that you face difficulties, for example this part [shows part on the score and continue making notes on the score], you have to start from 45, then 50 and then 55. Do you understand? So, you have to isolate parts with the use of the metronome, the parts that you face difficulties, isolate and work on them. So as to be able to play the whole piece at one tempo. I will also write this on your notebook.'*

The teacher also spent similar time in providing instructions about 'what to practise' for the next week, with the highest number of instances being up to 16 different times in the fourth lesson. Results showed that in general, she was referring to the material that the student had to practise (=what) very briefly, followed by an explanation of which of the strategies should be used (=how). The following extract demonstrates how the teacher advised Student B what to practise.

> *'In the second piece, you have to practise the dynamics and the phrases. Work on the details.'*

The teacher sometimes included an explanation about the effects of the strategies that she was suggesting so as to ensure that everything was clear for this young student. However, data showed that time that was spent on this category did not exceed 1% as, in all of the instances, it was evident as part of the discussion about what strategies should be used at home. In the following example, TB advised the student to focus on a specific part of the piece, while she also provided an explanation why she had to use this strategy.

'On page 59, you have to work the middle section so as to learn the notes.'

As SB1 mentioned during the interview, this was an often phenomenon in her lessons. However, according to her, she sometimes faced difficulties understanding the effectiveness of the suggested strategies.

Researcher: *'Do you always understand why you have to practise with a specific strategy?'*

SB1: *'Not always…Sometimes I do, but sometimes I don't.'*

Researcher: *'Do you discuss about this during the lesson?'*

SB1: *'Yes, she tells me about the effects… in every lesson.'*

In addition, her comments indicated that in such cases she lacked confidence to ask her teacher for further explanation, which subsequently has a negative effect on her perception of the effects of specific strategies. In order to prevent causing feelings of discomfort to the participant while sharing this type of information, the researcher asked a follow-up but still related question (Alderson and Morrow, 2020). Data suggested that in the case of SB1, usage of additional teaching methods, such as demonstration on the piano, enhanced her understanding. TB was found to be using this method in two different ways: either by playing on the piano so as to demonstrate to the student or by asking the student to demonstrate on the piano how she would practise at home. The following extract was taken from the second lesson to illustrate how TB used this method in her lessons.

[Discussion takes place after the student plays the whole piece.]

'The left hand should be softer. I am going to write them down for you in the book so as to see them. But you have to know what notes to play. So how did we say that you have to practise?'

 [The student plays on the piano by using the strategy.]

Lastly, reference to 'practice time' was found to be the lowest, as it was evident in the fourth lesson only. Findings from the teacher's interview revealed that she set a specific length of practise time for her students, especially for the youngest. This might suggest that this was one of the factors that reduced such discussions on this topic in the lessons.

> Researcher: *'Do you set a specific length of time for the practise sessions of*
>   *your students?'*
>
> TB: *'It depends on the student. However, this is something that I*
>   *usually do with my youngest students. I believe that it is*
>   *important for them to know how long and how often they have*
>   *to practise. It really helps if you write this down for them in their*
>   *notebook. It works as a reminder for them!'*

The following extract was taken from the fourth lesson, so as to demonstrate how TB gave instructions in relation to practise time. However, results showed that reference to quantity of practise was very brief.

> TB: *'You have to practise every day for a while.'*

5.6.6   Usage of Notebook

Usage of a notebook was found during all the weeks (total=14), and it was mainly used to keep detailed notes about future practice (see Appendix IX.6). Based on results, usage of notebook was evident mainly at the end of the lessons, with TB making notes and also revising verbally for the student what and how she has to practise at home. During the first and the third lessons, usage of notebook was also found in the middle of the lesson.

During the interview, the teacher's comments revealed her philosophy, which underpins how positive a notebook can be for young students. Her beliefs derive from her experience as an instrumental teacher for over 10 years. According to her, the possibilities are higher for young students to fail to remember what they were asked to do at home. Therefore, she considered the notebook to be a method that helps children keep track of what they have to practises for the next week, while it can also aid in organising their sessions (Green, 2007; Jorgensen and Hallam, 2009; Harris and Crozier, 2000).

> *'I usually use a notebook for my youngest students. The age of the students is*
> *the main factor that affects whether I am going to use a notebook for a student.*
> *And the reason is that they usually forget what they have to do, their memory is*
> *short. So I usually write down what they have to practise and I also like being*
> *detailed by explaining what and how to improve something.'*

Home-based videos revealed that the notebook had, in fact, a significant influence over SB1's practise. She was found to be using the notebook multiple times in all of her practice sessions (total=48). In these cases, she the notebook worked as a reminder of what and how she had to practise. In addition, analyses showed that she used the notebook as guidance, as she was following the exact order of the notes while practising. It seemed that the notebook was a method which modelled organisational strategies as it had a strong impact on the sequence of SB1's practice (Green, 2007; Dade, 2013).

SB1: *'I always use the notebook when I practise at home...I play by following the instructions of my teacher.'*

Researcher: *'Do you find the notebook useful?'*

SB1: *'Yes!'*

Researcher: *'Do you think that you would forget if your teacher wasn't making notes on the notebook?'*

SB1: *'Yes, once I forgot my notebook and so she didn't make any notes. When I got home to practise, I forgot what I had to do… I did practise, but I didn't use the strategies that my teacher asked me to...in the next lesson I told her that I couldn't remember what I had to do, and she reminded me again during the lesson what strategies to use.'*

Data analyses suggested that there was a strong need for this student to use a notebook for her piano lessons. The instructions made by her teacher on the notebook had a positive influence on the home-based practice sessions. The teacher was also found to be making notes in the score about what (total=11) and how (total=10) to practise for the next week in all of the lessons (see Appendix IX.6). According to SB1, making notes on the score was an activity that occurred regularly during the lessons.

'Sometimes, my teacher makes notes on the score based on the comments that she make during the lessons…She might for example write 'rhythm' and when I go home to practise and see the comments I remember what I have to do.'

This implies that keeping notes on the score can enhance student's memory about what and how they have to practise at home. However, SB1 reported that, in some cases, written instructions were not always clear and as a result her practise was not closely related. Her

comments suggested that she perhaps needed more detailed written information, especially when she was unfamiliar with the suggested strategies.

5.6.7   Quantity of Practice Sessions

During the four weeks, SB1 recorded ten practice sessions on video (see Appendix IX.7). The number of sessions that she carried out each week was found to be the same (=3), apart from the third week when she practised once. SB1 informed the researcher that during that week, she could not practice more due to health issues. The student's interview revealed an additional factor that had an impact on the number of the weekly practice sessions. As SB1 mentioned, the quantity of her practice sessions was influenced by other responsibilities.

> Researcher: 'How many times do you usually practise each week?'
>
> SB1: 'Two to three times per week because I have other private lessons as well in the afternoons…or I might have to study for other exams or tests for the school.'

In addition, SB1 commented on the effects that other responsibilities can have on her practise. A busy schedule in the afternoon was found to directly influence the time that she devoted in practice (*cf* Ilari, 2018). According to her, at times she needed to be reminded that she had to practise, as her school homework was her centre of attention. In this case, parental support had a positive impact on her quantity of practise. Even though her parents did not have any musical background, they provided emotional support to keep her committed in practice. Results support previous findings showing that Cypriot parents tend to encourage instrumental practise on a daily basis (Shiakou and Belsky, 2013).

> SB1: 'Sometimes, I forget that I have to practise because I have a lot of school homework. When I finish with it, my parents remind me that I have to practise the piano.'

SB1 also commented that she might consciously increase her practice during specific periods to achieve the best results. Based on her comments, she is motivated to practise more often during the exams period, or when she has to prepare for a concert. In contrast, during the summer holidays the number of her practise sessions usually decreases. Findings were in line with previous research indicating that these behaviours are common during these specific periods of time (Hallam, 2001b). Results from this doctoral study demonstrated that TB provided emotional support by encouraging SB1 to be actively involved in home practice during the holiday's season.

'You have to practise every day during the Easter holidays. Do not stop practising.'

In discussing quantity of practise, SB1 expressed her preference to use a time schedule for her practise as it can have a positive impact. According to her, this method could aid in the organisation of her practice and therefore its effectiveness.

Similarly, Dade (2013) reported that usage of this strategy benefited her practice, especially during periods of time when her timetable was very busy. She claimed that usage of schedule helped plan and organise her practise, while it also aided her to stay motivated. Usage of this strategy seemed to have similar effects over SB1's practise.

'I think I would prefer to use a table and to set a schedule…I feel that this would put in order my practise.'

5.6.8 Length of practice sessions

Data from the teacher's interview demonstrated two factors that influenced instructions about the length of the practise sessions. As TB commented the students' needs and their age influence to a great extent reference to quantity.

Researcher: *'Do you set a specific time for your student's practise?'*

TB: *'It depends from the student!….I do this with my younger students. I might tell them for example to practise for fifteen minutes, so as to let them know, because younger students need to know how much time they have to practise.'*

The student's interview revealed information regarding the time that they set for her home practise. However, according to her comments, reference to the quantity of practice is not usually evident in her lessons.

Researcher: *'Does your teacher advise you how much you have to practise?'*

SB1: *'She usually does not…I normally have to practise, for fifteen minutes.'*

Based on video analyses, SB1 tended to carry out short practice sessions in length, as they were found to be around ten to fifteen minutes (see Appendix IX.8). However, the shortest (08:36) and the longest sessions (19:16) were found to be an exception compared to the others. In discussing about length of practise, the student mentioned a factor that often had an influence.

> Researcher: 'How long do you practise?'
>
> SB1: 'Eight to fifteen minutes…It depends on how difficult the pieces are. If the pieces are very difficult, I usually spend more time practising so as to learn them…If the pieces are easy, like the last time when the pieces that my teacher told me to practise were easy, I practised less…I practised for eight minutes.'

Data showed that the perceived level of difficulty of the pieces was the major factor influencing the time that she spent on practising at her home. As she reported, when she faced difficulties playing a piece fluently, she spent more time practising so as to make progress for the next lesson. As previously reported, complex or difficult tasks often require longer sessions (Barry and Hallam, 2002). In the case of SB1, results demonstrated   that she was highly motivated to face any challenges encountered by increasing the length of her practice.

5.6.9   Concentration while practising

SB1 was found to be patient and persistent while practising. However, video and interview analyses showed that the home environment influenced her practice to a great extent. Home-based videos showed that, in almost all of the sessions, her little brother was present in the room while she was practising, and he was playing around and making a noise. In some cases, she was also found to be complaining to her brother to stop making a noise so as to be able to concentrate. Findings from the videos and the interview showed that this had a negative impact for her practise, as her behaviour demonstrated that her sibling presence was a distraction for her (see Appendix IX.9).

> SB1: 'I wish my little brothers would leave me alone! Every time that I go to practise the piano, they keep bothering me…they keep coming near me and they play randomly notes while I am trying to practise!'
>
> Researcher: 'Does this influence whether you will decide to practise or not?'
>
> SB1: 'Yes! Because the piano is in the living room and this happens almost every time that I practise!'

Although SB1 expressed negative feelings about her privacy while practising, further discussion of the topic was not considered appropriate due to ethical reasons. This topic can be sensitive, for the reason that SB1 did not have independent control to her home-environment because of her age. Parental involvement/intervention in such cases is essential, and so there was the risk to raise some personal yet irrelevant information if the topic was

discussed further. As Busher (2002, p.82) reminds us, interviews can be 'intrusive' and therefore 'gathering unnecessary data' should be avoided, especially when there is the risk of causing harm to children.

In addition, interview analysis showed that TB was aware that this might be an issue for home practice. According to her, some of her students may complain that they were not able to practise at their home due to a noisy environment. Although her comment was related to SB1's case, the researcher did not ask questions in relation to the student, as data protection (of SB1) was the priority in regard to ethics (Busher, 2002).

> *'The room that the family choose to place the piano in the house influence a lot the student's practise…and their family, if they have younger siblings. For example, I have students that they complain that their siblings don't let them practise properly. However, although I understand that this is an issue, they cannot use this as an excuse, in every lesson, for not practising! But yes, I think that the environment influence on a great extent whether they will sit and practise.'*

TB expressed her opinion about this matter, while she also explained that she always likes to set boundaries to her students. Any type of distraction in a home-environment needs to be solved with the parents, so as to avoid any future problems such as insufficient progress or in some cases, even drop out from playing an instrument. In discussing this issue, Harris and Crozier (2000) suggested some solutions that parents can follow to support to their children's practice. Parents or children can use a door sign (e.g., large letters saying, 'Do not disturb!') so as to keep the room quiet from siblings. When children face difficulties practising at home due to a noisy environment, parents can arrange in another place such as the music school or in a friend's house. The place that children practise influences their progress to a great extent; parents thus need to ensure that they can provide opportunities for their children to practise in a quiet and pleasant environment so as to keep them motivated.

5.6.10 Usage of Strategies

During the four weeks, SB1 used 22 different practice strategies (see Appendix IX.10). SB1 showed a preference to practise by 'playing throughout the whole piece' (=48.38%), followed by 'playing with the use of strategies (=6.80%). Apart from the pieces, she was also found to be practising the scales (=13.73%), either by playing the whole scale without stopping, or focusing on a part of the scale. Findings from the SB1's interview illustrated some of the strategies she tended to choose while working on pieces.

> *'I usually use the metronome…I play with separate hands, but not so often. I use this strategy only when something is difficult and I cannot play it…It also helps me to count aloud.'*

SB1's comments also demonstrated that she tended to organise her practise based on her enjoyment of the pieces. She reported that she usually began her practice with the pieces that needed more improvement for the reason that they needed higher-levels of concentration. Her practise continued on the pieces that she could play fluently and, lastly, with the pieces that she found to be more enjoyable amongst all. These findings suggested that the level of difficulty of the pieces also had an impact on her enjoyment of the pieces and therefore on the organisation of her practise sessions.

> *'I practise the pieces that I like most at the end of the session…I practise the difficult pieces first, when I am more motivated, and then I play the piece that I know very well, and lastly the pieces that I really like.'*

Videos analyses revealed detailed information about her practice repertoire. The student used strategies from the categories 'error correction', 'strategies for the conduct of practice', 'strategies to master difficult parts' 'focus on difficult parts', 'strategies for scales' and 'body movement'. Perhaps surprisingly, the category with the strategies used more was not 'error correction', but it was 'strategies for the conduct of practice' and then 'strategies to master difficult parts'. As a Grade One student, she was expected to correct mistakes mostly by repetition (Hallam, 1997). However, even though all of the strategies were used, the averages were rather low, as they did not exceed 2%.

On the contrary, SB1 showed a tendency to use different 'strategies for the conduct of practice'. The strategies 'count aloud' (=30.70%), 'singing along' (=30.25%) and 'metronome' (=18.78%) were used systematically during the sessions. SB1 also used 'increase gradually the tempo' (=1.41%) and 'count off' (=1.23%), but averages were much lower. In addition, she used a number of strategies from the category 'master difficult parts', by showing a preference on using 'slow' (=37.95%), 'regular tempo' (=16.93%), 'fast' (=14.35%), 'right hand only' (=9.51%) and 'left hand only' (=6.65%). While practising on the scales, she was also found to be using 'focus on one scale' (=12.06%) and 'repeat scale' (=0.19%). Additional strategies were used by the student, although they were hardly evident as averages were less than 1% (see Appendix IX.10). Overall, videos showed that the five strategies that she used frequently were 'slow tempo' (=37.95%), 'count aloud' (=30.70%), 'singing along' (=30.25%), 'use of metronome' (=18.78%) and 'regular tempo' (=16.93%).

During the interview, the student described how her practice repertoire developed over time. Her comments showed that, despite her relatively young age and low level of expertise, she was in a position to identify that she was in a learning process in which she was gradually enriching her practice repertoire.

> Researcher: 'Do you feel that the way that you practise has changed in any way during the five years that you are learning how to play the piano?'
>
> SB1: 'Yes! For example, when I was younger I used to play only at a very, very slow tempo. Now I know that I have to practise at different tempi…In general I use strategies that I wasn't using a few years ago.'

5.6.11 Identification of mistakes

Videos showed that SB1 had already acquired an internal representation of most of the musical pieces, as she had been working on them for a long time. In the cases when she made mistakes, the data suggested that she was using effective strategies to correct them. In the context of a new piece, she was often able to identify her mistakes and correct them by using strategies mainly from the 'error correction' category. Findings suggested that when the student was working on a new piece, she tended to use repartition instead of other strategies (Hallam, 2001b).

5.7 Relationship between the observed Lessons and videoed Home Practice

Interviews revealed information about the student's perspective of the lessons' influence on her subsequent practice. Her statements showed that she had already developed some levels of independency, as she occasionally reported choosing additional strategies from those that TB suggested. According to her, alternative strategies could aid on making progress by the end of the session.

> Researcher: 'Do you feel that the lessons influence the way that you practise at your home?'
>
> SB1: 'Not all the time…Sometimes only, because at home I use all strategies that I know, not only those that my teacher tells me to use…What I usually do, is to use some of the strategies that my teacher told me to use during the lesson and to combine other strategies that I find useful.'

SB1 also referred to a factor that influenced her decision to follow her teacher's instructions. As she stated, flexibility of time had an impact on using precisely the suggested strategies. Her comments suggested that at times, she consciously used alternative strategies that were less time-consuming.

> *'When I have to focus on smaller parts, for example when she tells me to focus on one bar at a time, I might practise by focusing on two bars because I do not have so much time…I still practise as my teacher said, but instead of focusing on one bar at a time I focus on more…Or I might play it only once, because I have somewhere else to go.'*

5.7.1 First Week

In the first week, the structure of the practice sessions was strongly influenced by the notebook as she was practising by following the written notes of the teacher. However, results indicated that she used only the half of the suggested strategies (8 out of 16). SB1 followed instructions for the scales and the pieces 'A' and 'B', as she worked on the dynamics of the pieces. She was not found to be using the strategy 'think about a specific part before start playing', as she began playing without stopping to query anything. For the piece 'C', she followed two instructions, but she did not follow advice on isolating specific parts in any of the sessions that she carried out.

For the piece 'F', she used all of the strategies, but not all in one session. On the contrary, she did not follow instructions for the piece 'G', even if she practised the piece during the second and the third session. Lastly, she did not follow the instruction to practise the piece 'H' as she omitted playing it at all during the first week. In general, findings demonstrated that SB1 used the half amount (average=50%) of information that was provided by her teacher (see Table 5.5). Even though she successfully chose to use alternative strategies in some cases, results suggested that, at times, she failed to show an awareness of the importance of using some of the suggested strategies.

Table 5.5. First week instructions and home sessions for SB1

	Teacher's instructions	1st	2nd	3rd
Scales	Work the 5th finger in Broken Chords.	√	√	X
A Piece	Practise the Dynamics.	√	√	√
B Piece	Work on Interpretation.	√	√	√
	Practise the dynamics of the staccato notes.	√	√	√
	Before playing the piece (mf), think of the part that is 'f' and the part that is 'p'.	x	x	x
C Piece	When she cannot control her fingers it means that she has to stop playing fast and practise only at a slow tempo.	√	√	√
	Focus on specific parts: begin by playing at a slow tempo and repeat a lot of times.	x	x	x
	Practise the Dynamics.	√	√	√
F Piece	Count Aloud.	√	√	√
	Focus on difficult parts to improve notation (middle part and the end).	√	x	x
	Work on the interpretation of the melody (RH).	√	√	√
G Piece	Work on the phrases.	x	x	x
	Practise the chords.	x	x	x
	Focus on parts: 1) bars 29-32 and 2) bars 5-9.	x	x	x
	Practise the dynamics of the LH.	x	x	x
H Piece	Practise the piece.	x	x	x

5.7.2 Second Week

During the second week, the SB1's practice was strongly linked with her teacher's advice. Once more, the notebook influenced to a great extent all of her practice sessions. She followed almost all of the instructions (13/14), with the average being the highest among all of the weeks (=92.85%). However, in all of the cases, instructions were not followed all together in one session. For the scales and the piece 'A', 'E', 'F', 'G' and the 'sight reading', SB1 used all of the strategies during the week (see Table 5.6). In contrast, she followed only one piece of advice for the piece 'C'. Overall, she followed most of her teacher's instructions, as she used a range of strategies that were suggested during the lesson. Even if she ignored some of them in a few sessions, she showed awareness of practising with effective strategies.

Table 5.6. Second Week instructions and home sessions for SB1

	Instructions	Session 1	Session 2	Session 3
Scales	Work on tempo-stability.	√	√	√
	Learn starting notes of each scale.	√	√	√
Piece A	Use of Metronome ($\quarternote$=150) to listen at the tempo before to start playing.	√	√	√
Piece C	Increase gradually the tempo ($\quarternote$=140 → $\quarternote$=150).	x	x	x
	Work on Dynamics: mf has to be softer.	√	√	√
Piece E	Work on Page 8.	√	√	√
	Use of Metronome to listen at the tempo before to start playing.	x	√	x
	Play at a faster tempo.	√	√	√
	Walk so as to find the tempo ('andante') and sing along the melody rather than use the metronome.	√	x	x
Piece F	Play the chords only with the LH at a fast tempo: forget the rhythm - just play the chords using the same values.	√	x	x
	Focus on the chords that cannot play fluent: repeat a lot of times the chords as one part. Then play that part with both hands at a slow tempo.	√	x	x
Piece G	Metronome: Change the tempo to slower and repeat a lot of times. Then change the tempo to faster.	√	√	√
	Gradually increase the tempo with the metronome: Initially practise the whole piece with the metronome and then gradually change the tempo to 55. If she faces difficulties on a part, start from a slower tempo and gradually go up to 55 (45→50→55).	√	x	x
Sight Reading	Choose new pieces from other books: play two bars or one line–spent a little time on playing the part and then play the piece.	√	x	x

5.7.3 Third Week

During the third week, SB1 followed 7 out of 14 (average=50%) of the suggested strategies (see Table 5.7). Findings showed that even though she used a range of the suggested strategies, she failed to show understanding of the importance to follow some instructions. An example found was when she ignored her teacher's advice to learn the starting notes of each scale from the book, even though her teacher spent time demonstrating how to practise at home. However, she followed instructions to work on the dynamics. Similarly, she did not use any of the suggested strategies for the piece 'G', even though TB provided a lot of information on how to practise this piece at home. In addition, she ignored the advice to use the metronome constantly while practising the pieces.

Table 5.7. Third Week instructions and home sessions for SB1

	Instructions	Session 1
Scales	Learn the starting notes of each scale.	x
	Work on Dynamics.	√
Piece A	Metronome ($\downarrow$=150). It is not necessary to play the whole piece with the use of metronome; she can use it only to understand the tempo before start playing the piece.	√
Piece C	Increase gradually the tempo from $\downarrow$=140 → $\downarrow$=150.	x
	Work on dynamics (mf has to be softer).	√
Piece E	Work on the phrases, legato and dynamics (Left Hand needs to be softer).	√
Piece F	Learn how to play the beginning of each phrase at the correct tempo.	√
	At the end of each phrase take a big 'breath' so as to understand the end of each phrase.	x
Piece G	Metronome: Change the tempo to slower and repeat a lot of times; then change the tempo again to faster.	x
	Gradually change the tempo to faster with the use of metronome: Initially practise the whole piece with the use of metronome and then work on it by gradually changing the tempo to 55. If she face difficulties on playing a part fluently, start from 45 then go to 50 and finally to 55.	x
	Focus on difficult parts and use metronome so as to play the whole piece at the same tempo.	x
Piece H	Work on the tempo so as to become steady.	√
	Focus on bars 1-5.	√
General Advice	Always use metronome while practising the pieces.	x

SB1 used only some of the suggested strategies while practising the pieces 'C' and 'F'. However, she showed understanding of using all of the recommended strategies for the pieces 'A', 'E' and 'H'. During that week, SB1 did not follow her teacher's instructions precisely, as she used only the half of the suggested strategies. However, video analyses showed that she chose to use alternative strategies from her own practice repertoire, such as singing along, counting aloud, counting off and playing with separate hands.

5.7.4 Fourth Week

In the fourth week (see Table 5.8), she practised by using the notebook, and as a result, she followed almost all of the suggested strategies (9 out of 12). This was the second-highest average (=75%) regarding how faithfully she followed the teacher's instructions. The material that she followed instructions in every session was for the pieces 'B' 'D' and 'F' and 'G' and the scales, as she 'worked on phrases and dynamics', 'used a metronome', 'focused on parts', worked with 'LH only' and 'counted aloud'.

Table 5.8. Fourth Week instructions and home sessions for SB1

	Instructions	Session 1	Session 2	Session 3
Scales	Work on the dynamics.	√	x	x
Piece A	Use of Metronome ♪=150 Do not practise at a faster tempo.	x	x	√
	Think of the rhythm of the third line because it is the line with the shortest note values.	x	x	x
Piece B	Work on the dynamics and phrases.	√	√	√
	Always practise with the Metronome	x	√	√
Piece C	Work on the phrases and dynamics.	√	√	√
	Metronome ♩=135 -> 140 =Increase gradually the tempo. Do not practise faster than 140.	x	x	x
Piece D	Work on the first two lines only.	√	√	√
Piece F	Count Aloud.	√	√	√
	Work with Left Hand to become softer.	√	√	√
Piece G	Practise the piece	√	√	√
Aural Tests	Learn the words for the Aural tests	x	x	x

For the rest of the pieces, SB1 chose to follow only some of the suggested strategies. She used one of the two suggested strategies only during the third session ('use of a metronome') for the piece' A'. According to video analyses, she was not found to be 'thinking of the rhythm' before starting to play the piece; on the contrary, she began playing straight away without pausing. Similar results were found for the piece 'C', as she worked on the phrases and the dynamics, but she did not use the metronome to increase the tempo gradually. The only session that was found to use the metronome was the third one, but again, she did not use the metronome to increase the tempo gradually. Lastly, no evidence was found for the instructions to learn the words for the aural tests.

5.7.5 Self-Regulating behaviour

SB1 showed some level of self-regulation, as she was found to be using some effective strategies that were not suggested by her teacher. A few examples of the strategies that she frequently used whilst practising was the 'singing along', 'count aloud' and playing with separate hands. Perhaps surprisingly, she used the above strategies more than the 'repetition' strategies from the 'error correction' category. As a Grade one student, she was expected to use repetition frequently, especially during the fourth week when she was practising a new piece. However, the percentages were very low compared to other strategies that she was using. According to Hallam's (1997) model, SB1 was at the fourth level of the development of practice, as she practised by using a variety of strategies, including repetition of short sections. In some cases, she was also able to cope with difficulties by using more efficient strategies,

but in those cases, the strategies had been suggested by her teacher. Overall, SB1's home practice depended on her teacher, as she was constantly checking the notebook in all of the sessions so as to follow the instructions for each piece.

5.7.6   Summary

During the four lessons, SB1's teacher gave her instructions to use 56 different strategies. SB1 used 37 of the suggested strategies while practising at home, equating to 66.07% of the total. In general, results show that she followed almost all strategies in the two of the four weeks, while in the other two weeks she followed only the half of them.

Taking into consideration an application of Ericsson Krampe and Tesch-Romer's (1993) theory of expertise, SB1 was found to be at the end of phase one. Her level of expertise and experience demonstrated that she was at initial stages of developing musical skills and abilities. In addition, her behaviour indicated that learning how to practise successfully was still a process in transit.

5.8   An overview of the two Grade 1 cases

5.8.1   What goes on in the lesson?

For both students, most of the lesson's time was spent on the musical pieces, followed by the scales. Results for the aural tests, sight reading, and other categories varied between the two students. Differences were also noted for the pattern of elements that the two teachers used. In most of the lessons TA used a specific pattern of elements (scales then pieces), while in the case of TB, the structure of the four lessons was different.

Both teachers constantly provided advisory comments and non-verbal advice to their students, with verbal input most of the time in all lessons. However, results indicated that TA (=552 times) gave more emphasis on promoting strategies verbally to her student compared to TB (=269). Similarly, TA was found promoting strategies non-verbally (=72) in her lessons more than twice as much as TB did (=31). However, in both cases, time that was spent was very low, as they did not exceed 2% in any of the lessons.

Similarities for the 'reference to practice during the week before the lesson' were noted for the two teachers, as the percentages did not exceed 2%. However, differences were note in the approaches that the teachers used. TB gathered more information by asking questions about 'what' the Student A practised, followed by 'how'. In contrast, TA was interested to know 'how' her student practised, followed by 'what material' was practised. She also used an additional approach, as she asked from the student to demonstrate on the piano how she practised so as to gain a deeper understanding.

With regard to 'reference to future practice', results indicated that TB had the tendency to provide more detailed information (total=92) compared to TA (=54). She also spent a relatively higher amount of the lessons time on giving instructions about future practice (=7.74%). In contrast, instructions given by TA were briefer, as they did not exceed 2% of the lessons time. However, they used similar approaches while providing instructions, as they both gave more emphasis on 'how' the student had to practise, followed by 'what', 'why' and 'practice time'.

TB was also found to be using an additional method when she provided instructions for future practise. She used a notebook so as to provide written notes to SB1, while in the case of SA1 no such evidence was found. However, a similar method was used, as both teachers provided written notes on score about what and how the students had to practise.

5.8.2 What goes on at home?

During the four weeks, SA1 (=17) carried out seven more practice sessions in total compared to SB1 (=10). In both cases, external influences were found. In the case of SA1, parental influence had a positive impact as an increase on the practice sessions was noted. In contrast, Student's B number of practice sessions was decreased in one of the weeks, due to health issues. Differences were also found in relation to the length of the sessions. SA1's sessions varied in length, ranging from 03:43 to 22:48. In the case of SB1's practice sessions, the length was relatively more stable, as all of the sessions were around 10 minutes, except one (19:16). Both students carried out one long practice session, with the rest being relatively short in time. In terms of concentration, SA1 and SB1 were not able to maintain concentration for a long time as they lost focus very easily. However, the difference in her case was that it was not really a conscious option for her, since the distraction resulted from other people being in the room.

In relation to the quality of practice, findings suggested that the two Grade 1 students were at about the same level (fourth) of the development of practice (Hallam, 1997). Both students spent more time playing through the piece as a whole rather than using the 'part-whole' method. While practising, SB1 demonstrated knowledge of a range of effective strategies, rather than to base her practice on repetition (=error correction strategies). On the other hand, SA1 was using mainly 'error correction' strategies, while she also spent relatively less time using strategies from the other categories (e.g., count aloud and singing along). SB1 was capable of identifying most of her mistakes, even in the new piece. This was unlike SA1, who was able to identify her mistakes only in the pieces that she had been working for a long time. In the case that she was working with a new piece, SA1 was often not able to identify any mistakes.

5.8.3 How does home practice compare to lessons?

SB1's based her practice primarily on her teacher's instructions, although at times, she chose to use alternative strategies from her own practice repertoire (e.g., singing along). SA1's practice on the other hand, followed a relatively high amount of instructions; however, at times she did not showed awareness of the importance to use the suggested strategies (third week=22.22%). Although she used knowledge of additional strategies, a lack of awareness of what can work best for her was noted most of the time.

One of the main differences between the two students was that SB1 was following both verbal and written instructions. Usage of notebook had a great impact on her practise, including its structure. In contrast, SA1 was following verbal instructions from memory and some brief written information in her music. As might be expected, SB1 followed more strategies (=66.96%) than SA1 did (=56.74%). However, it has to be noted that the number of instructions that were given to SB1 (=56) was almost twice as much compared to those given to SA1 (=28) and perhaps, this had an impact on how closely was their practise to the teachers instructions.

Chapter 6
Grade 5 Case Studies

6.1 Introduction

Chapter 6 focuses on data collected from two intermediate-level students studying for the Grade 5 (ABRSM) examination awards. This chapter follows the same design approach used for Chapter 5, by reporting teaching and learning approaches as well as behaviours and attitudes that were noted in home-based practice. Lastly, a comparison is made at the end of the chapter, taking into account self-regulation behaviours.

6.2 Grade 5: Case Study 3

SA5 was a 13-year-old girl from Cyprus and in the second grade in a lower Secondary school. Her main instrument was the piano and she had been taking private lessons for seven years with TA. Apart from the piano, she was also taking singing and theory lessons at the private music conservatory. The year that the research took place (2013), she was preparing for the Grade Five piano (ABRSM) examinations that she would take in the upcoming May. The lessons were one hour long, focusing mainly on the examination's repertoire which falls into Western Classical genre (Skoutella, 2015). The books that were used in the lessons were the 'Grade 5 ABRSM Pieces' and the 'Grade 5 ABRSM scales'. The pieces on which SA5 was working in the four lessons and in all of the home practice sessions were as follows:

- 'Allegretto in F' by J.C.F. Bach

- 'Adelite' by Francisco Tárrega

- 'Kavaleriiskaya' No.29 Op.27 by D.B. Kabalevsky.

6.3 Findings from the observed studio-based lessons and videoed home-based practice

6.3.1 Enjoyment of Practise

SA5 was a courteous, independent student who enjoys learning how to play the piano. Although she might sometimes lose her interest in practising at home, she is a committed student who desires to achieve her long-term goals. Results from the interview revealed a factor that can influence the extent to which she enjoys practising. Based on the student's

statements, her mood is a factor that can have a positive or a negative influence over the time that she would spend on practising during the week. The following example demonstrates how her current mood can have a negative effect on her practice, while it also explains some of the reasons why this might happen.

> SA5: *'Sometimes I am not in the mood to sit and practice... I feel bored. However, I do want to see progress over the years and to achieve my goals.'*

> Researcher: *'Why do you think this is happening?'*

> SA5: *'During the fact that for most of the period of the year we focus on the three pieces from the examination repertoire. I prefer learning more extra pieces, but I know that I have to learn the exam pieces first.'*

This example also illustrates that the material taught in the lessons can have a strong effect on the student's motivation and, subsequently, on her development as a learner. As she stated, in some cases she might not like the pieces that she had to learn, and this had as a result for her practice to decrease. Results thus indicated that the selected repertoire influenced to a great degree her engagement in practice. This finding is in agreement with Renwick and McPherson's (2002) argument that students are more likely to be motivated to practise and to display higher-levels of persistence when they enjoy the pieces that they learn.

She also expressed that she would prefer to learn additional musical pieces rather than focusing only on the exam pieces. A wider repertoire of pieces taught during the lessons, preferably chosen by her, could therefore stimulate her interest to practise at home more often. Extra pieces may also increase the possibilities for SA5 to spend more time practising the exam pieces, as a combination of the two could make practise more enjoyable. This is an issue that may arise due to the fact that Cypriot conservatories focus mainly on the ABRSM syllabus (Teklos, 2011; Skoutella, 2015). These results may suggest that there is the need for the teachers to include additional material constantly in their lessons.

6.3.2   Summary of the four lessons

Results showed that TA used a similar pedagogical approach as for her Grade 1 student (see section 5.3.2). However, in the case of SA5, the only material that was used during the lessons was the pieces and the scales (see Appendix X.1). Results showed that in most of the lessons (three out of four) the prime focus was on pieces followed by the scales. The first lesson was

the exception as the reverse sequence was observed. Less time was spent on 'other' activities, such as non-relevant discussion topics from the lesson.

Results also demonstrated that the teacher tended to use the same pattern of elements for the second, third and fourth lessons (see Appendix X.2), as she focused initially on the pieces and then on the scales. A reverse ordering was used for lesson one as the lesson began with the scales, followed by the pieces.

6.3.3   Teaching of specific practice strategies

TA used similar teaching approaches as those that were observed for her Grade 1 student (see section 5.3.3). Likewise, she was recommending practice strategies mainly verbally (total=520), with very few non-verbally (=31) (see Appendix X.3). Although the proportions of time were not high (average=11.91%), the teacher used 'advisory comments' multiple times in each lesson. The recommended strategies were mostly from the categories 'error correction', 'strategies for the conduct of practice', 'strategies to master difficult parts' and 'focus on difficult parts'. For non-verbal advice, percentages did not exceed 2%, while no examples were found in the third lesson. In this case, TA used similar methods (e.g., body movements) as those reported in Chapter 5 for the Grade 1 student (see section 5.3.3), so as to encourage development strategies mainly from the 'error correction category'.

In discussing the use of demonstration, TA commented that she preferred to combine the two methods at times (verbal/non-verbal), as this can enhance students' understanding. However, she reported using this strategy when the students face difficulties in understanding how to use the recommended strategy. In general, provision of informational, instructional and instrumental support (see Wong, Tao and Konishi, 2018) was offered with the use of multiple methods so as to enhance the development of technical skills.

> *'When I want to encourage my students to use a strategy, I usually explain to the*
> *student verbally and then I demonstrate on the piano. However, it depends how*
> *difficult is the strategy for the student. Sometimes they might understand what I*
> *asked them to do without having to demonstrate on the piano. At first, I always*
> *let them try, and if they cannot understand what they have to do, I show them by*
> *playing on the piano.'*

6.3.4   Reference to Previous Practice

References to 'previous practice' were barely evident (total=8) in the four lessons of SA5 (see Appendix X.4). In the cases when reference was evident, the teacher used a similar approach as for her Grade 1 student (see section 5.3.4); she gathered more information about 'what'

(total=5) SA5 had practised, followed by 'how' (total=3). The categories 'practice time' and 'ask the student to demonstrate how she practised' was not used.

The interview revealed SA5's perception regarding reference to previous practice. According to the student, her performance during the lessons can strongly influence whether her teacher would make reference on previous practice.

> Researcher: *'Do you usually discuss with your teacher about you practice during the week preceding the lesson?'*
>
> SA5: *'When I don't know how to play the pieces very well or when there is no progress compared to the previous lesson, we discuss about it. She might ask me for example 'Did you practise this piece?''*

In addition, she was able to recognise that such discussions were not evident very often, and—when they were—they were focused mostly on the material that she practised rather than on what strategies she used while practising.

> SA5: *'She usually ask me what I practised, but not in every lesson.'*
>
> Researcher: *'Do you discuss about how you practised as well?'*
>
> SA5: *'Mm not always. Only sometimes.'*

The interview with TA revealed additional information about the rationale of referring to previous practice. As the teacher mentioned, she was using this method to gain a deeper understanding of how students practise at home. She also commented that this method helped her to identify the reasons for not playing the piece fluently so as to find alternative methods that might work better for the student.

> *'The main reason that I refer to previous practice is to be aware of how they work at home. But it also helps me to understand why the student can't play something fluently during the lesson. In these cases, I try to find all the possible reasons. For example, why during the lesson she could make progress while working on it together [with me], but she can't play it fluently in the next lesson? You must be in a position to understand the reason behind this so as to be able to help them.'*

TA mentioned one more method that she uses in these cases. According to her, she usually asks students to demonstrate on the piano how they practised at home.

'I ask them to demonstrate how they practised at home. This helps me to get a more holistic picture. I tell them for example, to imagine that they are at their home and that they are ready to begin practising. Then I ask them to demonstrate on the piano how they would practise.'

6.3.5 Reference to Future Practice

Analyses showed that TA used a similar approach as for her Grade 1 student (see section 5.3.5). In almost all of the cases, she began the discussion by telling the student 'what' (total=14) needed more practice, and then she suggested specific strategies (how=13) that could aid progress (see Appendix X.5). According to her statements, she likes discussing the elements that need improvement in every lesson, so as to model to her students how to identify and overcome difficulties. In addition, TA commented that such discussions can benefit the achievement of short-term goals.

'By discussing along with the students how they can practise at home, you help them achieve the desired result more easily. If you let them practise on their own without giving them any direction, they most likely won't practise effectively, especially the young students!'

This showed that TA preferred using various methods during the lessons to help her students develop a self-regulated behaviour. However, according to her beliefs, practice skill development depends mostly on the student's choice to accept the help that is provided to them during the lessons. It is their responsibility to apply the strategies while practising at home, and to follow the instructions given to them during the lessons.

'The whole picture tells me that the students usually practise in a different way while practising at home. They have the tendency to use different strategies from those that we use during the lessons. They probably use 20% of what they were told to use. My responsibility is to do everything that I can to help them. But I do not have any control while they are practising at home.'

The student's comments in relation to future practice confirm the teacher's statements. According to SA5, TB usually provides advice about what material has to be practised or what strategies need to be used in home practice.

Researcher: *'What can you tell me about reference to future practice in the lessons?'*

SA5: *'My teacher usually tells me what and how I have to practise. One example is when she explained to me how to practise the scales.*

She suggested learning the key signatures before to start playing a scale. Or for the pieces, she said that I have to focus on the difficult parts so as to be able to play them fluently…Or to use a metronome so as to learn a specific part.'

An example taken from the videos analysis was when the teacher was advising different strategies to be used with the aim to improve a specific part in which the student faced difficulties in playing fluently. Initially, TA made reference to future practice by giving direct instructions about strategies that could help to improve playing of the focus element. Specifically, she provided a detailed explanation about which bars needed practice and she also marked these on the score so as to enhance her verbal instructions. She recommended focusing on that element, and she also advised SA5 to learn it from memory. She also informed the student that they would begin by playing that part in the next lesson so as to motivate the student to make progress until the next week. After discussing future practice, TA worked with the student during the lesson on that element so as to demonstrate to her what she was asked to do at home. This example shows some of the methods that TA uses while teaching. According to the video analysis, TA prefers combining reference to future practise with demonstration of how to use the suggested strategies so as to ensure in the lesson that is clear to the student about how to practise at home.

Videos and interview analyses also indicated that the teacher's comment related to the analysis category 'why' the student has to practise this way twice during the four weeks. Data showed that this method was used in the form of discussion to enhance SA5's knowledge and understanding of the effects of each strategy. During the interview, SA5 gave an example of how TA provided an explanation of the reasons previously.

'One of the pieces that I play, for example, contains a lot of trills and I face a lot of difficulties in playing them fluently. So, my teacher explained to me that I have to use the metronome and play at a very slow tempo so as to be able to play them at the final tempo.'

Overall, findings suggest that TA referred to future practice more often than previous practise. However, according to the student such discussions were not always evident during the lessons.

Researcher: 'How often do you discuss with your teacher about future practice?'

> SA5: 'Not always. We usually discuss about it when I don't know the pieces or the scales so well.'

SA5 also reported that her playing during the lessons influenced how regularly they referred to future practice. However, analyses of the interview data suggest that, even if such discussions occur, SA5 might not always understand or remember what she was asked to do at home. According to her, she may not be always in a position to remember what she was asked to do at home. This suggests that her memory skills were still in a developmental phase and that additional methods were required (Harris and Crozier, 2000).

> Researcher: 'Is it always clear to you what and how you have to practise at home?'

> SA5: 'To be honest, not always. I usually remember the basics, but I might forget some details. For example, I might forget that I was asked to use a specific strategy that was new to me.'

6.3.6   Usage of Notebook

Videos showed that a notebook was not used in any of the lessons; instead, TA made notes in the score to indicate what (total=7) or how (total=3) SA5 had to practise (see Appendix X.6). In addition, statements from the SA5's interview verified the teacher's behaviour in general.

> 'She keeps brief notes on the score; for example 'give emphasis on this', but this is not detailed notes about all the elements that I have to practise for every lesson. She might, for example, write on the score 'practice with the metronome', or might make marks on the score about specific elements.'

During the interview, TA also reported that the student's Grade level usually influences whether she would use a separate notebook or not. It may be that the provision of written notes on the actual score was used as a method with the aim to help SA5 to develop independency as a learner (Harris and Crozier, 2000).

> 'I usually use a notebook for the lower Grade levels, up to Grade 3, 4, and sometimes 5. For the higher Grades I make notes on the book [= musical score] to mark the important elements that they have to practise at home.'

However, in the particular case of SA5, TA provided written information on the score only. In discussing usage of this method, the student expressed her preference for using a notebook as well.

Researcher: *'Do you use a notebook?'*

SA5:   *'No. When I was younger my teacher used a notebook to write down my homework.'*

Researcher: *'Did you find it useful?'*

SA5:   *'Yes, it helped me to remember everything that I had to do until the next lesson.'*

Researcher: *'So, if you had the choice to use a notebook at the present, would you prefer to do so?'*

SA5:   *'Yes, I think I would prefer that!'*

SA5 felt that usage of a notebook would help her practice more effectively at home. This implies that the student's voice in relation to their preferences is perhaps crucial so as to enhance their development. However, at this level of expertise, students also need to begin developing their independency as learners, and constant usage of a notebook might be less effective in helping them to do so (*cf* Gledhill, 2001). Teachers might, therefore, use the notebook only when they feel that it is necessary to do so, like in the cases where they want to stress the importance of using a strategy or when they introduce new strategies. In addition, they can encourage students to keep their own notes.

6.3.7   Quantity of Practice Sessions

Over the period of four weeks SA5 videoed four different sessions, one session for each week (see Appendix X.7). However, the comments from the student's interview indicated that quantity of practice may vary between the weeks.

> *'I either spend a little time practising for a few days, or I practise once, but on that day, I spend a lot of time practising.'*

In addition, the interview revealed that school homework and other private lessons often had an impact on how much time she would spend on practising. Data analyses suggested that flexibility of time during the afternoon was a factor that often impacted her practise time (Ilari, 2018; Myung, 2001).

Researcher: 'What other reasons might influence whether you will practise or not?'

SA5:   'My homework. It depends on how much homework I have for the next school day. It also depends on how many private lessons I have in the afternoon.'

The interview also revealed one teaching method that could stimulate a student's motivation to practise more frequently. SA5 expressed her preference on using a schedule, as it had positive effects on her practice in the past.

SA5:   'A few years ago, my teacher made me a daily schedule in which she asked me to practise every day for a while. At that time, following a schedule helped me a lot. It was a period of time that I wasn't studying enough, that's why my teacher made me this schedule.'

Researcher: 'Can you explain to me how the schedule worked?'

SA5:   'Yes, she wrote down all the days of the week, and for every day she wrote down what I had to practise, for example, the Monday you have to practise only the scales.'

Researcher: 'And were you following the schedule precisely?'

SA5:   'Not precisely, but it did help me a lot.'

This implies that creating a weekly schedule might have increased SA5's practise time to a great extent. Based on previous experience, she believed that a schedule could positively affect the organisation of her practice, especially when she might lose her interest in practising the exam pieces. According to her comments, she is usually more committed when she organises her practise along with her teacher, by making a time-plan and setting specific goals for the week. Setting weekly short-term goals that she wants to accomplish until the next lesson helped her focus and better defined her practice. Results were in line with Dade's (2013) suggestions that a schedule can increase motivation to achieve goals.

These findings indicated that it is important for the teachers to discuss with their students about the best methods for them that can be used in relation to the organisation of effective practice. Such discussions can reveal important information about the student's preferences, and this may motivate her to be more involved in practice, especially when the quantity of practice is not satisfying. The following example shows that the student's personal

characteristics should also be considered when a teacher advises the use of this method. Adapting the method based on the student needs and their preferences can perhaps have greater results in relation to their motivation in using the method.

> *SA5:*   *'Even though I was feeling bored some days to practise, it*
> *definitely helped me!'*

> *Researcher:*   *'And why was that?'*

> *SA5:*   *'Because I had to do it every day (laugh).'*

External factors were also expected to have a strong influence on the quantity of practice sessions. During the second, third and fourth lesson, SA5 was preparing to play her pieces for a public concert that the music conservatory was organising. This was expected to be a factor that would influence her practice time, as students tend to experience increased anxiety levels particularly when a concert is approaching (Papageorgi et al., 2013). Surprisingly, video data showed that her quantity of practice was not influenced by this factor, as she carried out only one session each week – at least which was videoed.

6.3.8   Length of Practice Sessions

The length of SA5's practice sessions varied according to the video evidence. The shortest practice session was in the fourth week with the total time being 07:25, whilst the longest session was 20:27 in the second week (see Appendix X.8). During the first and the second week, the lengths of her sessions were 15:32 and 14:12.

During the interview, the student mentioned that she had agreed with her teacher a specific amount of time that she had to practise on a regular basis. However, results showed that she did not follow precisely the teacher's instructions, nor agreement, as she carried out only one session each week.

> *Researcher:*   *'Does your teacher tell you how long you have to practise?'*

> *SA5:*   *'Yes, we agreed that I have to practise for 15 minutes, every*
> *day. She usually tells me to practise every day for a while. But*
> *most of the times I practise once a week and I spend more*
> *time. I know that it is more effective to practise every day*
> *but…'*

At that point of the interview, the researcher detected signs of discomfort based on students' unfinished comment and body language. Her behaviour indicated that she did not wish to share more information. Due to ethical reasons, the researcher considered it inappropriate to

ask further questions to find reasons behind her comments. The protection of the participant was a priority, and so the researcher asked a follow-up question, which is a suggested technique by Alderson and Morrow (2020).

During the interview SA5 expressed her preference to carry out fewer but longer practice sessions. However, other responsibilities might influence her flexibility of time during the afternoon. During the interview, she gave an example of how other responsibilities can influence the length of her practice sessions.

> *'If I have, for example, a private lesson at 5 in the afternoon, I will practise at 3 for a while. If I have other private lessons for two hours in the afternoon, I usually don't have the time to practise. But if I don't, then I may spend more time practising.'*

Her comments indicated that in general she was coping with an overloaded schedule (*cf* Ilari, 2018). The length of her practice sessions often decreased due to other private lessons in the afternoon, an issue also reported in previous studies (Myung, 2001). In addition, SA5 reflected how her practice may have changed over the years. In discussing her practice development, she commented that there had been a change on her practice time. However, she felt that the change was not extreme.

> Researcher: *'Has the quantity of your practice changed in any way over the years?'*
>
> SA5:   *'It has changed, but not so much.'*

6.3.9   Concentration while practising

In all of the sessions, SA5 was alone in the room whilst she was practising, and she recorded all of the sessions without help from another person. While she was practising, she maintained concentration and did not appear to be distracted in any way (see Appendix X.9). Analyses suggest that SA5 had an ability to stay focused while practising at her home.

6.3.10   Usage of Strategies

SA5 used 19 different strategies whilst practising at home (see Appendix X.10). She used almost all of the 'error correction' strategies except one, the 'repeat trill'. All the other strategies were used in almost all of the sessions, with 'repeat part' being the most common (=32.90%). Similar results were found for the category 'strategies to master difficult parts', as she used almost all of the strategies, apart from two; the 'accentuation' and 'work chords at a fast tempo'. The strategy that was used more in comparison to the other strategies was playing 'slow'

(=77.89%). A number of other strategies were also noted during the four weeks. Results indicated that she was also isolating for practice what, for her, were difficult part ('focus on part'=47.37%). This behaviour suggested that she had already developed skills which are often reported in high level musicians' practice (Hallam, 2001b; Jorgensen, 2004). Two more strategies were also found from other categories, the 'use of a metronome' (=8.81%) and 'say the notes while playing' (=0.14%). The last category that was found was 'strategies for the scales', although they were evident during the second week only, as she did not practise the scales in other sessions. The highest average was found for the 'focus on one scale' (=18.60%), followed by the 'repeat scale' (=8.48%) and 'reference to the key signature' (=0.06%).

The five strategies that were used most during the four weeks were 'focus on part' (average=47.37%), 'repeat part' (=32.90%), 'play with the right hand only' (=19.30%), 'focus on one scale' (=18.60%) and 'play with the left hand only' (=15.39%). Some of these were referred to by SA5 during her interview when she was asked to comment on strategies that she tended to use whilst practising at her home.

> *'When I face difficulties with a piece, I usually play with the left hand only, then with the right hand, and finally I play with both hands to see if there is an improvement. If I realise that there is no improvement, I play at a slower tempo, with the use of a metronome. For the scales, if I face any difficulties, I usually do the same.'*

Overall, analyses indicated that SA5 was in a position to identify and apply appropriate strategies most of the time. She preferred to practise by mainly using the part-whole method, as she spent most of the time focusing on specific parts of the piece. At other times, she was also found to be playing the whole piece through so as to identify and subsequently focus on the more difficult parts. This suggested that she was in the fifth stage of Hallam's (1997) developmental levels of practice.

SA5's interview revealed additional factors that influenced her practice. As she reported, her current mood was an important factor that influenced what was practised at home. This illustrated that this student's decision was based also on her enjoyment of the pieces. As previously suggested (Renwick and McPherson, 2002), the repertoire that the students need to practise influences intrinsic motivation in general. In addition, when enjoyment of the pieces is evident, students are more likely to engage in practising with more sophisticated strategies.

> *'I do not follow a specific order of material. Sometimes I may practise the pieces and then the scales, others only the third piece and then the scales, others only the first…It depends on my mood.'*

SA5 also reported another factor that had an impact on the material that she practised. As she commented, the order of the pieces was strongly influenced by how well she knew a piece.

> *'I usually start practising with the piece that I don't know very well. And I practise the piece that I know very well at the end of the session.'*

Her comments suggested that, perhaps, she chooses to practise the pieces that demand a higher-level of concentration at the beginning of the session, when she can be more productive. Findings are consistent with previous research (McPherson, 2005), as the participants tend to follow a particular strategy so as to organise their practise (see Chapter 3). In both research, results indicated that practice was more targeted and effective when this strategy was used.

6.3.11 Identification of mistakes

SA5 was able to identify all of her mistakes, since she was observed to correct them, either by repetition, or by focusing on them until improvement took place. She had been working on the same pieces for many months, and the results demonstrated that she had already acquired an internal representation of them (Jorgensen and Hallam, 2016).

6.4 Relationship between the observed Lessons and videoed Home-based Practice.

Statements from the interview demonstrated SA5's perspective about the relationship between her lessons and home practice. According to her comments, the lessons influenced to a great extent the way that she practised at home and that this was directly influenced by her teacher.

> *Researcher:*   *'Do you think that the nature of the lessons influences the way that you practise at your home?'*
>
> *SA5:*   *'Yes! For example, if my teacher tells me to practise with a specific way, this will definitely influence the way that I will practise at home.'*
>
> *Researcher:*   *'Does this mean that if she doesn't tell you to use a specific strategy you wouldn't?'*

| SA5: | *'Yes, I would probably not.'* |

| Researcher: | *'And do you think that your lessons influence in a good way your practice sessions?'* |

| SA5: | *'Yes!'* |

6.4.1 First Week

For the first lesson, TA advised SA5 to use seven different strategies while practising at home. Five out of seven strategies were recommended for three different types of scales (see Table 6.1). The teacher also marked the scales that needed improvement on the score to keep track of what was to be practised.

<u>Example taken from video</u>

> *'Start practising from this page, not from the previous. I have marked all the scales that need an improvement with an 'x'. You face difficulties on three scales, there are not so many. And try to play them like this [teacher demonstrates on the piano how to play fluently followed by a demonstration of what she must avoid doing].'*

Instructions included a new practice strategy, namely variable practice. The teacher demonstrated on the piano how to play with different accentuations in the chromatic scales and she asked the student to use this strategy at home.

<u>Example taken from video</u>

> *'At home, try to play the chromatic like this [the teacher demonstrates on the piano four different types of variable practice]. Use different rhythms and accents. Let's try now one scale together by accenting the first note of every octave [demonstrates on the piano and then play together].'*

However, analyses showed that, although her teacher stressed the importance of practising the scales, SA5 did not follow instructions. Instead, she chose to focus on the three pieces during her session. With regards to the pieces, she followed both instructions that were given to her during the lesson. The overall picture for this week suggests that SA5 ignored most of the instructions (=28.57% match between lesson instructions and private home practice).

Table 6.1. First week instructions and home sessions for SA5

	Teacher's instructions	1st
Scales	Arpeggios: start practising from the last page of the book not from the previous one.	x
	Practise the scales that need improvement (marked on the score).	x
	Arpeggios: regular tempo (do not play very slow).	x
	Chromatic Scales: Variable practice: 1) Accent on the first note of each octave. 2) Swing 3) accent on the first note of each two octaves 4) accent the first note on every three notes. In general try different accentuations.	x
	Contrary motion scales: slow tempo.	x
A and B Pieces	Work on the notation.	√
C Piece	Work on the second page.	√

6.4.2 Second Week

During the second lesson, six strategies were suggested, of which only three were followed up in the following week (see Table 6.2). TA introduced and explained a new practice strategy to her student, the 'semitone-semitone', and asked the student to focus on one form of scales in each session (Major or minor). Although TA emphasised using the strategy at home, SA5 did not follow her advice. On the contrary, she played two forms of scales in the same practice session, the major and minor, while she also followed the order from the score and not the semitone-semitone method. Another recommendation was to practise the scales at the regular tempo which she did at the beginning of her session. However, she faced difficulties and, therefore, she continued practising at a slow tempo only. Lastly, the teacher suggested playing the scales with closed eyes, but this strategy was not evident in the video recording.

TA also provided information about the first and the third piece. She asked the student to focus on specific parts that needed improvement. She also advised SA5 to practise the part of the first piece at a very slow tempo, and she strongly advised her not to play it at a fast tempo. SA5 followed both instructions when practising that piece. Overall, SA5 followed half (=50.00%) of her teacher's instructions by ignoring some of the suggested strategies that were strongly recommended for future practice.

Table 6.2. Second Week instructions and home sessions for SA5

	Teacher's instructions	1st
Scales	Practice by playing the first day only the minor scales by semitone-semitone, the next day all the major scales (semitone-semitone), the next day all the contrary scales, the next day chromatic scales and the next day arpeggios. Do not practise all the scales at the same day.	x
	Play at the regular tempo.	√
	Play with closed eyes.	x
A Piece	Focus on a specific part (bars 5-6).	√
	Practice the part at a very slow tempo. Do not practise at a fast tempo.	√
C Piece	Focus on a specific part of the piece (bars 24-43).	x

6.4.3   Third Week

TA suggested four different strategies, from which only one was used; to play the first piece at a slow tempo (see Table 6.3). Although TA emphasized the importance of practising the scales and the third piece, the student did not choose this material in her private session. Overall, she followed the smallest proportion (=25.00%) of the given instructions, as she chose to use only one of the four recommended strategies (see Table 6.3).

Table 6.3. Third Week instructions and home sessions for SA5

	Teacher's instructions	1st
Scales	Practise the scales.	x
A Piece	Practise the piece only at a slow tempo - Do not play at a fast tempo.	√
C Piece	Focus on the line that she faces difficulties to play fluently.	x
	Focus on the three lines that she faces difficulties to play (bars 25–43).	x

6.4.4   Fourth Week

In the fourth week, SA5 followed the highest number of tutor instructions compared to the previous weeks. TA provided instructions at five different times and she also made written notes for some of these (see Table 6.4). Specifically, while the teacher was asking SA5 to memorise a specific part for the next lesson, she also marked this on the score as a reminder. SA5 chose to follow three out of five instructions, corresponding to 60.00%. She practised only

once during the week and the only material that she worked on was the third piece. However, she used all of the recommended strategies for this piece.

Table 6.4. Fourth Week instructions and home sessions for SA5

	Teacher's instructions	1st
Scales	Practise the scales.	x
A Piece	Work on the details of the piece (e.g. dynamics, phrases).	x
C Piece	Focus on a specific part (bars 32-43) → the teacher marked on the score the part that she has to practise.	√
	Learn to play that part from the memory.	√
	Focus on a specific part (bars 62-63) and repeat a lot of times	√

6.4.5 Self-Regulating behaviour

SA5 was expected to show awareness of her tutor's advice while practising at home by focusing on the material that she was told that needed improvement. In contrast, she was selective in the material on which she chose to focus in each session. This suggested that the student's behaviour was not in consistent with her teacher's instructions and as a result, progress in between the lessons was, at times, insufficient – at least in terms of the teacher's expectations.

Even though analyses demonstrated that the weekly target goals set by the teacher were often not met, a self-regulated behaviour was noted in most of the practice sessions. Based on the analyses, SA5 had already developed a rich repertoire of practice strategies, and she was in a position to use a range of effective strategies. She also used a whole-part method whilst practising the pieces, as she focused mostly on selected parts, instead of playing through the whole piece. However, findings indicated that this resulted in her skipping some parts that appeared to need improvement. Her behaviour indicated that she was still in process of developing skills and abilities of how to practise successfully. Considering Ericsson Krampe and Tesch-Romer's (1993) theoretical framework on musical expertise, she was at the middle of the second phase, as she still needed guidance from her teacher. With regard to the student's perspective on her progress over time, interview data revealed that she felt that her quality of practice had changed in a positive way. As she stated, her piano practice repertoire had become enriched during the past seven years.

> *Researcher:*   *'Do you feel that the way that you practise has changed in any*
>   *way over the years?'*
>
> *SA5:*   *'Yes! I am using methods that I didn't before.'*

6.4.6   Summary

Results show that SA5 used approximately half of the suggested strategies from her teacher, and in two of the four weeks she barely used any of them. TA gave a total of 22 instructions for future practice of which 9 were followed, equating to 40.89%.

6.5   Grade 5: Case Study 4

SB5 is a 14-year-old female student from Cyprus and, at the time of the research, she was in the third grade of a lower Secondary school. She had been learning to play the piano for seven years at the music conservatory with TB. During previous years she had been taking ABRSM Grade level piano examinations, and this year she was preparing for her Grade 5, as she planned to be examined that upcoming May. Apart from the piano lessons, she had been taking theory lessons at the music conservatory.

Based on home-based videos, she is generally a goal-oriented person, and she is persistent and patient while practising. She is also a motivated and collaborative student, as she was found to be modelling her teacher's behaviour and actions while practising. Results also showed that she likes organizing her practice so as to be prepared for each lesson. All of her lessons focused on the examination syllabus of the ABRSM, which indicated that the majority of education within this conservatory focused mainly on Western Classical music (typical for conservatories, Smith, 2015; Papageorgi, 2015). This included the three pieces from the 'ABRSM Grade Five Pieces' repertoire book, the scales from the 'ABRSM Grade Five Scales & Arpeggios', and the sight reading and the aural tests.

The three musical pieces that she was learning were as follows:

- 'Allemande in A minor' by G.F. Handel
- 'To a Wild Rose' No.1 from Woodland Sketches, Op. 51, by Edward MacDowell
- 'Samba-lelê' No. 4 from Guia prático, Album 2, by Heitor Villa-Lobos.

6.6   Findings from the observed lessons and videoed home practice

6.6.1   Enjoyment of practice

SB5 is a student who generally appears to enjoy practising at home. As she reported during the interview, piano learning is an activity that she has liked doing from a young age.

'I have started taking piano lessons from a young age until the present time. If I didn't like practising, I would have probably dropped out.'

Data analyses demonstrated that her main aim was to make progress in between the lessons and that she was highly motivated by the praise given to her for her achievements. In addition, she appeared in general to be a well organised person, and she liked following a schedule in her daily life. Therefore, practising is an activity that was often planned so as to reduce influences from external factors. 'Following a schedule' was used as a strategy to organise and plan her practise accordingly (*cf* Dade, 2013). It also enhanced her motivation to stay committed in her musical learning.

'I generally like having a schedule to follow. For example, when I know that I have plans with my friends, I know that I have to practise before that and so I organise accordingly.'

However, SB5 commented how following a schedule can also have negative effects. According to her, this can sometimes cause stress to her as she tries to be well prepared and organised for everything. Findings showed that the usage of a particular approach can have both positive and negative effects over different periods of the year for this student. This suggested that the teacher needs to take the personal characteristics of the student into account and to discuss more regularly about her preferences to use a schedule at busy periods of time.

'At times I might feel pressure because I try to be prepared for everything that I have to do. This might cause me stress. But this happens rarely, most of the time it works for me.'

6.6.2 Summary of the four lessons

Similar findings emerged as for the Grade 1 student of the same teacher (see section 5.6.2), as TB focused mostly on the pieces, followed by the scales. However, focus on scales was not found in the third lesson. Sight reading followed, although again, it was not evident in the third lesson. Lastly, aural tests were less evident, as these were noted in the third lesson only (see Appendix XI.1).

Once again, TB did not use a specific pattern across the four lessons; however, a similar pattern was identified for the second and fourth lessons (see Appendix XI.2). Overall, TB showed preference for starting her lessons by focusing on the pieces and then on other material.

6.6.3   Teaching of specific practice strategies

Findings indicated a consistency in the methods that TB used (see section 5.6.3). However, higher instances (see Appendix XI.3) were found for SB5, as she recommended strategies 'verbally' 457 times during the four weeks and 42 times 'non-verbally'. Results showed that these methods were used in the same way as for her Grade 1 student (e.g., providing feedback on what needed improvement).

6.6.4   Reference to Previous Practice

Results demonstrated that, in almost all of the lessons, TB discussed previous practice with SB5 (see Appendix XI.4). Likewise, she used the same methods that were reported in Chapter 5 (see section 5.6.4). TB focused mostly on gathering information about 'what' (total=6) or 'how' (=6) the student practised, and she also asked the student to demonstrate how she practised (=1). The following example was taken from the fourth lesson and is a discussion about the home practice that was undertaken for the scales. It also illustrates how TB combined three approaches to gain a deeper understanding of her student's practice.

> TB: 'How do you practise the scales at home? Do you open the book   and play the scales with that order?'

> SB5:   'No.'

> TB: 'Let's say, for example, that today you want to practise the scales. How are you going to practise? Which order are you using?'

> SB5:   'First the major, then the minor.'

> TB: 'OK, so imagine that you are going to practise the major scales today. Show me how you will practise.'

[SB5 played by using the semitone-semitone strategy.]

> TB: 'So with the use of the semitone-semitone strategy. This is what I wanted to verify! That you are using this strategy while practising the scales.'

Overall, this interest in previous practice was barely evident, as TB tended to spend little time on gathering information about previous practice. However, the interview with the student revealed that reference to it was an often phenomenon in her lessons.

> *Researcher:* '*Do you discuss with your teacher about what or how you practised during the previous week?*'

> *SB5:* '*Yes. She might ask me, for example, what and how I have practised the scales during the whole week. In such cases, I respond by telling her what form of scales I have practised, and, depending on my playing at the lesson, she tells me what and how I need to practise for the next lesson.*'

6.6.5   Reference to Future Practice

TB gave instructions for future practice on approximately 20 different occasions in every lesson. Discussions about future practice were made by using similar approaches to those reported in Chapter 5 (see section 5.6.5), as she gave an emphasis on 'how' (total=40) SB5 had to practise for the next week (see Appendix XI.5). During the interview, SB5 verified that she receives this type of instructions in every lesson.

Example A:

> '*My teacher always tells me how I have to practise for the next week. For example, throughout the years, I remember her telling me that I have to use the metronome so as to improve the rhythm of the piece, or to play at a slow tempo with the left hand only, and then link the difficult parts together…In general, her comments clearly depend on my playing during the lesson.*'

Example B:

> '*Usually, when I finish playing a piece, she tells me which parts of it needs more practice and she is telling me exactly what I have to do. For example, she tells me to isolate that part and repeat it a lot of times by playing it at a slow tempo, and finally link that part with the next parts….She usually shows to me how to do it by playing on the piano.*'

TB also provided information about 'what' needed more practise (total=30). She briefly reminded the student which pieces or scales she had to practise, while in some cases she also provided more detailed information about specific parts from the pieces or specific types of scales. Results from the interview support these findings, while they also demonstrated that the student was highly motivated to make progress in between lessons.

> Researcher: 'Does your teacher advise you what you have to practise for the next lesson?'
>
> SB5: 'Yes! She will comment on each piece of music, and I always remember what I have to do so as to be better in the next lesson.'

Lastly, in all lessons, TB provided an explanation of the effects of the strategies that she suggested (why=13). This approach was used, along with instructions about 'what' or 'how' the student had to practise. However, in all of the cases, the averages of time were low, as references were made by providing briefly explanations to the student. The following extract was taken from the student's interview and demonstrates an understanding of the advised strategies.

> Researcher: 'Do you always understand why you should use the suggested strategies?'
>
> SB5: 'Yes! With this way I understand my mistakes and I know what I have to do to correct it.'

In addition, SB5 reported that all the material that was assigned to her by TB was appropriately based on her knowledge and skills as a piano player. SB5's comments suggested that having the same teacher over several years was a great advantage for her learning, as she was always in a position to know best how to help her develop as her student.

> TB: 'How would you describe the level of difficulty of the pieces that your teacher assigns to you?'
>
> SB5: 'Yes. She is my teacher for a lot of years now, and because of that she knows my skills and what pieces to assign to me.'

6.6.6 Usage of Notebook

The use of a notebook was not evident in the case of SB5. According to the student, using a notebook was not an activity that she found to be essential at her age and level of expertise. Data inferences suggest that this was likely due to the fact that she had already developed independence as a learner (*cf* Barry and McArthur, 1994). In discussing such a method, SB5 also mentioned that using a notebook had a great effect when she was young, since it worked as a reminder of what she was asked to practise.

> Researcher: 'Do you use a notebook to keep notes about homework?'
>
> SB5: 'We don't keep notes on a notebook now; but we used to do it in the past. She was writing down what and how I had to practise so that I wouldn't forget any of them.'
>
> Researcher: 'If you had the chance to use a notebook, would you prefer to do so? Would this be helpful for you?'
>
> SB5: 'I don't really mind because I am now in a position to remember my teacher's instructions. I believe that the notes in the music score are enough.'

Videos demonstrated that TB used an alternative method to provide written instructions, possibly to help SB5 to become an autonomous musician (Harris and Crozier, 2000). She was making any notes that were perceived to be essential on the scores (see Appendix XI.6). In all of the lessons, the teacher provided written notes about 'how' the student had to practise (total=27). Notes related to 'what' to practise were evident only in the first and second lessons (total=3). According to the student's statements, this method had a positive effect, as it enhanced her memory skills in relation to what she was asked to practise at home (*cf* Green, 2007).

> Researcher: 'Do you always remember your teacher's instructions when you practise at home?'
>
> SB5: 'Yes. Because in all of the scores, at the top of the page there are notes that my teacher had made during the lesson…So when I sit to practise a piece and play a part that we have discussed during the lesson, I automatically remember what she said about that part. Or about a note or the sustain pedal.'

6.6.7 Quantity of Practice Sessions

SB5 carried out six practise sessions while she was participating in the research (see Appendix XI.7). The first and fourth week she practised only once, while she practised twice in the second and the fourth week. Based on her Grade level, SB5 was not expected to carry out several practice sessions each week; instead, fewer but longer sessions were expected (e.g., as Hallam, 2001a). During the interview, SB5 reported that, even though she likes following a schedule, some external factors influence the quantity of her practice. According to her, flexibility of time during the afternoon usually had a direct impact (Ilari, 2018). Data analyses indicated that a busy schedule was a fact of life for SB5. As Lamprianou and

Lamprianou (2013) argue, this is often the case in Cyprus, due to the fact as children take various private lessons after school. However, in some cases, this may lead to over-scheduling, which may have as a result for private instrumental practice time to decrease (Myung, 2001; Ilari, 2013)

> SB5: *'Sometimes I might not practise everything that I have to, because I have other private lessons during the afternoon. In such cases, I practise before I leave from home, or later in the night...Around 7 o clock.'*

> Researcher: *'Can you think of anything else that might influence whether you will practise or not?'*

> SB5: *'Yes, my school homework, and of course the tests!'*

However, data analyses showed that she is a student who likes taking advantage of any opportunity to increase her practice. While previous researchers have claimed that students decrease practice time during holidays (Jorgensen, 2008; Sloboda et al., 1996), results from this study indicated that this might not always be the case. As SB5 commented, she is usually motivated to increase her practice during holidays, as her overall schedule is more flexible. In addition, results indicated that she had a tendency to increase her practice time during the examination period. This was previously reported to be a common behaviour for students, since they are likely to experience increased anxiety levels with the examination is near (Papageorgi et al., 2013).

> *'In Christmas time when I spend more time at home, I practise more. As well as in Easter holidays. In general, wherever I am on holidays…I also practise more before the exams. I put practice more often into my schedule.'*

6.6.8 Length of practice sessions

All the sessions that SB5 undertook on video were relatively long, with the shortest being 25:05 and the longest 43:21m. The number of the sessions in each week did not influence their length, as in the weeks that she practised twice, both sessions were also relatively long in duration (see Appendix XI.8). According to SB5's comments, she did not set a specific amount of practice time with her teacher. Instead, references to practice time were made to encourage students to practise on a daily basis.

> *'We do not set a specific time that I have to spend on practising. But she tells me that is better to practise every day.'*

6.6.9   Concentration while practising

In all of the sessions, SB5 was the only person in the room at the time that she practiced. Results showed that she stayed focused on the activity, as she did not 'talk to others' or 'move around in the room' in any of the sessions (see Appendix XI.9). The only exception was when she was distracted by a discussion from her parents, as she stopped practising and waited for a few seconds. However, this lasted only for a few seconds and then she continued. Overall, she demonstrated that, at her level of expertise, she had already developed an ability to sustain concentration for a long period of time (*cf* Hallam, 1998).

6.6.10   Usage of Strategies

SB5 used 21 different practice strategies across the four weeks (see Appendix XI.10). She spent most of her time practising the pieces by 'playing the whole piece' (=53.40%) without stopping. She also practised by 'playing with the use of strategies' (=15.52%), mainly from a 'focus on difficult parts' category so as to improve specific elements of her pieces. As SB5 commented during the interview, she usually prefers to begin her practice by playing the whole piece so as to identify difficult parts. A similar approach was also used while practising the scales (=19.20%). This was previously reported to be a common behaviour for students who had reached high levels of expertise (Hallam, 2001b).

> *'At the beginning, I play the whole piece without using the metronome. Then, I usually play with the usage of the metronome to see whether I played the piece at the correct tempo or not. If I identify a phrase or a part of the piece that I cannot play very well, I focus on it and repeat it a lot of times until to make progress.'*

In her practice sessions, she regularly used strategies from the 'error correction' category, with the highest average being used for the 'repeat part' (=10.73%). This was a strategy that was mainly used when she isolated difficult parts. The rest of the strategies were used whilst playing through the piece and so the time that she spent on these was much less. The strategy 'repeat notes' (=2.80%) was mainly used to correct quickly notation decoding or rhythm, followed by 'start from the beginning' (=2.05%) and 'repeat chords' (=1.16%). The rest of the strategies ('repeat trill' and 'repeat bar') were barely used as they did not exceed 1.0%.

SB5 used only one strategy from the 'strategies for the conduct of practice' category, the 'metronome' (=7.36%). In contrast, she used a variety of strategies from the 'strategies to master difficult parts'. The strategy that was used the most was 'slow' (=59.41%), followed by 'fast' (=13.87%) and finally 'regular tempo' (=13.31%). Playing with the 'right hand' (=2.64%) and 'left hand only' (=0.84%) were also used, as well as 'break down chords' (=0.05%).

In addition, three strategies were used from the 'focus on difficult parts' category. The most common used was 'focus on part' (=14.21%), follow by 'focus on trills' (=0.26%) and 'focus on bar' (=0.10%). Lastly, SB5 used four additional strategies while practising the scales: 'focus on one scale' (=14.93%) and 'repeat scale' (=7.36%), 'tonic chord' (=0.23%) and 'play key signature as a chord' (=0.16%). Findings illustrated that the five strategies that SB5 used most were 'slow' (=59.41%), 'focus on one scale' (=14.93%), 'focus on part' (=14.21%), 'fast' (=13.87%) and 'regular tempo' (=13.31%).

Comments from the interview revealed information in relation to the student's preferences for the organisation of her practise. According to her, she always uses a specific order of material while practising at home. As she mentioned, this is rather a habit that she developed over several years.

> SB5: *'I always play first the pieces and then the scales.'*
>
> Researcher: *'Did your teacher advise you to use this specific order?'*
>
> SB5: *'No, this is something that I do. It's a habit.'*

6.6.11 Identification of mistakes

Data demonstrated that, in each of the sessions, SB5 was able to recognise all of her mistakes. At the times that she was identifying a mistake while she was playing the whole piece, she mainly used strategies from the 'error correction' category to quickly correct them. In the cases when she identified that she was actually facing difficulties playing a particular part of the piece, she used strategies from the 'focus on difficult parts'. Overall, she demonstrated that at this level of expertise, she was able to quickly identify and solve problems accordingly (Hallam, 1997).

6.7 Relationship between the observed Lessons and videoed Home Practice

Interview data revealed information about the relationship of SB5's lessons and the subsequent practice. As she reported, her practice was strongly influenced by the teacher's advice on future practice. The comments indicated that she was a committed student, who was motivated to develop as a learner. In addition, data suggested that SB5 was a high achieving student who was motivated by verbal rewards for her efficient practice (*cf* Zarza-Alzugaray et al., 2020). Achieving any short-term goals and getting acknowledged by her teacher seemed to inspire and also stimulate SB5's interest.

> *SB5:* '*I always listen to her comments, and when I get home I try to correct my mistakes…I try to improve at home, so that in the next lesson, my teacher can tell me that I have made progress. And also this gives me the opportunity to learn more in every lesson.*'

6.7.1 First Week

In the first lesson, TB advised the student to use eleven strategies (see Table 6.5). SB5 followed less than half of these strategies during the following week, as she used only four out of eleven strategies (=36.36%). She used at least one of the suggested strategies for each musical component, except the second piece and the sight reading. In general, she practised by ignoring her teacher's suggestions, even at times when she was strongly advised to use them while practising. Although these were offered as key strategies to improve the piece, she did not show an awareness of the importance of using them. Overall, her practice session was not particularly influenced by her teacher's instructions as she mainly practised by using alternative strategies.

Table 6.5. First week instructions and home sessions for SB5

	Instructions	1st
Scales	**Contrary motion:** Focus the contrary motion scales and repeat a lot of times so as to learn the fingering.	x
	Major and minor scales: Play all the scales at the regular tempo by using the semitone-semitone strategy (practise them a lot).	√
First Piece	Use of Metronome (♩=55) for steady tempo (Use the metronome every time that she practises this piece).	x
	Count of – Count with the use of metronome before to start playing the piece.	x
	Work on accentuation and dynamics.	√
Second Piece	Work on the melody and the accompaniment (Right Hand and Left Hand).	x
	Use of metronome to work on synchronisation of both hands.	x
Third Piece	Work on the tempo until to become steady.	√
	Work on the accentuation and dynamics.	√
	Focus on three specific parts and work on each separately → then link together.	x
Sight Reading	Practise sight reading by playing 3-4 bars of random pieces from other books.	x

6.7.2 Second Week

During the second lesson, TB suggested twelve strategies, from which seven (=58.33%) were followed (see Table 6.6). Although SB5 practised all of the material, she was selective on which instructions to follow, even at times when her teacher emphasized the importance of using the suggested strategies. However, results indicated that she followed at least one piece

of advice for each material. During this week, SB5 demonstrated a level of understanding of the importance of using selected strategies. However, she did not use some of the most important strategies that were advised as key for her improvement.

Table 6.6. Second Week instructions and home sessions for SB5

		Instructions	1st	2nd
General Advice		When facing difficulty playing a part work on it at a slow tempo and change the rhythm to dotted notes = variable practice.	x	x
		The days that she practises on the keyboard work more on the scales and when she practise on the piano focus more on the pieces.	√	√
Scales		Work on the fingering by creating a visual picture of each scale (Major and minor scales BH). She has to practise the scales a lot so as to play automatically the scales.	√	x
		Practise the minor (semitone- semitone) and the contrary motion scales.	x	x
		Learn from memory all minor and contrary motion scales	x	x
		Do not work all scales at the same day; she has to practise every day and playing four minor or Major scales by using the semitone-semitone strategy: for example the first day C,C#,D,Eb the next day E,F,F#,G.	x	x
First Piece		When facing difficulty playing a part (e.g. a trill) change the rhythm to dotted rhythm with the correct fingering and repeat a lot of times = variable practice.	x	x
		Focus on specific parts with the metronome at ♩=55 and gradually increase the tempo to ♩ =60.	√	√
		If she still faces difficulties at ♩=55 turn off the metronome and play the part once at a very slow tempo →Then use metronome again.	x	√
		If she faces difficulties, stop and play the piece once at a very slow tempo.	x	√
Third Piece		Focus on a specific part so as to work on the rhythm and accentuation.	√	x
		Focus on another part to improve rhythm	√	x

6.7.3 Third Week

During the third lesson, TB advised eleven strategies (see Table 6.7). She provided detailed information on all of the three pieces ('A', 'B' and 'C'), and she also gave information on how the student could practise one of the exercises of the aural tests. Results showed that her session was strongly linked by her teacher's instructions, as she used nine out of eleven (=81.81%) of the suggested strategies. SB5 followed all of the instructions that were given for the first and the second piece. In contrast, instructions for the third piece were not followed precisely, as SB5 used only two out of the suggested five strategies. Lastly, SB5 reported in the fourth lesson that she followed instructions to listen to different tracks from YouTube. Unfortunately, this information cannot be verified, as this was not part of the recordings.

Table 6.7. Third Week instructions and home sessions for SB5

	Instructions	1st
First Piece	Focus on a specific trill.	√
	Focus on the trills with the use of metronome: Initially start practising at a slow tempo without the metronome. Then use of metronome - if the tempo is too fast, change it to slower and work on the trills.	√
	Focus on the second page and repeat a lot of times so as to improve notation.	√
Second Piece	Focus on a specific part and repeat a lot of times.	√
	Focus on the second page: repeat a lot of times without using the pedal so as to improve notation.	√
	Work on the pedal and dynamics.	√
Third Piece	Focus on a specific part with the Right Hand Only.	X
	Work on the dynamics of the Left Hand-it should be softer.	X
	Work on any elements that need improvement.	√
	Play at a slow tempo so as to work on anything that needs improvement → Then use the metronome ♩=60.	√
Aural Tests	Use of recordings: Listen to different tracks from the examinations ABRSM - Grades 2-5 from the YouTube website (if she has time listen to grades 6- 8 as well) and try to recognise different features of the music so as to improve her skills on recognising what era is each piece.	√

6.7.4 Fourth Week

TB provided thirteen different instructions, from which only six were followed (=46.15%). Results showed that SB5 followed all instructions regarding the scales and the first piece (see Table 6.8). For the second piece, only two of the suggested strategies were used, even though TB had recommended applying all of the strategies. Lastly, none of the recommended strategies were evident while practising the third piece, even though the teacher provided written information. Results demonstrated that her practise sessions were not particularly influenced by her teacher's instructions. Instead, she chose to practise by mainly playing the pieces so as to identify and focus on the parts that she faced difficulties to play fluently.

Table 6.8. Fourth Week instructions and home sessions for SB5

	Instructions	1st	2nd
Scales	Work on the fingering.	√	√
	Work slow–do not play at a fast tempo.	√	√
First Piece	Always practise with the metronome.	√	√
	Focus on difficult parts when needed and play at a slow tempo.	√	√
Second Piece	Work on the pedal at specific points of the piece.	√	x
	Work on a specific part of the piece so as work on the pedal.	x	x
	Metronome ♩=67 or 70.	x	x
	Practise specific parts of the piece to work on the pedal changes.	x	x
	When facing difficulties on playing some notes fluently, focus on the group of notes.	√	√
Third Piece	Focus on a specific part and play at a slow tempo so as to work on the notation and synchronisation of the chords.	x	x
	Focus on a specific part and repeat a lot of times	x	x
	Use metronome to work on the tempo.	x	x
	Work the last bars of the piece.	x	x

6.7.5 Self-Regulating behaviour

In all of the sessions, she showed self-regulated behaviour, as the strategies that she was using while practising had a positive impact. The strategies that SB5 chose to use while practising verified that her practice repertoire was rich and, in all cases, she demonstrated knowledge and understanding of their use and effects. She was also in a position to set short term goals while practising, as she was found to be working on the difficult parts that she identified until improvement took place. Lastly, in none of the cases was she being selective on what to practise, as she worked on all of the material, even in the weeks that she practised more than once. At the end of each session, an improvement was observed although she did not precisely follow her teacher's instructions.

Her practice attitudes showed that she had already acquired high level of practising skills, as she could successfully meet short-term goals. However, analyses indicated that she was still in need of her teacher's guidance so as to acquire deeper knowledge and understanding. Regarding Ericsson, Krampe and Tesch-Romer's (1993) theory of expertise, results suggested that she was at the second phase, in which development of practice skills is still in transit.

6.7.6   Summary

SB5 received 47 different instructions during the four weeks, from which 26 were followed whilst practising. Findings showed that there was not always a direct link between the lessons and the home-based sessions. Nevertheless, her practice appeared to be effective.

6.8   An overview of the two Grade 5 cases

6.8.1   What goes on in the lesson?

Both teachers had similar preferences regarding the time that they spent on material while teaching. In the majority of the lessons, the focus was primarily on the selected pieces, apart from one of SA5's lessons where most of the time was spent on the scales. However, in all of the lessons, both pieces and scales were evident, regardless of the time that was spent on them. Regarding the material used in the lessons, the prime difference between the two teachers was that TB also focused on sight reading (average=10.75%) and aural tests (=7.00%). In general, results indicated that both teachers focused mainly on material from the syllabus of the ABRSM examination in their lessons. These findings support previous arguments that this behaviour is expected for teachers in Cypriot private conservatories (Skoutella, 2015; Papageorgi, 2007).

Differences emerged from the teaching pattern of elements that were used in the lessons. TA once again chose to use a specific pattern of elements, apart from one lesson in which the elements were used in reverse. In contrast, a consistent pattern was not found in TB's lessons. However, she showed a preference for beginning her lessons with the pieces (i.e., three out of four lessons).

Findings also showed that both teachers recommended strategies verbally. Although TA (total=520) advised strategies more frequently than TB (=456), results showed that this behaviour was evident constantly while teaching. In contrast, teachers barely spent time on promoting strategies non-verbally. However, in these cases, they used similar approaches (e.g., singing).

Similarities also emerged in terms of 'reference to previous practice', as this was barely evident in both cases. However, the teachers gathered different type of information from their students. Results showed that TB mainly discussed the strategies (='how') that SB5 used during her practice, while TA asked questions mainly about 'what' was practised.

Another similarity was that both teachers referred to 'practise for the next week' more often than 'previous practice'. One of the differences that were found was the reference to 'practice time', as in the case of SA5 it was not evident in any of the four lessons. Another difference

was that TA (=2.74%) referred less than half of the average time spent by TB. (=9.25%). This is due to the fact that TB gave more detailed instructions when she was providing information about future practice.

A notebook was not used by either of the two teachers. Instead, they made notes or marks on the score so that their students would be reminded of what or how to practise during the following week. But, in both cases, it was barely evident, as the averages did not exceed 2%. Once more, TB provided more written information to her student with the average time being more than twice (15 times/1.97%) compared to TA's case (6 times/0.90%).

6.8.2 What goes on at home?

SB5 was in a position to maintain concentration in all of the sessions. The only time that she lost concentration was when she was distracted by her parents, but this lasted only for a few seconds as she continued practising immediately after. In contrast, SA5 was not found to lose concentration while practising.

In regard to quantity of practice, both Grade 5 students carried out a relatively small number of practice sessions. SB5 (total=6) carried out slightly more practise sessions compared to SA5 (=4). However, the length of their sessions varied, as SB5 carried out longer practice sessions than SA5. Results also indicated that the student's quantity of practice was strongly influenced by external factors, such as other private lessons during the afternoon. Results were related to those found for Grade 1 students, indicating that an overload schedule is part of these students' lives (*cf* Lamprianou and Lamprianou, 2013).

Differences were noted with regards to the practice strategies that the students used. SB5 practised by playing mainly the whole piece (=53.40%) and then focusing on the parts (=14.21%) that she identified as difficult. The time that she spent on 'playing with the use of strategies' (=15.52%) was found to be much less. On the contrary, SA5 used an opposite method, as she mainly practised by 'playing with strategies' (=58.63%) instead of 'playing the whole piece' (=9.35%). She began her practise by focusing directly on difficult parts (=47.35%). With regards to their practice repertoire, data analyses showed that the two students showed a preference for different strategies. SA5 preferred to use 'both hands' (=51.40%), 'slow' (=77.82%), 'repeat part' (=32.90%), play with the 'right hand' (=19.30%) and 'left hand only' (=15.39%). In the case of SB5, the strategies that she used were primarily, 'both hands' (=84.88%), 'slow' (=59.41%), and less on 'focus on one scale' (=14.93%), 'focus on part' (=14.21%) and 'fast' (=13.87%). However, both students could identify all of their mistakes and accordingly use effective strategies in the face of difficulties.

6.8.3 How does home compare to lesson?

Although both students applied several of the suggested strategies while practising at home, SB5 followed more instructions as a whole (average=55.66%). In the case of SA5, fewer strategies were followed, as she hardly followed instructions on the two of the four weeks (=40.89%). Results suggested that she had a tendency to ignore instructions while practising at home. However, it has to be noted that SA5 received less than the half of instructions compared to SB5. The number of instructions given for SA5 in the four weeks ranged between 4 and 7, which is a relatively small amount of information for the student to remember. In contrast, in SB5's case, the number of instructions ranged from 11 to 13 which is more than the double the instructions that SA5 received. Regarding the number of strategies that they followed, the numbers for SA5 were between 1 and 5, while for SB5 were 4 to 9. SB5's teacher provided more detailed information about each strategy, both verbally and non-verbally, and this might be one of the reasons that SB5 used a higher number of the recommended strategies.

Taken as a whole, the two students showed that they had already developed a repertoire of effective strategies and they also demonstrated a knowledge and understanding of their use and effects. Each student used a different method while practising; however, improvement was marked in both cases. Data analyses indicated that SB5 had already reached the sixth level that Hallam (1997) suggested for practice development. She practised by playing through the whole piece so as to identify difficult parts and therefore to practise these in isolation. In the case of SA5, analyses suggested that she was at the fifth level, as she practised merely by focusing on specific parts instead of playing the whole piece. However, the fact that she was being selective in which of the difficult parts to practise demonstrated that she was not quite as consistent in her ability to self-regulate her practice consistently. Perhaps, one other factor that might have influenced the choice of methods was the repertoire, as the pieces that they were learning were different.

Chapter 7
Grade 8 case studies

7.1 Introduction

Chapter 7 presents data collected from two Grade 8 students. Grade 8 is the final Grade level from the ABRSM examinations and the criteria to pass the exams are very high and demanding. The chapter follows the same reporting approach as used in Chapters 5 and 6 so as to report teaching and learning methods as well as home-based practice behaviours and reflections. This chapter closes with a summary section which includes a comparison between the two Grade 8 case studies.

7.2 Grade 8: Case study 5

SA8 is a 16-year-old boy from Cyprus and he was currently in the 5th grade of a private school in Nicosia. His major instrument was the piano, and he had experience for 10 years. He was also taking singing and theory lessons at the music conservatory. The year (2013) that the research was being conducted, he was taking private piano lessons with TA, with the aim to pass Grade 8 of the ABRSM examinations in the upcoming May. During the four lessons, they focused on the piece 'Fughetta No.4 Op.126' (Robert Schumann) from the book 'ABRSM Grade 8 pieces' and the scales from the 'ABRSM Grade 8 scales book'. Apart from the material for the examination, they also focused on additional pieces. The first piece from the list was a duet piece that SA8 was preparing to perform in a concert. The 'Impromptu in Ges-dur' was a new piece that he was learning as additional material, separate from the examination repertoire. As had been the case with the lower Grades, the selected repertoire reflected positive attitudes towards Western classical genre, which is previously reported to be a common phenomenon in private Cypriot music conservatories (Smith, 2005; Skoutella, 2015).

- 'In the Hall of the Mountain King' by Edvard Grieg - Duet with SB8
- 'Impromptu in Ges-dur' (op. 90 no.3) by F. Schubert.

7.3 Findings from the observed studio-based lessons and videoed home-based practice

7.3.1 Enjoyment of Practise

SA8 is an energetic, passionate learner who is dedicated to achieve all his long-term goals. At that time, one of his main goals was to acquire high-level skills to be able to study abroad

for a Music degree. Taking into consideration Ericsson, Krampe and Tesch-Romer's (1993) theory of expertise, he was at the end of phase two, as he held a positive attitude in making a full-time commitment to the music profession. As he mentioned during the interview, he has discussed his long term aim with his teacher

> *Researcher:* *'Do you discuss with your teacher about your long-term goals?'*
>
> *SA8:* *'Yes. We talk about the fact that I want to get a degree and to be a professional.'*

Data analyses showed that he was reflexive of the knowledge that he gained during the lessons. His home-based practise also demonstrated that he is an independent learner who likes combining information that he receives from his teacher, and also being creative and explorative while practising at home. In addition, he generally enjoys practising so as to achieve progress. However, according to his comments, a factor that may influence the enjoyment of this activity is the material that has to be practised. As he reported, he is usually more committed to practise when he likes the pieces of music that he is learning. Also, practising is more pleasant for him when he learns other pieces that are not related to the lessons.

> *Researcher:* *'Do you like practising?'*
>
> *SA8:* *'There are pieces that I choose to learn on my own when I am at home, which I practise a lot. I focus on them until I learn them. For the material that I have to learn for the lessons, it depends if it is a compulsory material, which means that I don't really have a choice, or if they are additional pieces that I choose with my teacher because I like them. But usually I like the pieces, so yes, I like practising the piano.'*

SA8's comments demonstrated that the choice of the pieces plays an important role in his learning. According to his comments, his teacher gives the opportunity to the student to choose pieces that he likes, possibly to motivate him to engage his interest in practising regularly. As previously reported, this strategy can enhance a student's intrinsic motivation to practise by adapting more efficient strategies (Renwick and McPherson, 2002).

> *SA8:* *'When we choose pieces from the examinations repertoire, she tells me her opinion, she plays on the piano all the pieces, and then she gives me the opportunity to choose.'*

7.3.2   Summary of the four lessons

TA used the same approach in all of the lessons, as she focused mainly on pieces, with averages in time ranging from 82% to 98% (see Appendix XII.1). The first and second lessons were identical in regard to the material used, as they focused on the same pieces (duet and examination pieces). In the fourth lesson the focus was on the examination piece. The third lesson was the only one in which they worked on additional material as they also focused on the scales and on a new piece of music that the student chose. Results indicated that TA used a similar approach as for her other students – reported in previous chapters (see sections 5.3.2 and 6.3.2).

In addition, TA used a similar pattern of elements while teaching (see section 5.3.2 and 6.3.2), even though she focused on less material. She used an identical structure for the first and the second lessons, as she followed the exact same order of the pieces (see Appendix XII.2). The third lesson was more enriched in regard to the material, as she focused on a new piece and finally on the scales. The fourth lesson had the least material, as the focus was on the exam piece during the entire lesson.

7.3.3   Teaching of specific practice strategies

TA used the same methods as those reported in previous chapters (see sections 5.3.3 and 6.3.3). These methods were primarily advisory comments (total=360) and non-verbal advice (total=55). In the cases when she provided advisory comments more often, references were shortest in time (e.g., second and fourth lesson). In contrast, she spent more time on this method at times that she used this method less (see Appendix XII.3). Findings from SA8's interview provide an insight of how TA uses advisory comments.

> *'My teacher usually plays on the piano the part that I face difficulties so as to demonstrate how it should sound, and then she always suggests strategies that I can use to overcome the difficulties. For example, last year she introduced to me a new strategy that I can use so as to practise the trills. She advised me to play with an accent the first note of every trill...Since then, when I want to practise a trill in a piece of music, I use this strategy.'*

His comments also demonstrated that this method was an important aid in developing his practice repertoire over several years. In addition, SA8 referred to his early years of learning, by describing how he acquired his practice habits. Data analyses suggest that acquiring appropriate practising skills can be a long process. As Hallam (1997) notes, this is because building an appropriate practice repertoire requires many years of involvement.

> *'Sometimes I may adapt strategies that the teacher recommended in the lesson. Or [recommended] in the past. I still use strategies that my first teacher taught me in the first year when I was a beginner.'*

Non-verbal advice was also used, although time that was spent on this activity was barely evident (see Appendix XII.3). Similar approaches were used (e.g., singing) as those reported for TA's Grade 1 and Grade 5 students (see section 5.3.3 and 6.3.3). Interview data demonstrated the student's perspective about the teaching methods that were experienced in the lessons. According to SA8's view, the teaching methods played a crucial role in his development as a learner. In addition, the educational system of the conservatory provides opportunities to become an autonomous learner (Hallam, 2006; Gaunt, 2005).

> *'I really like the fact that the teaching system allows us, the students, to have our independency as learner. I have the option to practise as I want to, but I also know that I have my teacher who can help me if my way of practising won't work. I feel that I have all the help that I need, I have someone to discuss and solve any difficulties that I might face, and at the end to achieve a good result.'*

7.3.4 Reference to previous Practice

Results for discussions about previous practice were similar to those reported in Chapters 5 and 6 (see sections 5.3.4 and 6.3.4). References were evident in all lessons (total=12), but time spent was barely evident (see Appendix XII.4). Discussions included 'what' (total=8) and 'how' (total=4) the student practised. The following example illustrates the approach that TA used to gather information about prior practice.

<u>Second Lesson</u>

> TA: *'Did you practise the sixth apart scales?'*
>
> SA8:   *'No, only the piece. I only played at the beginning the arpeggios as a warm-up.'*
>
> TA: *'You should practise all of the scales!'*

The second example shows another approach that TA used. In this case, she referred to previous practice based on the student's playing. She initially provided feedback by commenting about insufficient progress, and then she asked the student whether he had practised the piece.

Fourth Lesson

[Discussion took place after the teacher stopped the student from playing the piece.]

> TA: 'I can't hear the voices clearly. Did you practise?'

This example illustrated that the student's performance in the lesson was a factor that influenced the amount of reference to previous practice. Data from the SA8's interviews support these findings, while they also indicated that the student was in a position to recognise that his progress was a factor of influence.

> SA8: 'My teacher listens to the piece that I play during the lesson, and she comments on it, based on how well I played it. Usually, she makes reference by commenting on whether I practised or not, or on the improvement that is made compared to the previous lesson. She might tell me, for example, 'There is an improvement on that part, but it still needs more practice'…The way I see it, is that during the lessons, my teacher actually examines in a way the practice that I did during the week before.'

> Researcher: 'Do you also discuss about how you practised?'

> SA8: 'She might ask me 'Did you practise the way that I told you to practise?'

7.3.5   Reference to Future Practice

A similar approach to that reported in previous chapters (see sections 5.3.5 and 6.3.5) was noted, although in this case there were some differences. TA gave more emphasis on providing information about 'how' (total=10) SA8 had to practise for the next week, followed by 'what' (total=6) (see Appendix XII.5). In addition, SA8's interview revealed that the number of instructions changed over different periods of time, as his teacher usually provided more instructions when he was at the initial stages of learning the notation of a piece. At later stages of learning a piece (e.g., working on details such as the dynamics), the amount of instructions is reduced.

> 'During the period of time that I am still learning the notation and the rhythm of the piece, my teacher provides me with a lot of instructions about practice. When I reach a point that I learn how to play the piece and I have to learn the details, reference to practice is mainly made by simply reminding me of what I have to practise for the next week.'

Interview data also showed that the student's playing was another factor influencing directly discussions about future practice. SA8's comments suggested that TA was assessing the progress of the student in between the lessons.

> *'Reference to future practice depends on how well I played something during the lesson. She usually comments on what I did not play well, or point out the parts that I face difficulties. Then she will tell me comments about the dynamics, or how the piece should be played based on the period that was written.'*

In further discussing this topic, he commented that reference to future practice only occurs when the teacher identifies an issue. In such cases, TA initially informed him about the problem that she identified and then suggested a solution. According to SA8, this type of discussion also provided an insight into the reasons that he had to use the recommended strategies.

> *SA8:*   *'My teacher listens on my playing and if she identifies a problem, she will advise me on how to improve it. For example, she might say that I have to focus on a specific part and work on it with the correct fingering.'*
>
> *Researcher:*   *'Is it always clear to you why you have to practise with this way?'*
>
> *SA8:*   *'Yes, always.'*

The following extract was taken from the fourth lesson to illustrate how TA recommended strategies. In addition, this example demonstrates how the teacher provided information about why this strategy should be used.

> *TA:*   *'You have to start practising from the part that you don't know very well, not from the beginning. Because you play from the beginning, again and again and when you get on that page you stop…You have to start practising from the last page…The difficulty is that the voices change all the time.'*

During the interview, SA8 commented that he gained a deeper understanding of the effects of the suggested strategies when they were applied so as to correct his mistakes. Based on his comments, his mistakes were used as learning tools.

'I think that we learn better when we use a strategy after we have made a mistake…instead of telling us what strategies are appropriate to use while practising. You usually remember your mistakes and you don't want to make the same mistake.'

With regards to practice time, video analyses showed that reference to practice time was barely evident (total=2). Data from the interview also support this evidence, as SA8 commented that instructions related to practice time were hardly found in his lessons.

'My teacher usually doesn't tell me how much time I have to practise throughout the week. I remember only a couple of times [her] referring to that. She usually tells me that I have to study instead of telling me how much time I have to practise.'

Interview analysis also revealed information about the student's memory of the instructions that he receives during the lessons. SA8 often lacked memory of his teacher's verbal instructions when he was practising at home. In these cases, he reported that he used alternative strategies chosen from his own practice repertoire. Results indicated that he showed independency as a learner and that he was in a position to self-regulate his practice.

'I usually improvise! If, for example, I don't remember what strategies TA told me to use for a specific part of the piece, I will work on it by using strategies that I believe that will help me to improve it. Then, I will ask my teacher about it in the next lesson.'

7.3.6   Usage of Notebook

Usage of a notebook was not found in any of the four weeks. As SA8 commented during the interview, they had not been using a notebook for the past two years. Instead, TA was found to be using an alternative method; she was making notes on the score so as to provide information about future practice.

Researcher: *'Do you use a notebook to keep notes about future practice?'*

SA8:   *'No, not for the past two years at least. I think that I am old enough to use a notebook. My teacher just keeps simple notes on the score, like for example to use the metronome, or focus on a part so as to improve dynamics. When I was younger, we were using a notebook but over the years we used it less until we stopped using it.'*

His comments revealed additional information about usage of this method during his earlier learning development. Usage of a notebook decreased gradually over time as his level of expertise increased. He also felt that this activity was not essential in his current Grade level. Instead, he found that simple notes on the score were more effective. Results suggested that he had already developed independent skills as a musician through the help of his teacher (*cf* Barry and McArthur, 1994; Gledhill, 2001). In discussing the past, SA8 also reported that the notebook was a method that he did not like to use in his earlier years of learning. His comments illustrated that using a notebook was a strategy that SA8 did not find personally to be efficient for his practice. This might suggest that personal characteristics (e.g., strengths and weaknesses) and preferences can influence usage of notebook.

> Researcher: *'If you had the choice to use a notebook for future practice notes, would you prefer to use one or not?'*
>
> SA8: *'I think, no. I don't think that is something that will help me. To be honest, when we were using a notebook in the past, I wasn't actually using it when I was practising at home. How things work for me, is to keep in mind what she tells me during the lesson…Now that I think about it, the instructions that my teacher used to make on the notebook worked only as a reminder for my teacher of what I had to practise during the previous week rather than using it to do what I had to do.'*

According to data, the only written behaviour that was evident during the lessons was written notes on the score (see Appendix XII.6) about 'what' (total=3) and 'how' (total=2) to practise. The following extracts were taken from the videos as an example of how this method was used. In the first example, the teacher suggested and demonstrated to SA8 how to use a specific-coloured marking system (*cf* Lettberg, 2011; Aiello and Aaron, 2002).

Extract taken from the Second lesson

> TA: *'I want you to use a red pencil and to mark all the themes with the letter 'T'. [The teacher takes a pencil and begins to demonstrate to the student how to do it.] For example, this is the first theme. Mark it with red colour. This is the next one so marks it again with red...Use the red colour so as to be clear to you visually.'*

In the second example, TA used this method so as to provide information to the student about what scales needed more practise. In both lessons, written notes were provided along with verbal instructions, possibly as an enhancement of the student's memory.

Extract taken from the Third lesson

> *'For the next time, I want you to learn [the teacher takes the book of the student and begins to write notes for future practise] scales third apart, sixth apart, and the pages 12 and 13.'*

7.3.7   Quantity of Practice Sessions

According to the video data, SA8 carried out one home-based practice session in each week, apart from the last week when he practiced twice (see Appendix XII.7). During the interview, SA8 reported that he tended to practise slightly more.

> *Researcher: 'How many days during the week do you usually practise?'*
>
> *SA8:   'I usually practise two or three times.'*

Findings from the SA8's interview also indicated that his quantity of practice changed over specific periods of time. As he commented, he tended to increase his practice time in periods when he felt more stressed (e.g., an upcoming examination period). Findings were consistent with previous research, suggesting an increased quantity of practice during preparation periods for exams (Lehmann and Ericsson, 1998).

> *'I usually practise more before May for the reason that I feel that the examination is close and that I don't have enough time…usually by that time I feel the pressure...Apart from that period, I usually practise two to three times per week.'*

In discussing this, SA8 also referred to the concerts by commenting that he tended to experience positive feelings in these cases. Based on his comments, he enjoyed taking part in concerts, and he usually had a lot of energy while performing. Results illustrated that the quantity of his practice was influenced by his own perspective of the current activity.

> *'I usually have a lot of energy when I play. In the exams, not so much, because in such cases there is also the stress. But when I perform at concerts, I don't get stressed, I have a lot of energy.'*

7.3.8   Length of Practice Sessions

SA8 tended to carry out short practice sessions, at least as evidenced by the video. During the four weeks, the length of his practice was similar, as they were around 7 to 8 minutes (see Appendix XII.8). The longest and the shortest sessions were the exceptions, as they lasted for 10.20 and 3.22 minutes accordingly. SA8's interview offered slightly different results to those found from the home-based videos, as he commented that he usually carried out longer practice sessions. His comments also indicated that a busy schedule may influence time devoted in home practice (Ilari, 2018).

> *'I usually practise for fifteen to thirty minutes, but this happens when I have free time.'*

However, results from the videos demonstrated that he carried out relatively short sessions (average time=7:12m). Interview data revealed that his time on practising was influenced by how busy his weekly schedule was. In discussing quantity, SA8 also reported that he usually increased his practice time after he learned the notation of the piece. Based on his comments, he particularly enjoyed working on musical expression (e.g., dynamics, expression) he was learning a piece of music. In contrast, working on notation was not an enjoyable activity for him. Results suggested that this was a factor influencing the time that he spent on practising.

> *'I really enjoy practising the dynamics, the musical expression of the piece. The things that I have to learn so as to be able to perform the piece. I usually practise more these elements. And usually, the guidance that I receive in the lessons, because we discuss a lot about why something should be played in this way, is the part that I will work more at home. When the piece has a flow, I feel that I have the foundation to work on the things that I enjoy most…So notation, it's not my thing.'*

7.3.9   Concentration while practising

As a Grade 8 student, he was expected to maintain concentration for a long time while practising (*cf* Hallam, 1998). Based on results, much of the time he was able to maintain concentration while practising. However, he was found interrupting his practice (see Appendix XII. 9) to move around the room (average=6%) and talk to his relatives (=0.16%), Other unrelated activities were also noted in all weeks (=6.53%). Findings suggested that he was not always able to maintain concentration for long periods of time. However, based on results, the home-environment was possibly a factor influencing his levels of concentration (*cf* Harris and Crozier, 2000).

7.3.10 Usage of Strategies

SA8 used 19 different strategies whilst he was practising (see Appendix XII.10). He showed a preference for using the method 'part-whole' (average=58%) while practising the pieces, which is a method that highly skilled learners tend to apply to their practice (Hallam 2001b). He was playing through the piece and, when he was identifying difficult parts, he focused on these until he felt that progress was achieved. SA8's practice was, therefore, based primarily on 'focusing on specific parts' (=29.48%), followed by 'focus on bar' (=7.66%) and 'repeat chords (=2.77%). He rarely focused on group of notes while practising the piece; instead, he preferred focusing on larger parts to solve any problems that occurred. Results from SA8's interview also support this evidence, when he commented on how he tended to practise.

> *'A strategy that my teacher keeps telling me that I have to use is to focus on difficult parts and repeat a lot of times. Then play through the whole piece to see whether I have fixed the problem. However, what I usually do is to play the piece from the beginning and, when I get to the parts that I know that I cannot play fluently, I stop, focus on that part and then move on to the next part. But I usually do not begin practising by isolating parts. I prefer playing the piece from the beginning because I like that the fact that I know how to play those fluently, and when realise that I have to focus on a part that I find difficult to play then I do it'*

However, SA8 reported that, even when he improved a difficult part, he was still feeling nervous when had play that part while performing the piece. His comments showed that at times, when he faced a lot of difficulties to play a part fluently, it had a negative effect on him as this caused him anxiety.

> *'From what I see, during the ten years that I had been learning how to play the piano, is that every time that I faced difficulties to play a part fluently, I usually felt nervous about that part until the very last moment. No matter how good I could play the piece, I felt very anxious when I had to play that part of the piece.'*

Videos revealed additional information about other strategies that SA8 used. Playing at a 'slow tempo' was the most common strategy used in his sessions (average=71.00%), followed by playing with 'both hands (=68.22%). Playing with the 'left hand only' was also noted (=8.93%), as well as with the 'right hand only' (=6.01%). Lastly, SA8 applied the strategy 'tapping foot' (=8.38%) and, it is possible that this was used so as to keep the beat instead of counting aloud. During the first three weeks, he also used 'focus on one scale' (=14.78%), 'repeat scale' (=4.14%), 'play tonic chord' (=0.74%) and 'play key signature as a chord' (=0.12%) while practising the scales. Results showed that the five strategies that SA8 used more while

practising during the period of four weeks were 'slow' (=71.00%), 'repeat part' (=24.13%), 'focus on part' (=29.48%), 'focus on one scale' (=14.78%) and 'start from the beginning' (=11.71%). Overall, there is a clear sense that particular strategies were used much more in the final week, such as the repetition of specific parts of the music.

Interview data revealed additional information with regards to the student's perspective about his development of the practice repertoire as a learner. SA8 's comments indicated that building a practice repertoire is a lifetime process by reporting that he still uses strategies that he was taught in his early years. In discussing this topic, he also used to learn a language as an example, so as to illustrate that the learning process is similar for all subjects.

> *'There are simple strategies that stick to you since we were beginners…During the ten years that I have been learning the piano, there are some things that our teachers kept on telling us when we were younger, that I still use in my practice…It's like learning a language, either you know three words or a hundred, some things are always the same. And I do like the fact that there is a connection from year one up to Grade 8 with regards to practice strategies.'*

7.3.11 Identification of mistakes

SA8 identified all of his mistakes in the sessions that he carried out, with each of them being corrected. In most of the cases, he 'repeated the whole part', whilst the rest of the time he was correcting wrong interpretation of notation or rhythm by 'repeating a group of notes', 'repeating bar', or by 'starting from the beginning'.

7.4   Relationship between the observed Lessons and videoed Home Practice

Results from the interview revealed the student's perspective regarding the relationship between the lessons and his practice. As SA8 reported, in order to be driven to adapt a strategy, the teacher had to give a lot of emphasis on using that strategy. In such cases, his teacher spent a lot of time on working along with him in the use of that specific strategy. He also explained that this is due to the fact that he likes being explorative with strategies while practising.

> *Researcher: 'Do you feel that the lessons influence your practice at home?'*
>
> *SA8:   'Yes. It depends. For example, in order to influence the way that I practise at home, we must work on something a lot during the lesson along with my teacher. In the cases when this happens, I adopt the strategy on the subsequent practice sessions. I usually like to experiment on my own while practising at home, and I am*

trying to find strategies that can help me to make an improvement

on something that I face difficulties with.'

Interview data revealed a factor that influenced how closely SA8's practise was to his teacher's instructions. As he reported, at times when he made a promise to his teacher to make progress for the next lesson, he was more committed to practise. He also commented that this had more effect on him when he was younger. Based on results, this motivated SA8 to a great extent.

'When I was younger, there were times that I didn't practise. But if I had promised my teacher that I would learn the piece for the next lesson, I did it. Now, if I promise to my teacher, I will try, but I might not be as committed as I was when I was younger. And this is because I develop as learner, and I believe more in myself that I can do it.'

7.4.1 First Week

TA proposed two strategies for two different pieces (see Table 7.1). Comparative data indicated SA8 did not follow any of the suggested strategies (=0.00%). In his session, he practised only the arpeggios scales (=9.35%) and the examination piece (=67.10%). However, he did not apply the suggested practice strategy for this piece, as he began his practice by playing the piece from the beginning and at a later point, he focused on difficult parts or bars that he identified as difficult.

Table 7.1. First week instructions and home sessions for SA8

	Instructions	1st
Due Piece	Practise only at a slow tempo.	x
First Piece	Work on the melodic lines separate of the last two pages. Then play together the 1st and the 2nd melodic lines, then the 1st and the 3rd and do the same with all melodic lines. Do not play all melodic lines together.	x

7.4.2 Second Week

TA advised the Grade 8 student to use three strategies from which none was evident (=0.00%) in his practice session (see Table 7.2). The first two instructions were given for the duet that he was learning to play with another student. However, according to data analyses, SA8 did not practise the piece during the week. The third strategy concerned the examination piece. SA8 was asked to mark all the themes of the piece with a red pencil as this could aid in learning

the piece. TA also demonstrated to him how it could be done by marking the first themes that occurred at the beginning of the piece with a pencil. However, video data showed that he did not mark any of the themes in his home-based practice.

Table 7.2. Second Week instructions and home sessions for SA8

	Instructions	1st
Due Piece	Practise a specific part at a slow tempo so as to be able to play it at a fast tempo.	x
	Focus on a part and play at a slow tempo.	x
Examination Piece	The student has to use red colour so as to mark all the themes with the letter 'T'.	x

7.4.3   Third Week

The instructions that TA provided for the third week focused on scales only (see Table 7.3). The teacher referred to scales four different times, while she also strongly advised the student to improve the scales until the next lesson. Initially, she made a reference to practice time by stressing the importance of practising the scales as part of a daily routine. However, the student was only found to be practising once during the week. TA also suggested beginning his practice by playing scales rather than the pieces, as this can be a proper warm-up, an instruction that SA8 followed.

Table 7.3 Third Week instructions and home sessions for SA8

	Instructions	1st
Scales	Practise every day.	x
	Begin practice sessions by playing scales (thirds, 6ths, etc).	√
	At each session focus only on one form of the scales.	x
	For the next week he has to practise: a) 3rd apart, b) 6th apart, c) and pages 12 - 13 (legato scales in thirds, chromatic scales 3rd apart, chromatic scales minor thirds, whole tone scale.	√

Another suggested strategy was to focus on one type of the scales each time, since at the Grade 8 examination period they have to learn a large number of scales. She gave an example that in one session he had to practise the 6th apart scales and in the next to practise the arpeggios. Findings demonstrated that he did not follow instructions as he was found practising the 6th apart scales, then chromatic scales in 3rds and lastly the arpeggios in one session. The fourth and the last time that the teacher referred to future practice was to inform the student what type of scales had to practise for the next lesson. Written notes on the book also made for the student so as to enhance his memory. However, he did not practise all of the suggested scales, as he practised only the 3rd apart scales and the chromatic 3rd apart from the suggested strategies. Overall, SA8 followed two out of the four strategies that his teacher suggested to use while practising at home, with the proportion for this week being 50.00%.

7.4.4 Fourth Week

For the fourth week, TA suggested two strategies for the examination piece at the end of the lesson (see Table 7.4). She strongly advised the student to begin his practice by playing from the part where he experienced difficulties, rather playing the piece from the beginning. She also stressed the importance of focusing on difficult parts, by explaining the reasons for this and its likely effect. Through their discussion, she gave more detailed advice, such as by suggesting beginning his practice from the last page of the piece. In the following week, SA8 carried out two practice sessions on the same day; the second session was essentially a continuation of the first session. However, they were considered to be two different sessions for the reasons that the video was stopped for unknown reasons and, also, the time that passed in between the two sessions was unknown and could not be identified. SA8 used all of the suggested strategies, with the proportion for this week reaching 100.00%.

Table 7.4 Fourth Week instructions and home sessions for SA8

	Instructions	1st	2nd
Examination Piece	Always start practising from the part that presents difficulties, not from the beginning.	x	√
	Start practising from the last page of the piece	x	√

7.4.5 Self-Regulating behaviour

Video analysis demonstrated that SA8 practised by playing the piece from the beginning so as to identify and isolate difficult parts. Based on his actions and behaviours while practising, he was in the fifth (out of six) stage of theorised practise development (Hallam, 1997). In addition, data suggested that he often followed his teacher's instructions on 'what' to practise (although not consistently), and that there was more evident variation in the match between guidance and home behaviour in 'how' to practice. In most of the home sessions, he was able to identify the elements that had to be practised; yet he chose to use alternative strategies while practising. His behaviour illustrated that he self-regulated his practice, as he successfully faced any difficulties that emerged. In general, he was able to set short-term goals while practising, and to achieve the desired result. Findings from the interview with SA8 also support this analysis, as he reported that he usually practised with the strategies that he felt that work best for him.

> *'I practise based on how I think is going to work for me…For example, I usually learn a piece as I was told to, and when I go to the lesson, I ask my teacher 'Can I show you a different way that also helped me to achieve progress?' And at the end, I practise with my own way. And until now, using my strategies didn't affect the result. I always achieved a high mark in the exams.'*

His comments also revealed important information about his behaviour as a learner. As he mentioned, he liked the fact that he could gain further knowledge from his teacher. Specifically, he was interested in enriching his practice repertoire based on his teacher's recommendations so as to be aware of the alternative strategies available to him. His comments suggested that as a student, he was aware of his self-regulated behaviour.

> *Researcher:* *'Do you usually follow your teacher's instructions on future practice?'*

> *SA8:* *'I do. The problem is for how long…When I learn a piece I think about them as backup strategies, in case my strategy doesn't work. I always have alternative strategies that I prefer to use when I practise...But I will pay attention on what my teacher suggests, because when you learn an instrument, you need to develop as many skills as you can. What I have noticed is that when I teach at home my younger brother how to play the piano, I initially introduce him to the strategies that I find to be useful.'*

7.4.6 Summary

In the period of four weeks, SA8 received 11 instructions related to future practice. In the sessions that he carried out, he followed these instructions only 4 times (total average=37.50%). Although a small number of instructions were given to him in each week, he chose to practise in a different way.

7.5 Grade 8: Case Study 6

SB8 is a 16-year-old boy from Cyprus. At the time that the research took place (2013) he was in the second grade of a private school in Nicosia. His main instrument was the piano and he had been taking one-to-one lessons. He was also taking theory lessons in the private music conservatory. At that moment in the research process, he was working on Grade 8 (ABRSM) material with TB. All of the lessons focused on preparation for the upcoming examinations, with the aim to receive awards for Grade 8. The material included working on the scales from the 'ABRSM Grade 8: Piano Scales & Arpeggios', and the piece 'Beethoven's Sonata Op.10, No.1' from the book 'Piano Examination Pieces'. In regards to the musical genre of the pieces, similar findings to those reported in Chapters 5 and 6 were found. Analyses indicated that his lessons within the music conservatory focused mostly on Western Classical music, as might be expected within the Cypriot conservatory culture (*cf* Smith, 2015; Papageorgi, 2007).

7.6 Findings from the observed school lessons and videoed home practice

7.6.1 Enjoyment of Practice

SB8 was found to be a courteous student who was motivated to achieve the Grade 8 piano examination award. SB8's comments from the interview indicated that she was committed to his goal, as he wanted to accomplish rewards before the third grade of his school which is the final year and the busiest. Data analyses suggested that he was an organised student, who sets long-term goals and followed a timeline to achieve them. Based on results, he was at the end of phase two of Ericssons, Krampe and Tesch-Romer's (1993) theory of musical expertise. However, his interview illustrated that he would possibly not move into phase three, which is full-time commitment into the domain of music. According to his comments, involvement into this activity is likely to stop after passing the Grade 8 examination. It is likely, therefore, that he took piano lessons with the aim to enhance future academic opportunities. As previously reported (*cf* Ilari, 2018, p.50), involvement in instrumental learning is often seen as an opportunity to 'build a curriculum vitae that will enhance their chances of being admitted to a prestigious university'.

> *'My main goal is to finish Grade 8 by the end of the year, because next year, I will be in the final year of my school, third grade of lyceum. I don't know yet if will prepare for the diploma after the Grade 8, mainly because I will not have the time to do it. Otherwise, I would probably sit examinations for the diploma as well. Either way, my goal for the moment is to sit the Grade 8 examinations.'*

In addition, he was found to be a student who generally enjoyed practising. However, his comments illustrated that the material that he learned was a factor affecting his home-based practice, as noted with other students (*cf* Renwick and McPherson, 2002). Specifically, he reported that at times when he enjoyed the pieces, he was motivated to practise more. The choice of the pieces was, therefore, a factor influencing his engagement in practise in general.

> Researcher: *'Do you enjoy practising at home?'*
>
> SB8: *'It depends. For example, there were times that I had to learn pieces that I liked practising more compared to others. In these cases, I enjoyed more practising at home.'*

SB8's comments demonstrated that his level of motivation was also influenced by the stage that he was when he was learning a piece of music. As he mentioned, he usually did not like practising when he was at the initial stages of learning a piece (e.g., notation and rhythm). Instead, he enjoyed practising when he had to work the final adjustments of the piece.

> *'At the beginning, until to learn in a way how to play the piece, I do not like it at all! (laughing) Yes. That is the biggest problem in my practice.'*

During the interview SB8 expressed his preference to learn more pieces that he enjoyed. Specifically, he felt that this would help him to gain more skills and more confidence as a player. However, he could recognise that learning additional pieces was usually not part of his lessons due to the limited time that they had available.

> *'I would like to learn more pieces that I personally like…they would help me to gain more skills and also to help me develop more my confidence.'*

However, SB8 commented that he often did not have free time to practise extra pieces. For that reason, he usually focused more on the examination repertoire while practising. Results suggested that his schedule generally did not allow him to focus on additional repertoire, and therefore, he stayed focused on his long-term goals.

> *'What I usually do, and in general the past years, what I did was to practise more the examination pieces and if I had more time, I practise additional pieces.'*

7.6.2 Summary of the four lessons

Video analyses indicated a consistency in the material on which TB focused while teaching (see sections 5.6.2 and 6.6.2), as she spent most of the lesson time on the pieces (average=61%) followed by the scales (=33.25%). Overall, in all of the weeks, there was only a slight difference between the times that TB spent on each musical component (see Appendix XIII.1).

In most lessons, TB followed the same pattern of elements while teaching (see Appendix XIII.2). The majority of the lessons began with the student playing the scales followed by the examination piece. The only exception was the third lesson, as they focused only on the musical piece for the entire lesson. This pattern suggests that TB had a relatively consistent pedagogical approach.

7.6.3 Teaching of specific practice strategies

A similar teaching approach as those reported in the previous chapters was found (see sections 5.6.3. and 6.6.3), as TB recommended strategies mainly verbally (total=537) (see Appendix XIII.3). Most of the time, she was making brief comments, instead of giving detailed information to SB8. As a result, findings showed that the weekly percentages of time were not high overall (average=16.04%), even though the actual instances appear to be very high (total=537). According to SB8's comments, this method was often evident during the lessons, while his teacher also used demonstration at times when it was necessary. He also explained new strategies that were introduced to him during the lessons.

> *'She explains verbally what she wants me to do and then I will try to play it on the piano while she is explaining to me, so as to understand better what she means. Because at this time she can comment for example 'not like this, you have to do it this way'…If it is not clear to me, I ask her to explain to me again.'*

Video analyses demonstrated that TB also recommended strategies 'non-verbally' (total=66), although this behaviour was less evident in the lessons (see Appendix XIII.3). In these cases, she used similar methods as reported for her Grade 1 student (see section 5.6.3 and 6.6.3), such as demonstration on the piano. These methods were mainly used to suggest strategies from the categories 'error correction' and 'strategies to master difficult parts'.

7.6.4 Reference to previous practice

TB referred to previous practise in all of the lessons (total=25). Results showed that she used identical teaching methods as those reported for her Grade 1 student (see section 5.6.4). She mainly gathered information about 'what' (=15) and 'how' (=8) SB8 practised (see Appendix XIII.4). An additional category was found in SB8's lessons related to 'practice time', although

it was barely evident (=2). During the interview, SB8 commented that such discussions were often evidenced in his lessons.

> Researcher: 'Do you discuss with your teacher about what and how you have practised at home?'
>
> SB8: 'Yes, for example she will ask me, 'How did you practise at home?' And I will reply 'I played with the left hand only, then with the right, and then I played with both hands, or I worked on that part to improve the dynamics.''

Findings from SB8's interview also revealed a possible factor that could influence the frequency of reference to previous practice in his lessons. According to his statements, his performance during the lessons was the main factor influencing whether discussions about previous practice would take place.

> 'If I play very bad during the lesson, or if she doesn't see any progress from the previous lesson on specific parts, she will ask me whether I practised and how I practised.'

The following extracts were taken from the third lesson to demonstrate examples of how TB referred to previous practice. In the first example, TB made reference to previous practise as soon as she considered that there was an insufficient improvement. The second example demonstrates that TB opened a discussion to gather information about previous practice.

Example A

[The student finished playing the scales that his teacher requested.]

> TB: 'The scales are unacceptable. What did you practise? The piece?'
>
> SB8: 'I did not practise them a lot this week. I practised some of them and the piece.'

Example B

[The student finished from playing part from the examination piece. The teacher turned the page and asked a question about another part of the piece]

> TB: 'Did you practise this part?'
>
> SB8: 'No.'

7.6.5 Reference to Future Practice

TB used all the categories while referring to future practice, although some of them were not evident in all of the lessons (see Appendix XIII.5). Reference to 'practice time' was the category referred to least, as it was used only in the first two lessons (total=2). SB8's interview verified these findings, while they also revealed that insufficient progress was the main factor influencing frequency of such discussions.

> *'We usually don't discuss about how much I have to practise during the next week. However, I remember a period of time that I wasn't practising enough. At that time, she was advising me to carry out short sessions throughout the day. But this would happen only at times when she understands that I don't practise enough at home.'*

The next category with a relatively lower percentage was 'why the student has to practise this way' as it was evident in the first three lessons only (total=7). The following example demonstrates how TB explained to the student about the potential benefits of the suggested strategies.

<u>Extract taken from the First Lesson</u>

> *'You should learn the notes of that part and to work on the pedal slower…You have to practise at a slow tempo that part so as to work on the notation, you need to play the notes more clearly, and then increase the tempo. If you continue to practise at a fast tempo, they will not improve.'*

Although analyses showed that reference to why a strategy must be used was not frequent, findings from the interview revealed that such discussions did take place in the lessons. According to the SB8 this method helped him to gain a deeper understanding about usage of strategies.

> *'When my teacher suggests a strategy, its effects are always clear to me. We usually discuss about it. She might ask me about it and then explain why it's better to use that strategy.'*

The next category that TB used was 'how' to practise (total=33), by providing either detailed or brief information about what strategies should be used at home. Analyses showed that such references were often combined with 'what' to practise or 'why' to use this strategy. SB8's interview verified these findings, as he commented that recommendation of strategies was always part of his lessons.

> *'In every lesson my teacher suggests specific strategies that I have to use during the following week. She might tell me, for example, to play the piece at a slow tempo with the use of a metronome, or to focus on difficult parts.'*

The following examples were taken to demonstrate how TB provided instructions about 'how' to practise on two different occasions. In the first example, TB stopped the student from playing so as to give instructions for a specific part of the piece. In this case, she gave verbal instructions, along with written notes, while she also used demonstration.

<u>Extract taken from the Second Lesson</u>

> *'You have to play the notes more clearly…You have to understand how to play the left hand which is the accompaniment [demonstrates on the piano how it should sound]. So, for that part [begins marking on the score] the notes of the left hand should be played clearer. You have to work this section by breaking it into smaller parts.'*

In the next example, reference to future practise is made after they had finished working on a part. This took place at the end of the lesson when TB gave detailed instructions so as to summarise how the student should practise. Written instructions were also evident along with verbal instructions.

<u>Extract taken from Third Lesson</u>

> *'You understand what you have to do right? [Starts marking on the score the part that he has to practise] You have to practise this part more. Work on the details from here [points on the score from where to start: fifth page of the piece]. Begin your practise from here. And that part, [shows on the score another part] practise the part separately to learn the melody, play with the left hand only at a fast tempo. Focus more on these two pages so as to learn notation, ok? And, I don't want you to begin your practise from the beginning of the piece. Isolate parts [turns to page one and shows another part]. Also practise these bars. You remember what we said about these, practise this part [shows another part] because the tempo is unsteady. Practise this part [shows on the score a part on page two] then turn the page and practise these parts. Focus on parts! Do not play the entire piece.'*

Lastly, the category that TB referred to more often during the lessons was 'what to practise for the next week' (total=43). The following example illustrates how TB gave instructions about the material that needed more practice, based on the student's performance.

<u>Extract taken from the Second Lesson</u>

[The teacher gives instructions after the student played the scale F# minor harmonic]

> TB: *'I have marked the scale with a star (*). G# minor, should I mark   that one as well?'*
>
> SB8:   *'Yes.'*

Analyses showed that TB often stressed the importance of home practice (total=85 times). During the interview, SB8 also reported that his teacher used demonstration so as to provide information about specific elements of the piece, such as the dynamics. His comments suggested that demonstration had positive results on student's practice.

> *'If it is related to dynamics, then she will demonstrate on the piano how she wants me to play it… For example, there is a part of one of the pieces that I have to improve the dynamics. She played that part for me so as to listen to it and to understand how it should be played.'*

However, results from the Student's B interview indicated that he was not always in a position to remember all of his teacher's instructions. It may be that written instructions can possibly enhance the student's quality of practice, even at this level of expertise.

> *'To be honest I don't always remember what I was asked to do...In such cases, I usually start by playing the piece from the beginning, and when I realise that a part needs an improvement, I work on it separately. In some cases when I play a part that my teacher told me to focus on, I might remember what she told me to do.'*

7.6.6   Usage of Notebook

A notebook was not used in the case of SB8, suggesting that TB was perhaps seeking to provide further opportunities in developing independence (Harris and Crozier, 2000; Barry and McArthur, 1994). TB provided a limited amount of information through written notes on the score about 'what' (total=9) and 'how' (total=9) SB8 had to practise (see Appendix XIII.6) Findings from the student's interview revealed that this method was usually used during the lesson. This might suggest that TB used this approach as an alternative method to a formal notebook, in cases when she considered that key notes can enhance SB8's practice effectiveness.

> *'For the scales, my teacher usually makes notes on the book about what I have to do at home, so I always remember what I have to do. Every time that I practise, I simply turn the pages and see the written notes.'*

However, SB8 reported that—at times—he was not able to identify which of the written notes referred to his weekly practise sessions. In discussing this, he referred to a teaching method that he found to be effective for his practice in the past.

> *'Because there are a lot of written notes and marks on the scores, I might not remember what is new. But most of the times, I remember what I have to do.'*

In general, SB8 felt that written notes on the score had positive effects on his practice. Findings suggested that this method could enhance the student's memory and, therefore, helped his practice sessions to be more closely related to his teacher's instructions.

> *Researcher:*   *'Do you find it helpful that your teacher makes notes on the scores?'*
>
> *SB8:*   *'Yes. It works as a reminder for me of what and how I have to practise. She might mark a part for example and write down 'Left hand and right hand separately'. If I see notes like this while practising, I will automatically remember what I was asked to do during the lesson.'*

7.6.7   Quantity of Practice Sessions

In the four-week period, SB8 carried out ten practice sessions in total (see Appendix XIII.7). The highest number of sessions was found in the second week when he practised five times. However, it has to be noted that, of these, the student reported that three sessions were carried out on the same day, but at different times, as well as the other two. The fourth week he practised three times and during the first and third week once. Findings from the interview suggested that SB8 tended to carry out three practice sessions weekly.

> *Researcher:*   *'How many days during the week do you usually practise?'*
>
> *SB8:*   *'Three.'*

However, SB8 commented that in the past, he noticed that there were specific periods of time that his practice changed. According to him, during the examination period his practice increased to a large extent. In such cases, the literature suggests that anxiety may be the main influence (Papageorgi et al., 2013).

'I usually practise more by the end of the year, when I reach a point that I feel that the examination is getting close...by that time I feel the pressure.'

7.6.8   Length of practice sessions

The length of the practice sessions that SB8 undertook during the four weeks also varied considerably (see Appendix XIII.8). However, although findings showed that the average time across the lessons was 14 minutes and 21 seconds, results from the SB8's interview suggested that the student used to carry out longer practise sessions.

'I usually practise for forty minutes to one hour...Because when I decide to practise, I practise a lot.'

According to SB8, various factors may influence the length of his practice sessions. He commented that school tests as well as other private lessons in the afternoon were the main factors of influence. It seems that an overscheduled programme influenced the availability of time to engage in home-based practice. As previously reported in the literature, this can be an issue in instrumental learning, as it directly affects achievement (Ilari, 2018). However, his comments suggested that his sense of the time available changed over different periods.

'It depends on how much time I have. I mean, I have other private lessons in the afternoon, and I also have homework…I usually practise on Wednesdays because it is the only day that I have most of the time free in the evening. So, on that day, I can practise a lot. Also, if I have to study for school tests, I usually do that first and then spend time on practising the piano, if there is any time left for me to practise for the piano.'

His comments reinforced comments from others as well as the literature that practice is impacted negatively by an overloaded schedule, particularly in a Cypriot context (Lamprianou and Lamprianou, 2013). In discussing the quantity of practice time, SB8 also reported that, in the past, he used a weekly schedule with the aim to organise his practice. However, he felt that this method did not have positive effects on his practise as he did not follow the schedule.

'I have tried to create a programme in the past, but it was a failure (laugh)   so yes, I wouldn't recommend it to myself (laugh).'

7.6.9   Concentration while practising

SB8 videoed all of the sessions on his own while he was alone in the room in which he was practising. Time analyses of the videos showed that he was somewhat distracted at times while practising (average=2.67%) as irrelevant activities (e.g., answering his phone) were

evident (see Appendix XIII.9). However, in all the cases he was able to regain his concentration quickly.

7.6.10 Usage of Strategies

SB8 showed knowledge and understanding of 19 different strategies while practising (see Appendix XIII.10). Video analyses illustrated that he showed preference for isolating the difficult parts of the piece and working each of these separately with the use of various strategies. During the interview, SB8 commented that he tended to use this approach while practising at home. Results indicated that he had already acquired skills that are often evident in the practice of expert musicians (Hallam, 2001b).

> *'I practise the pieces by playing specific parts to see how I play them…for example the parts that I was told to practise...But to be honest, I don't really practise all of the parts that I was told to in one session. I work, for example, on the parts that I think that needs more practise, and then, I work on the scales. I might, for example, practise one day the half of them, or the most of them, and I leave the others for the next day…For example I might practise the sixth apart, the arpeggios, and the third apart, and I practise the rest of them the next day.'*

In his practise sessions, SB8 used almost all of the 'error correction' strategies, apart from the 'repeat trill'. In virtually all instances, these strategies were used to correct mistakes quickly. A variety of strategies from the category 'master difficult parts' were also used, with the most common being 'slow' (average=79.91%) Two strategies were evident from the category 'strategies for the conduct of practice' ('count aloud' and 'metronome') but analyses also showed that they were barely used. Lastly, three strategies were used while practising the scales, with 'focus on scales' being the highest.

Based on the video analyses, SB8 showed a preference to practise by playing at a 'slow' tempo (=79.91%), 'playing with both hands' (=72.82%), 'focusing on one scale' (=37.06%), 'starting from the beginning' (=14.67%) and 'repeating a specific part' of the piece (=12.80%). Findings from the SB8's interview enhanced these results, while his comments showed that he considered all of these strategies to be effective while working on new pieces.

> *'When I work on a new part, I usually play with the left hand only, then with the right hand, and then I play with both hands. This is a strategy that I always use when I try to learn something new. I also play the piece at a lot of tempi. I usually begin by playing the piece at a very slow tempo and then increase it gradually. When I have difficult parts or group of notes like a trill, for example, I focus on*

that separately and repeat this a lot of times by playing it initially at a very slow
tempo and then I increase the tempo gradually.'

SB8 also showed awareness of the importance of warm-up exercises. He commented that he tended to begin his practice by playing the pieces that he could play fluently as a warm-up and then he focused on the material that needed more work. This attitude showed that he had already developed high level knowledge and understanding of important elements of practice (*cf* Colson, 2012). He also showed that he was able to organise his practice sessions with a logical manner (*cf* Hallam et al., 2012).

> *'I usually play first the pieces…and then the scales. I know that they say that is*
> *better to begin with the scales so as to warm-up your fingers, but I can't (laugh)*
> *because then, I can't play the scales. I play the pieces that I can play fluently in*
> *terms of fingering, so as to warm-up my fingers and then I play the scales. Most*
> *of the times I practise like this. But there is no specific order that I will always*
> *use.'*

During the interview, SB8 also commented about the development of his practice repertoire by reporting that usage of practise strategies had changed over the years. In addition, he felt that he reached a point in which he could identify the effects and proper usage of each strategy.

> *Researcher:*   *'Do you feel that the practice strategies that you use while*
>   *practising have changed over the years?'*
>
> *SB8:*   *'Yes definitely! Over the years I have learned about the effects of*
>   *each strategy….you reach to a point when you know when you*
>   *have to use a specific strategy to improve something…Yes, they*
>   *have definitely developed over the years! But there are some*
>   *strategies that, even if you wanted to change them, you can't,*
>   *because they are basic to how you learn a piece.'*

7.6.11 Identification of mistakes

SB8 was seen to be in a position to identify all of his mistakes, as he corrected them with the use of various strategies (*cf* Hallam, 1997). When he wanted to correct a mistake quickly, he often used the strategy 'repeat note(s)', or 'start from the beginning'. In cases where he realised that he needed more significant improvement, he adopted more effective strategies that were categorised as 'focus on part', 'repeat part', 'right hand only' and 'left hand only'.

7.7   Relationship between the observed Lessons and videoed Home Practice

During the interview, the SB8 commented on the impact that the lessons could have on his practise sessions. He mentioned that the lessons usually influenced his playing positively. In addition, his teacher's guidance helped his practice to be more focused at home.

> *Researcher: 'Do you believe that the lessons influence your practice sessions in any way?'*

> *SB8:   'Yes, but not so much. I mean, sometimes I do pay attention to some things when my teacher advises me to do so. And, of course, there are important things that, if my teacher didn't advise me to do, I wouldn't. Especially at the beginning of the year, which is the period that I need more help from my teacher due to the fact that there are long-term holidays in the summer before and I usually don't practise so much…Yes, the suggestions of my teacher influence the way that I practise at home.'*

7.7.1   First Week

In the first week, TB provided 11 instructions about the scales and the examination piece. Detailed information was given about what material had to be practised and what strategies to be used (see Table 7.5). In addition, written information was also provided during the lesson. During the subsequent session, SB8 followed all the instructions (=100%). Findings, therefore, suggested that his practice was closely related to his teacher's instructions.

Table 7.5. First week's instructions and home practice sessions for SB8

	Instructions	1st
Scales	Practise the Arpeggios, legato scales in 3rds, chromatic 3rd apart.	√
	Focus on the Chromatic 6th Apart scales that presented difficulties.	√
	Practise the arpeggios that they had focused on during the lesson at a slow tempo	√
	Chromatic 3rd Apart: Practise four different combinations and play every day different combinations=starting from different notes each day.	√
First Piece	Focus on a specific part.	√
	Play at a slower tempo so as to ensure correct response to notation at a specific part.	√
	Focus at a specific part to improve a trill.	√
	Focus on tempo, dynamics and staccato.	√
	Work the beginning of the piece.	√
	Improve all trills and pedal.	√
	Work on the pedal by playing at a slow tempo → then increase gradually the tempo.	√

7.7.2 Second Week

TB provided twelve strategies verbally, while—in some cases—she also made written notes (e.g., for the scales). During the following week, SB8 used ten of the twelve recommended strategies (=83.33%). It has to be noted that during the five sessions, usage of strategies varied considerably. However, most of the recommended strategies were used at some point during the week (see Table 7.6). Overall, findings suggested that SB8 was in a position to recognise the importance of using the suggested strategies, as his practice was strongly linked with his teacher's instructions.

Table 7.6. Second Week instructions and home sessions for SB8

	Instructions	1st	2nd	3rd	4th	5th
Scales	Learn the fingering of the 6th apart scales.	√	√	x	x	x
	Focus on F#minor and G# minor 6TH apart scales.	√	√	x	x	x
	Chromatic 3rd apart.	x	x	x	√	x
	Arpeggios.	x	x	x	x	x
	Arpeggios: Variable Practice: Play with an accent the first note of each octave.	x	x	x	x	x
	Practise the arpeggios from the book so as to see the fingering while playing.	x	x	x	x	√
	Practise scales marked on the book.	x	x	x	x	√
Exam Piece	Start practice by focusing on a specific part (bars 41-48).	x	x	√	x	√
	Focus on a specific part (bars 57-75) with the LH Only: Play silent the note B of each group of notes.	x	x	√	x	√
	Focus on bars 93-105 so as to work on the phrases.	x	x	√	x	√
	Focus on bars 118-135 with the LH only to work on notation.	x	x	x	√	x
	Work on the last two pages of the piece.	x	x	x	√	x

7.7.3 Third Week

Opposite results were found for the third week, as SB8 did not follow any of the recommended strategies (average=0.00%). All instructions that TB gave (total=11) were for the examination piece, as it was the main focus during the lesson. Surprisingly, SB8 ignored his teacher's instructions, as in his session he worked only on the sixth apart scales (see Table 7.7).

Table 7.7. Third Week instructions and home sessions for SB8

	Instructions	1st
Exam Piece	Start practising by focusing on bars 201-207.	x
	Then focus on bars 215-263.	x
	Work with the Right Hand.	x
	Work on the Left Hand only at a fast tempo.	x
	Focus on the notation of the RH (bars 215-263).	x
	Variable practice: Work with accentuation when the piece contains arpeggios.	x
	Focus more on the last page and work on the details.	x
	Start practising from the fifth page: play with hands separately-work the left hand at a fast tempo, and the right hand so as to learn the melody. Focus mostly on the last two pages of the piece to learn notation. Do not start practising from the beginning of the piece.	x
	Work on the third page from bar 118-145 so as to learn notation.	x
	Focus on the bars 176-189.	x
	Practise by focusing on difficult parts and not by playing the whole piece.	x

7.7.4   Fourth Week

For the fourth week, SB8 received eight instructions about his home-based practise (see Table 7.8). Specifically, SB8 received three instructions for the scales, from which two were followed. In addition, TB recommended five strategies for the pieces and results showed that he used four of them.

Table 7.8. Fourth Week instructions and home sessions for SB8

	Instructions	1st	2nd	3rd
Scales	Work on all of the 6th Apart scales.	√	x	x
	Learn the F# minor 6th Apart scale.	√	x	x
	Work on the Major scales that begin on white and minor scales.	x	x	x
Exam Piece	Focus on a specific part.	x	x	√
	Practice by focusing on parts.	x	x	√
	Work on specific parts.	x	x	√
	Then link the two parts together.	x	x	x
	Work more on the two pages.	x	x	√

7.7.5   Self-Regulating behaviour

SB8 preferred to practise the piece by dividing it into parts instead by playing through the whole thing. Based on Hallam's model (1997), this is the fifth (out of six) stage of the development of practice strategies. Overall, findings illustrated that SB8 had already developed knowledge and understanding of a range of practice strategies. In all of the sessions, he used effective strategies that either were suggested by his teacher, or alternate strategies that he considered to be helpful. Apart from the third week when he chose to focus on other material from those that his teacher advised him to do, he generally showed an understanding of the importance of practising the elements that were identified as difficult during the lessons. In all of the cases, he self-regulated his practise, as he was able to address to set short-term goals based on the difficulties that emerged, and to achieve them by the end of each session.

Findings from SB8's interview showed that he was aware of his self-regulating behaviour, as he commented that he often preferred to practise by using alternative strategies from his own practice repertoire. As he explained, he felt that at times, these strategies worked better for him rather than those suggested by his teacher.

> *Researcher:* *'Do you always follow the instructions of your teacher in relation to future practice?'*
>
> *SB8:* *'In general, yes, I do. But there are times that I choose not to follow precisely all of her instructions…I might also use other strategies…In general, I prefer doing things on my own way… I might not follow her instructions during the week. For example, she might advise me to practise a part by playing with separated hands, but I would choose to focus on that part by repeating with both hands.'*

7.7.6   Summary

Overall, SB8's practise was mainly related to his teacher's instructions, apart from in the third week. He also chose to use additional strategies in addition to those that were suggested, with the aim to make efficient progress by the end of the session. During the four weeks, he received 42 instructions from his teacher, from which he followed 26 (=61.45%).

7.8 An overview of the two Grade 8 cases

7.8.1 What goes on in the lesson?

In regard to the material that was used, the two teachers used a similar approach, as they had a prime focus on the selected pieces in the majority of their lesson times (three out of four lessons). However, differences were found in the pattern of elements that they used for each student. TA began her lessons by focusing on the pieces and then on other material. In contrast, TB often showed a preference on starting her lessons by focusing on the scales, and then on the pieces. In general, the teachers focused on the ABRSM syllabus materials during their lessons. This was previously reported to be a common behaviour in Cyprus, as this ideology is adopted by the majority of the private music conservatories (Skoutella, 2015; Teklos, 2011).

Similar approaches were also found for the methods that the two teachers used so as to encourage strategies for effective practice. Both teachers recommended strategies mainly verbally, usually while they were providing feedback to the students. However, it has to be noted that TB gave more pieces of advice (total=537) compared to TA (=360), while she also spent a relatively higher amount of time on advice in her lessons (=19.36%). In contrast, TA paid less emphasis to demonstrating specific strategies while teaching (=11.38%). In addition, they promoted strategies non-verbally, although this method was hardly evident Results showed similarities for the time that they spent on this method, as well as its frequency in the lessons.

In addition, both teachers barely referred to previous practice during the lessons, although TB spent slightly more time (=1.69%) compared to TA (=0.75%). Any reference to previous practise were strongly influenced by the performance of the student during the lesson. The teachers also used similar approaches so as to gather information about previous practice ('what' and 'how' the student practised). The only difference was that TB also referred to 'practice time'.

The teachers also referred to future practise, so as to provide instructions to their students about home practice. TB gave more pieces of advice (total=85) about material that had to be practised (='what'), followed by recommendation of specific strategies (='how'), reference to 'practice time' and, lastly, explanations about the effects of the strategies (='why'). Slightly different results were found for TA (total=20), as she focused more on recommending strategies (='how'), followed by 'what', 'practice time' and 'why'.

Similarities for written information were noted for the two teachers, as neither of them used a notebook to provide details about future practice. Instead, they made brief notes on the scores about how and what to practice. Nevertheless, for both teachers this behaviour was barely evident in terms of time, and it was mainly used along with verbal instructions.

7.8.2   What goes on at home?

The two students spent a different amount of time practising at their homes. SB8 carried out twice as many practice sessions compared to SA8 and they were also longer in length. In both cases, the quantity of the student's practice was strongly influenced by external factors such as flexibility of available time during the afternoon (e.g., other private lessons, school homework). Results were identical to those reported for Grade 1 and Grade 5 students, indicating that this was possibly a current issue for students who learn to play an instrument at private music conservatories in Cyprus. These findings are related to previous suggestions that students' weekly schedules can become overloaded due to private lessons after school time. Parents in Cyprus often spend a lot of money on private tuition for different subjects (e.g., mathematics, English lessons) so as to enhance their children's learning (Lamprianou and Lamprianou, 2013). However, this may cause other problems, such as limiting the opportunities for the children to be productive in subjects where they seem to have talent – in terms of the skill levels already achieved. In the cases of music, for example, individuals need to devote high amounts of time in practising so as to achieve excellence (Ericsson et al., 1993; Sosniak, 1985). A busy schedule can, therefore, decrease possibilities for individuals to achieve a high level of musical skills.

Another factor that influenced both Grade 8 students was their current stage of learning a piece, as both students reported increasing their practise when they were working on final adjustments. Lastly, anxiety was inferred to be a factor that increased their practice sessions. This was reported to be a common behaviour at times when an event (e.g., examination or concert) is approaching (*cf* Papageorgi et al., 2013).

Similarities were also found in relation to the methods and the strategies that were used. SA8 and SB8 showed knowledge and understanding of 19 different strategies and they also self-regulated their practice. Most of the strategies that the two students used were similar, even though they were working on different pieces. In addition, they used a similar method whilst practising the pieces, as they worked on them mainly by focusing on specific parts rather than playing through the whole piece.

7.8.3 How does home practice compare to the lesson?

Differences were also found in relation to the student's preferences to follow instructions of their teachers. SA8's practise was less related to the instructions that he received, as he practised mainly by choosing strategies from his own practice repertoire. Results suggested that he was more independent as a learner as he was achieving the desired result when facing difficulties that emerged. In contrast, SB8's practice was strongly linked to his teacher's instructions. Self-regulation behaviour was also noted, as he also chose to use additional strategies that aided his progress by the end of his practice sessions. However, it has to be noted that the amounts of instructions given differed between the two students. During the four weeks, TB (total=42) gave more than twice as many as TA (total=11). This was perhaps a factor that had an impact on the student's behaviour while practising. Overall, results suggested that even though they were considered to be at the same stage of the development of practice (Hallam, 1997), each Grade 8 student had already developed unique practice habits so as to accomplish the desired result.

Chapter 8
Discussion

8.1 Introduction

Chapter 8 comprises a comparison among the three levels of expertise as reported in the previous chapters. It takes into account all practice-related elements that were found in the studio-based lessons and the home-based practice sessions. The comparisons that were made were based mainly on an analysis undertaken using the software Excel and SPSS. The two software programs were used to examine the relationship between the practice-related elements that were found in the video analysis (e.g., advisory comments) and the students' level of expertise.

The chapter presents figures (X Y Scatter charts) that were created in the Excel software to calculate trend lines for the three different Grade levels. In addition, it reports Pearson's correlations results that were used to examine the relationship between the student's level of expertise and the practice-related elements. T-tests' results are also outlined by discussing differences and similarities among the two teachers. Lastly, a comparison of how precisely instructions were followed by the students of each teacher in the subsequent practice sessions take place. Overall, the chapter focuses on each element separately by presenting all the results of instances, time percentages and averages. A critical discussion of the findings is also part of Chapter 8.

8.2 Research Question One: What is the nature of the relationship between one-to-one studio-based instrumental lessons and home-based private practice?

The first research question was created to test three hypotheses, each one concerning the three different levels of expertise. Various elements of the lessons were examined to answer this research question, with specific interest in any teaching approaches that were related to the home-based practice sessions. The students' level of expertise was also investigated as a factor of influence.

- H2: Grade 1 piano tutors provide explicit practice guidance orally in the lesson and back this up with written guidance for home practice.
- H6: Grade 5 piano tutors provide some explicit practice guidance orally in the lesson and do not use a notebook, but back this up with written guidance on the score for home practice.

- H11: Grade 8 piano tutors provide some explicit practice guidance orally in the lesson and do not use a notebook, but may mark the score.

8.2.1 Material used in Lessons

The prime foci for the lessons were the musical pieces, with the exception of two instances (2/24 lessons) where the main emphasis was on the scales before moving on to the pieces. However, in some lessons, a focus on scales was not evident at all (5/24 lessons). In addition, 'sight reading' and 'aural tests' varied with each lesson.

In general, the two teachers emphasised the importance of practising the scales. In almost all of the lessons (19/24) teachers encouraged their students to include scales in their practice sessions. In some instances, TA was found to be suggesting more creative strategies so as to motivate one of her students to practise. These strategies included 'play with closed eyes', 'play by using a swing rhythm', or 'different accents.' Past research on instrumental and vocal teaching demonstrated that teachers are aware that students are often unwilling to practise scales (Haddon, 2009). In addition, findings from a study undertaken by Haddon (2009), demonstrated that teachers needed to use creative approaches to motivate students to practise scales. Exercises based on scales were written down as pieces by the teachers to make the process more fun for the students. Creating a productive and musical learning context (Harris, 2006) with the use of exam material can thus motivate students to practise material often described as uninteresting.

8.2.2 Patterns of elements in lessons

Differences in teaching style emerged from an analysis of the ways that each teacher approached the lessons. Data indicated a sequence in the pattern of elements that TA applied in the lessons of each of her students (see Chapters 5, 6 and 7). This suggests that the structure of the lessons was an important element for TA, as she used a more fundamental approach for their organisation. In contrast, TB did not exhibit a similar tendency to organise based on a specific sequence her lessons, as she employed a different pattern in each case. However, the student's level of expertise seemed to influence her approach, as used the same pattern for most of the lessons with her Grade 8 student (see section 7.3.2).

8.2.3 Prevalence of advisory comments to use specific strategies

'Advisory comments' were found to be one of the main teaching approaches used by TA and TB. Similarities were found between the two teachers, as they both combined this approach with demonstration on the piano. They also used this approach to provide feedback on what needed an improvement, as well as instructions related to future practice.

8.2.3.1 Instances of advisory comments

In all of the lessons, both teachers were recommending strategies regularly, based on the perceived needs of each student (see Table 8.1). However, results indicated differences between the two teachers in relation to their students' Grade level (see Figures 8.1 and 8.2 below). Pearson's correlation was computed in the Excel software to assess the relationship between the Grade level and the number of instances of advisory comments for each teacher. Analyses revealed a strong link between the advisory comments and the Grade levels. For TA, the number of pieces of advice decreased across the three Grade levels (see Figure 8.1). In contrast, TB increased the number of pieces of advice with Grade level (see Figure 8.2). There was a strong negative correlation between the two variables in TA's data (as indicated by the trend line in Figure 8.1) (r=-.644, n=12, p<.05), suggesting that more experienced students received significantly fewer instances of advisory comments from this teacher. In contrast, there was an even stronger positive correlation between the variables of Grade level and advisory comments instances in TB's data (r=.714, n=12, p<.01), indicating that she increased the number of feedback instances significantly for more experienced students. Based on the results, the trend line was better fit for TB compared to TA, who provided more advisory comments to higher-level students.

Table 8.1. Instances and time percentages of advisory comments related to the students' use of a specific strategy

	Instances of advisory comments											
	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	169	151	124	108	115	141	145	119	100	54	117	89
TB	102	79	63	52	152	111	136	57	129	142	119	147
	Time percentages in the lessons for advisory comments (%)											
	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	23.63	12.33	15.36	11.45	9.26	15.76	13.03	9.57	8.52	11.14	8.34	11.38
TB	15.14	19.19	11.21	12.32	19.17	16.81	23.62	20.52	15.12	18.07	19.36	11.59

Nevertheless, when considering the data in the lower section of Table 8.1 concerning the percentage of time used (see Figures 8.1 and 8.2), the trends were slightly different. TA had the tendency to take up less time across lessons for advisory comments related to both Grade level and the progress in the set of four lessons for each pupil. In contrast, although TB increased the number of advisory comments instances by Grade level, she tended to take up the same amount of time, irrespective of level. This implied that she was providing more, but shorter advisory comments as Grade levels progressed. Results suggested that the amount of advice that each teacher provided was significantly influenced by the student's level of expertise. Video data analyses also indicated positive factors that influence usage of advisory comments. In both cases (TA and TB), this method was strongly linked with discussions on what needed improvement, based on the students' performance during the lessons (Baughman, 2016; Barry, 2007).
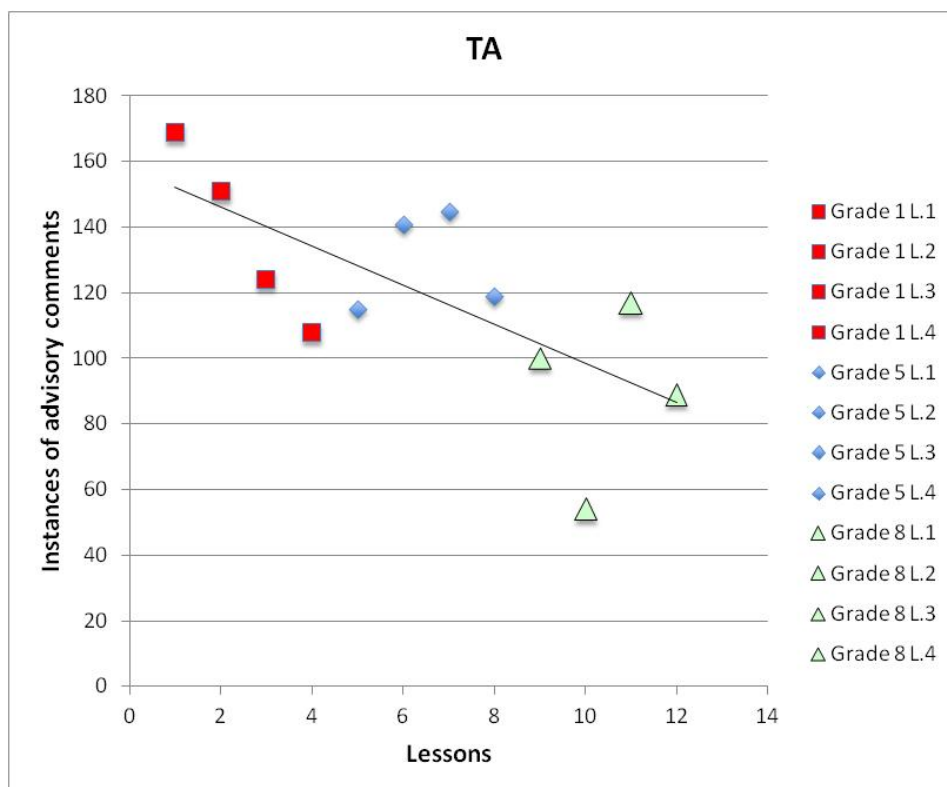
Figure 8.1. Instances of advisory comments in each lesson for TA by pupil's Grade level
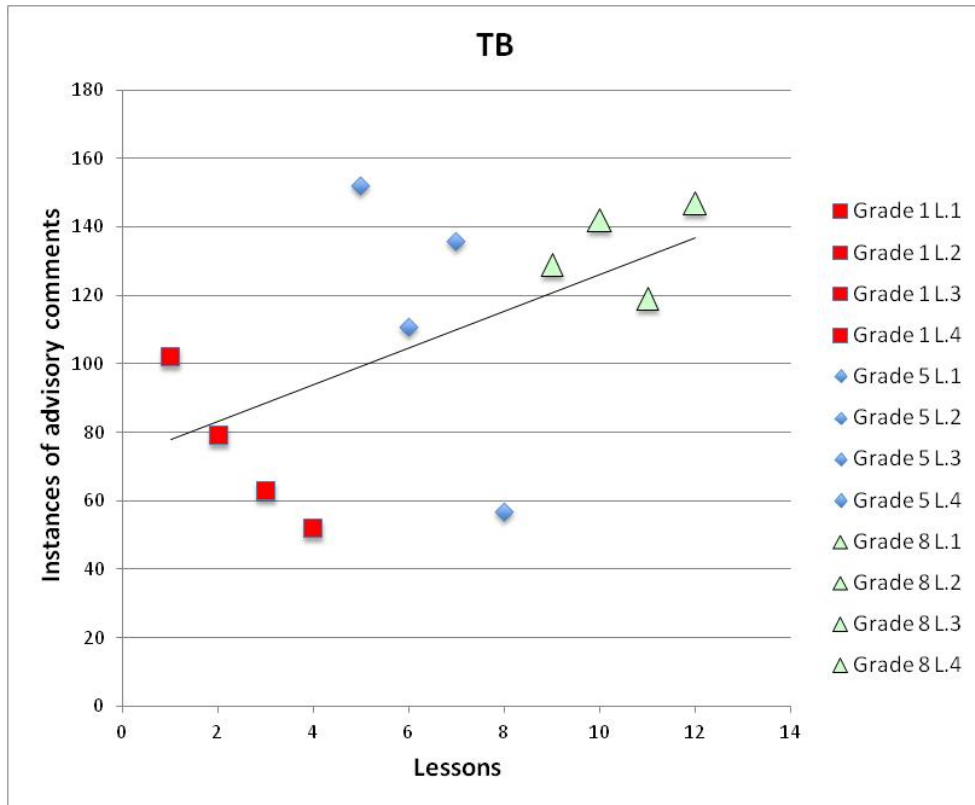
Figure 8.2. Instances of advisory comments in each lesson for TB by pupil's Grade level

Marked differences were found in relation to the highest total amount of advisory comments that each teacher provided and the students' level of expertise (see Table 8.2). Analyses showed that TA gave more advisory comments to her Grade 1 student (total=552), whilst TB provided more directions to her Grade 8 student (=537). Results also suggested that the students' Grade level was a factor influencing the number of advisory comments provided during the lessons (see Table 8.2).

Table 8.2. Instances of advisory comments related to the students' usage of a specific strategy

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	169	151	124	108	115	141	145	119	100	54	117	89
Total number of instances	552				520				360			
TB	102	79	63	52	152	111	136	57	129	142	119	147
Total number of instances	296				456				537			

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Further analyses verify the above findings, as the examination of the three Grade levels reveals that there were significant correlations between the student's level of expertise and the quantity of advisory comments (TA: r= -.644, n=12, p<.05; TB: r=.714, n=12, p<.01). This can be verified from the results that were found for each week separately, as the total numbers for each lesson varied (see Table 8.1). Different results were found for all six case studies, as the teachers were providing different amounts of information to each of their students (see Figures 8.1 and 8.2). Specifically, TA provided more information to the lowest Grade level (n=552), followed by Grade 5 (n=520) and lastly, Grade 8 (n=360). Reverse results were found for TB, as she gave more advice to her Grade 8 student (n=537), followed by the lower Grade levels, which were Grade 5 (n=456) and Grade 1 (n=296).

The contrast between the pedagogical approaches that the two teachers applied can also be seen in Figure 8.3. Results indicated that TA perceived that, lower and younger students needed more support verbally, due to their limited experience as learners. She thus provided a great amount of information to her lower-level student, so as to model various practice strategies (Koopman et al., 2007; Hart, 2014). In contrast, TB's methodology seemed to be based on the idea that practice-related discussions are more essential in the lessons of higher-level students. Possible factors of influence were the level of difficulty of the pieces in combination with the student's progress, as TB was found to be modelling a range of strategies in the lessons. Previous research has also identified that the student's progress is strongly related to the teaching approaches (Barry, 2007; Baughman, 2016; Carter, 2010; Prewitt, 2013). One of the studies that revealed such results was undertaken by Siebenaler (1997) in an effort to investigate the characteristics of effective teaching in piano lessons. This study showed that the most effective lessons included frequent discussions about the progress of specific tasks assigned by the teacher. In such cases, detailed information of what needed to be corrected was given to the students, along with provision of strategies for improvement. Similar results were found amongst the participants in this doctoral study, as their improvement in between the lessons seemed to influence the usage of advisory comments.
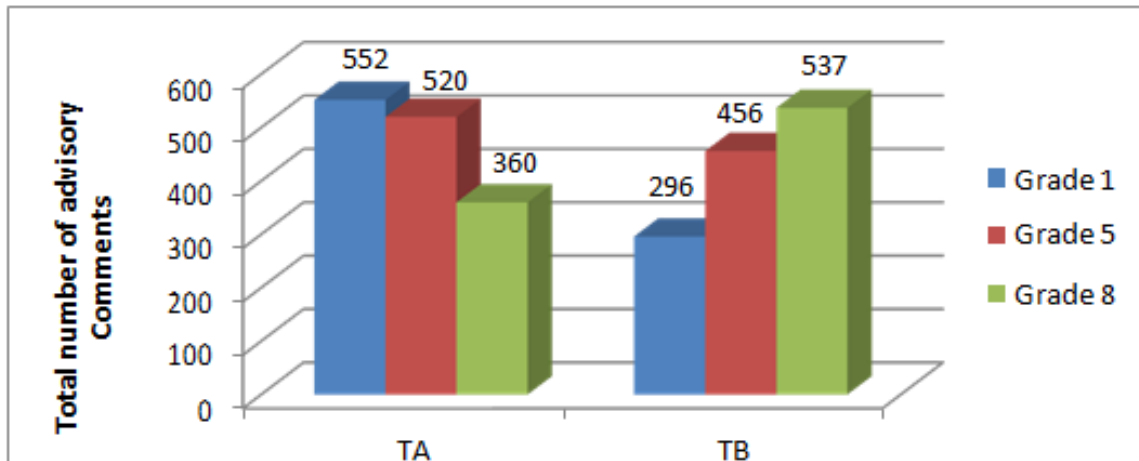
Figure 8.3. Comparison of the total number of advisory comments presented as a chart

8.2.3.2 Percentages and average time of advisory comments

Data suggested that both teachers spent a relatively high amount of time on modelling strategies verbally. However, as Table 8.3 presents, there was diversity in the amount of time that each teacher spent on this approach. Percentages in the case of TA consistently dropped as the level of the student's expertise increased, suggesting that she perceived that lower-levels students need more support verbally so as to develop their practice skills. As video analyses showed, discussions included longer explanations, plus demonstration on how to use strategies.

Table 8.3. Percentages of total time spent in the lessons for advisory comments

Grade 1				
	L.1	L.2	L.3	L.4
TA (%)	23.63	12.33	15.36	11.45
TB (%)	15.14	19.19	11.21	12.32
Grade 5				
TA (%)	9.26	15.76	13.03	9.57
TB (%)	19.17	16.81	23.62	20.52
Grade 8				
TA (%)	8.52	11.14	8.34	11.38
TB (%)	15.12	18.07	19.36	11.59

Slightly different results were found for TB, as more time was spent during the lessons of the Grade 5 student, while time percentages for the Grade 1 and Grade 8 students were rather similar. Data suggested that in the case of TB, the perceived needs of the students were perhaps more of the main factor of influence rather than the student's level of expertise. In addition, data showed that TB spent higher amounts of times on providing advisory comments during the lessons compared to TA, particularly to the higher Grade students (Grade 5 and 8). Qualitative data from the TB's interview indicated that this behaviour derived from the teaching methodology applied by the teacher (see section 5.6.3)

A Pearson's correlation was also computed to assess the relationship between the Grade level and the time percentages of advisory comments for each teacher. The analysis showed a significant positive relationship between the Grade levels and the advisory comments for TA, as the time percentages for advisory comments decreased across the three Grade levels (TA: $r=.714$, $n=12$, $p<.01$). A closer analysis of the four lessons of TA indicated another possible factor that influenced the amount of time that was spent on advisory comments; the material on which the lesson focused. As Figure 8.4 shows, during the first lesson of SA5, the teacher spent a relatively small amount of time on advisory comments (=9.57%), followed by an increased amount of time in the following three lessons. Video analysis showed that, during the first lesson, equal time was spent on the scales and the pieces, while in the following three lessons the focus was mainly on the exam pieces. Even though there was a gradual decrease in comments from the second lesson, data indicated that TA spent more time on advice while working on the pieces. However, data do not suggest that the musical material can directly influence time spent on advisory comments, as results did not indicate this for every student.

Data from analysing the four lessons of TB's Grade 8 student showed another interesting point (see Figure 8.5). In the first three lessons, there was an increase in the time used on advisory comments, while in the fourth lesson there was a sudden drop. By taking a closer look at the video data, they revealed that the musical material and the short-term goals influenced the amount of advisory comments. The lesson focused initially on the scales and then the student spent more than the half of the lesson time trying to improve a specific part of the focus piece, with his teacher intervening less, implying that she was encouraging her Grade 8 student to work more independently rather than constantly feeling a need to make advisory comments. Perhaps, this was also used as an opportunity by TB to observe her student's practice behaviours so as to examine how to help him best. Results were in line with previous literature, suggesting that one of the key roles of instrumental teachers is to facilitate their students to develop their independency as learners (Hallam, 2006). Findings of a study undertaken by Gaunt (2005), for example, showed that this seemed to be one of the main goals for teachers of higher-level students. In an effort to emphasise the importance of this argument, a

participant commented that 'your role is to get rid of your role'. Reducing advisory comments as learners gain more experience can thus be related to a teacher's beliefs regarding the need to enable student independency.

Pearson's correlations undertaken on the small number of participants in the present research also support these arguments (see Figures 8.4 and 8.5). Data analyses suggest that the student's level of expertise was a factor influencing the amount of time dedicated to advisory comments. There was a strong significant relationship for TA (r=.714, n=12, p=.009), suggesting that the amount spent on advisory comments decreased as the level of expertise increased. However, different results to this trend were found for TB (r=.223, n=12, p=.486), with the relationship being non-significant and moderate. This teacher provided 'softer' and more brief advisory comments to her lower-level students. Siebenaler (1997) found similar findings while studying teachers of young and adult students. Results suggested that teachers of younger students may try to 'soften' instructions in relation to what needs improvement by using more questions instead.
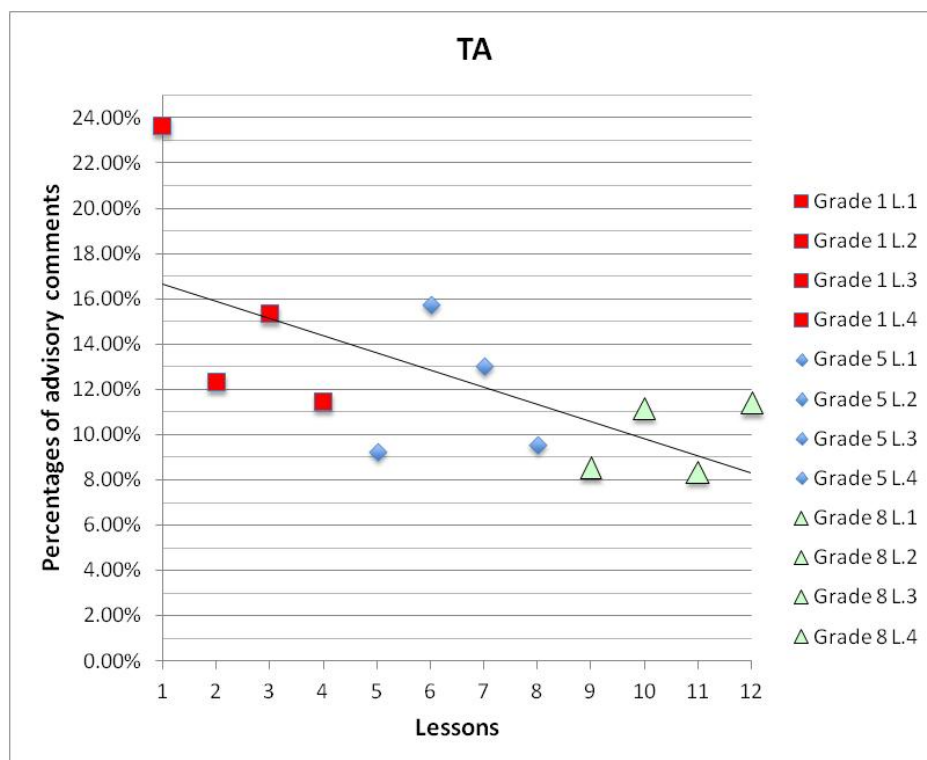
Figure 8.4. Percentages of advisory comments in each lesson for TA's pupils' Grade levels in terms of the proportions of time within the lesson
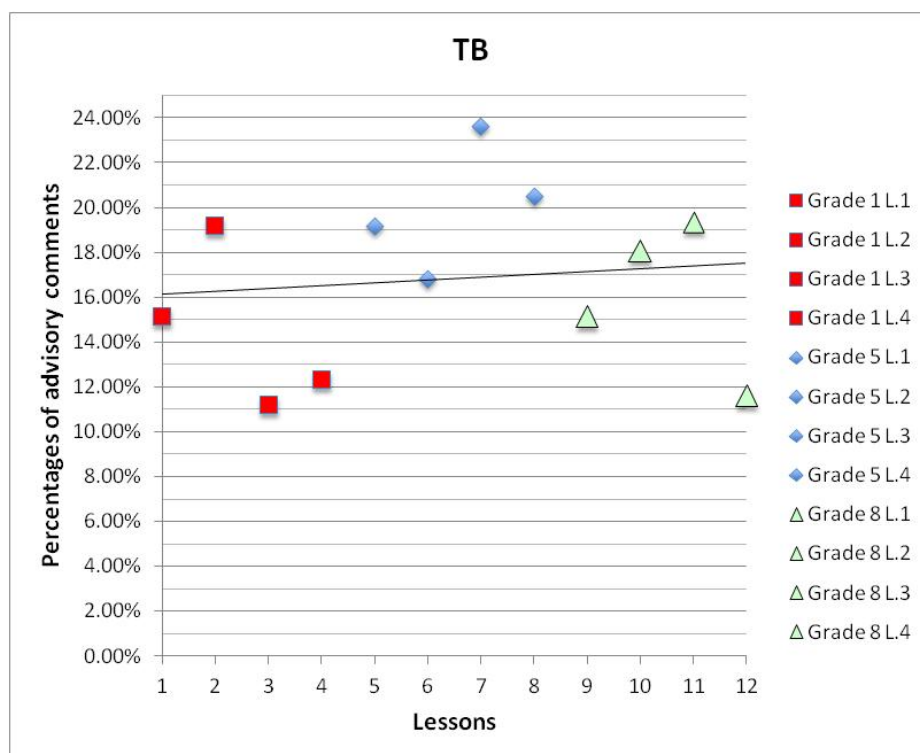
Figure 8.5. Percentages of advisory comments in each lesson for TB's pupils' Grade level in terms of the proportions of time within the lesson

The total number of teacher utterances related to advice were also examined, so as to reveal information about how much time was spent on this behaviour by each teacher overall (see Table 8.4). These results were found to be slightly different when compared to the total number of times that the teacher provided advisory comments (see Figures 8.1 and 8.3). Examination of the highest averages indicated that TA spent more time on advising her Grade 1 student (=15.69%), while TB's highest average was found for the Grade 5 student (=20.03%). Similar results to the total number of advisory comments (see Figure 8.1) were found for TA, as she also provided the highest total average of advice statements to the Grade 1 student (see Figure 8.4). Contrasting results were found for TB. Although, in total, she provided more comments to her Grade 8 student, the highest amount of time was essentially spent on providing advisory comments for her Grade 5 student (see Figure 8.5).

Data from the lesson observations, as well as from TB's interview, suggested that this behaviour was due to the perceived needs of SB5; the teacher spent the highest amounts of time on working with this student by suggesting specific strategies to improve specific elements of the pieces and the scales. Qualitative data analysis of the videos during the lessons suggested that TB was promoting specific strategies to her Grade 5 student with the aim to improve particular elements of the pieces by the end of each lesson. TB spent a relatively high amount of time on encouraging isolation of difficult parts in order that the student

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work on specific elements of the focus pieces. One example was when TB spent up to six minutes of the third lesson asking her student to repeat a trill until an improvement was evident. Results thus suggest that the progress of the student influenced the average time spent on advisory comments by his teacher. It has been argued that it is extremely important for the teachers to provide support during lessons, as students have the tendency to model their practice based on lesson activity (Koopman et al., 2007).

Table 8.4. Time percentages and averages per Grade for advisory comments across all observed lessons

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
Teacher A (%)	23.63	12.33	15.36	11.45	9.26	15.76	13.03	9.57	8.52	11.14	8.34	11.38
Average	15.69%				11.90%				9.85%			
Teacher B (%)	15.14	19.19	11.21	12.32	19.17	16.81	23.62	20.52	15.12	18.07	19.36	11.59
Average	14.47%				20.03%				16.04%			

A comparison between the two teachers on the average time that was spent on advisory comments suggested that the pedagogical methodology used by each differed. Table 8.4 shows that TA had a tendency to spend more time on advising her youngest student who, at the time, was in her early stages of musical development (*cf* Papageorgi et al., 2010). Overall, time spent on this behaviour tended to drop as the Grade level increased. Results for TB showed that time spent on advisory comments appeared to be based mostly on the needs of the students and their improvement over time.

8.2.4 Non-verbal advice related to specific practice strategies

Data analysis revealed that both teachers promoted strategies non-verbally during their lessons (e.g., by the use of body language). Findings were consistent with previous studies, which showed that non-verbal support is often used as a method to provide information about practice. Simones, Schroeder and Rodger (2015), for example, found a positive relationship between verbal and non-verbal approaches, as they found that usage of gestures occurred more during the provision of practice suggestions.

8.2.4.1 Instances of non-verbal advice

Video data from the lessons revealed that non-verbal advice was much less evident, suggesting that the teachers did not use this teaching technique regularly (see Table 8.5). Yet, despite its relative rarity, it did nonetheless feature to some extent in all but two of the lessons. Both teachers used demonstration on the piano, singing, as well as gestures and body language with the aim to promote different awareness and strategies, but mainly to assist error correction (e.g., repeat single note).

Table 8.5. Instances of non-verbal advice to use a specific strategy

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	22	22	18	9	11	31	0	13	23	8	15	9
TB	9	8	6	8	13	0	26	3	13	16	17	20

Findings suggest that, in all of the instances, students responded positively to this approach, including the least experienced Grade 1 students. It has been suggested that non-verbal behaviour and particularly visual cues, can enhance the effectiveness of teaching (Zhukov, 2012). Previous research suggested that the teachers' non-verbal sensitivity can have a strong impact on teaching effectiveness. A study undertaken by Kurkul (2007) investigated verbal sensitivity by examining participants' face, body, and tone of voice as tools for non-verbal communication. Results showed that non-verbal sensitivity had a strong influence on students' perception of the lesson's effectiveness. Based on its results, this study raised one main concern, namely the student's ability to interpret their teachers' non-verbal advice. However, this was not the case for this doctoral study, as video data analyses revealed that all participants were able to make sense of each of their teachers' non-verbal cues.

A Pearson's correlation analysis was undertaken to examine the relationship between the Grade level and the instances of non-verbal advice during the two sets of four lessons. Figures 8.6 and 8.7 present results for each teacher separately, illustrating that there was a difference between the two. The analysis showed a non-significant relationship between the Grade levels and the non-verbal advice, both for TA (r=-.210, n=12, p=.513) and for TB (r=.493, n=12, p=.103). Results suggested that, in these instances, the level of student expertise was not a factor of influence in the usage of non-verbal advice.
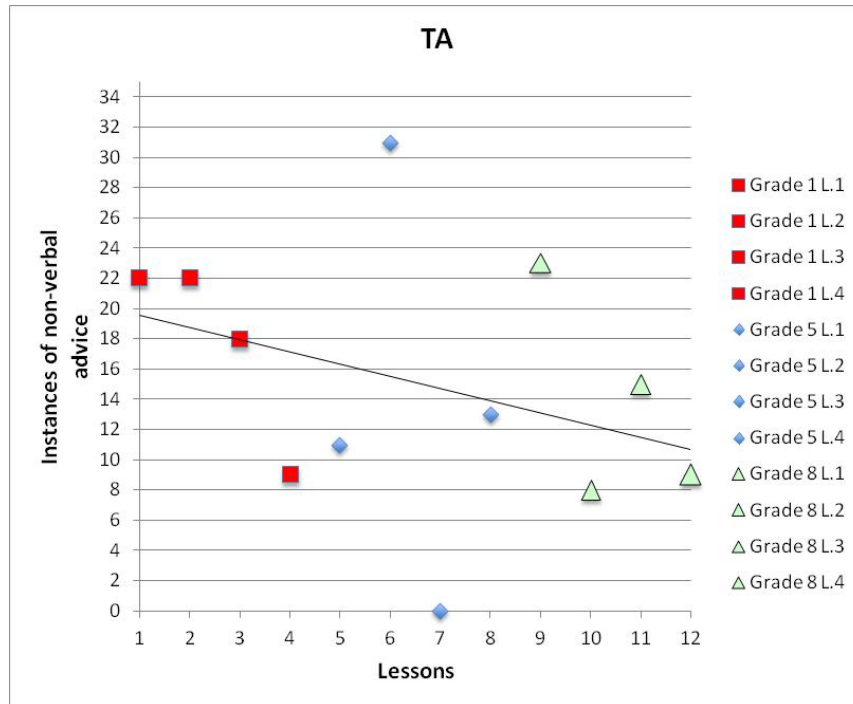
Figure 8.6. Instances of non-verbal advice in each lesson for TA by pupil's Grade level
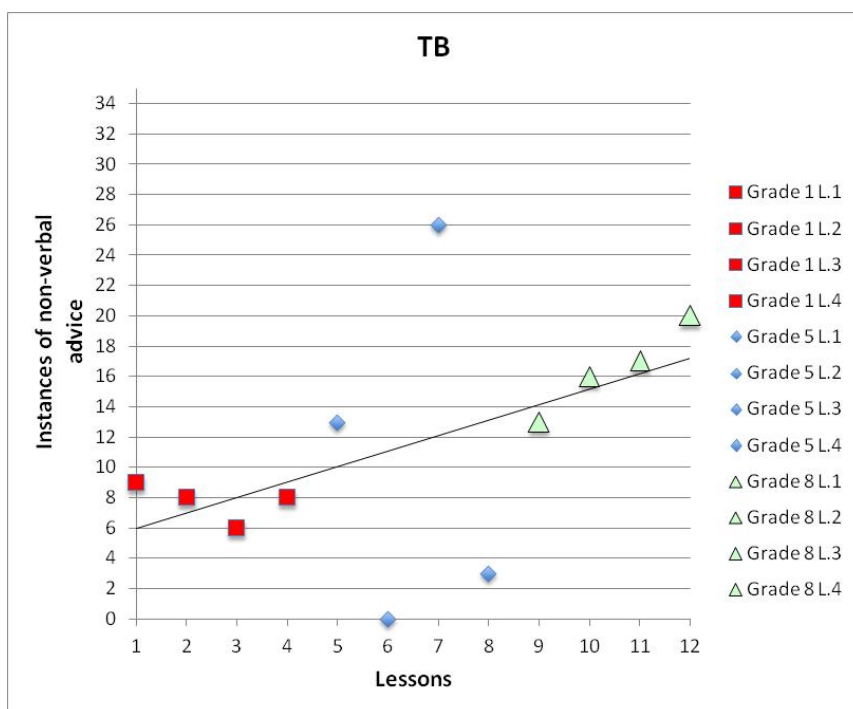
Figure 8.7. Instances of non-verbal advice in each lesson for TB by pupil's Grade level

By taking a closer look at the four consecutive lessons of SB8, an increase among them was identified. Qualitative data analysis suggested that, in each of the cases apart from one, non-verbal behaviour was used to indicate a mistake in not following the notation correctly. This behaviour was also used as an encouragement to use error correction strategies (e.g., repeat chords). Video analysis showed that one possible factor influencing the application of this method was the musical material used at that time. When the lesson's focus was mostly on the piece, this behaviour was found to be more evident. Thus, behaviour might be related to the practice itself, with one question being raised here: 'How well does the student know the piece?'

Qualitative data analysis of TB's Grade 1 student supports this finding. Figure 8.7 shows a decrease on the usage of non-verbal advice with a slight increase in the last lesson. The analysis indicated that non-verbal advice was evident during the time that the focus of the lesson was on specific pieces of music. Once again, TB used non-verbal advice to encourage correction of mistakes mainly related to her student not following the notation. Lastly, data from both Grade 5 students support this finding. Data shows that both teachers demonstrated a wide variation in non-verbal behaviours with the Grade 5 students (see Figures 8.6 and 8.7). Qualitative analysis showed similar findings, as both teachers used non-verbal advice mostly for pieces that needed more improvement. This suggests that this behaviour was possibly linked with the student's level of knowledge of the piece and the practice that was undertaken before the lesson.

The total numbers of instances of non-verbal advice were also examined, as this was deemed to aid an understanding of the frequency of non-verbal behaviour for each teacher and each Grade level (see Table 8.6). Results showed that, even though non-verbal feedback was used in almost all of the lessons, there was no relationship between the highest total amount and specific level of pupil expertise. TA used non-verbal advice more often in the lessons of her Grade 1 student, with the total amount being 71 times. In contrast, TB provided more non-verbal advice to her highest-level student (Grade 8) at 66 different times (see Table 8.6).

Table 8.6. Total number of instances of non-verbal advice for all observed lessons

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	22	22	18	9	11	31	0	13	23	8	15	9
Total number of instances	71				55				55			
TB	9	8	6	8	13	0	26	3	13	16	17	20
Total number of instances	31				42				66			

Table 8.6 presents the total number of non-verbal advice events, indicating a noticeable difference between the two teachers when it comes to Grade 1 students. At Grade 1, the total number of non-verbal feedback behaviours for TA was 71 times. A considerably lower number was found for TB, with the total number being 31 times. In addition to the display in Table 8.6, Figure 8.8 below shows the same results in a chart, demonstrating the opposite results for the two teachers. Overall, results suggested that the Grade level of the students influenced in a different way the teacher's decision to use non-verbal advice while teaching, showing that other factors may have contributed on this decision.
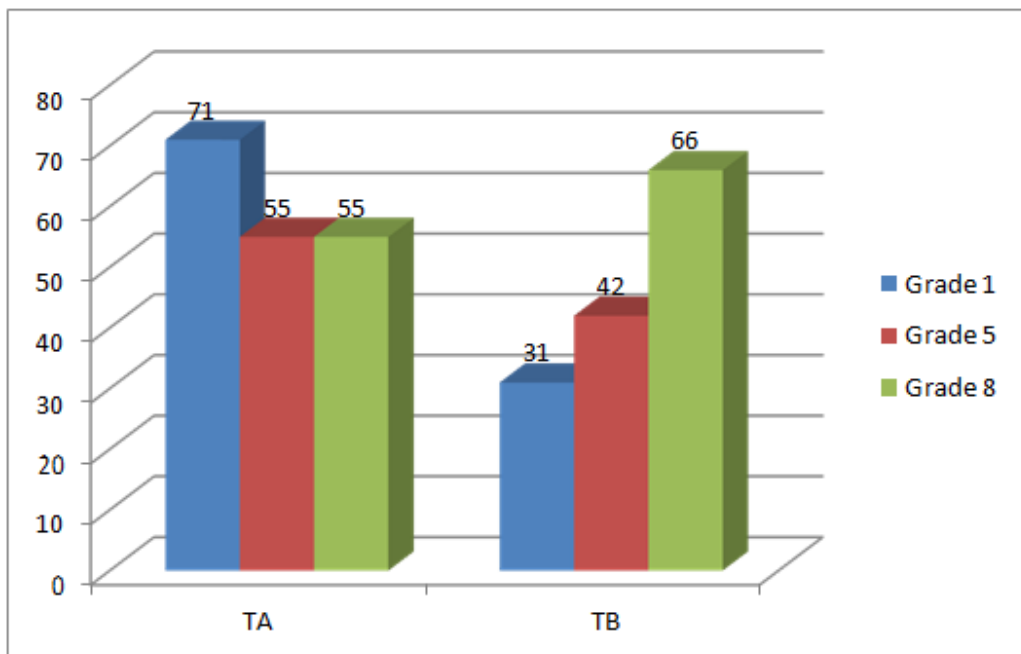
Figure 8.8. Total number of instances of non-verbal advice for all weeks by teacher and Grade level presented as a chart

8.2.4.2 Percentages and average time of non-verbal advice

The time percentages of non-verbal advice were also examined. Results showed that both teachers spent less than 2% of the total time in lessons encouraging strategies non- verbally. Table 8.7 presents results for each lesson separately, indicating that non-verbal advice was not a priority, conscious approach for either of the teachers.

Table 8.7. Time percentages of total lesson time for non-verbal advice

Grade 1				
	L.1	L.2	L.3	L.4
TA (%)	1.01	1.55	0.97	1.21
TB (%)	0.33	0.35	0.42	0.47
Grade 5				
TA (%)	0.52	1.40	0.00	0.58
TB (%)	0.76	0.00	1.82	0.40
Grade 8				
TA (%)	0.97	0.85	0.72	0.86
TB (%)	0.46	0.52	0.69	0.72

The relationship between the Grade level and the time percentages of non-verbal advice was also examined (see Figures 8.9 and 8.10). A Pearson's correlation analysis showed a non-significant moderate relationship for TA (r=.220, n=12, p=.491) and a weak negative relationship for TB (r=-.383, n=12, p=.220). In both cases, results were found to be non-significant, suggesting that the level of expertise did not have an influence over the usage of non-verbal advice. Specifically, the averages found for TB were lower when compared to TA, although results did not differ to a large extent (see Table 8.8).
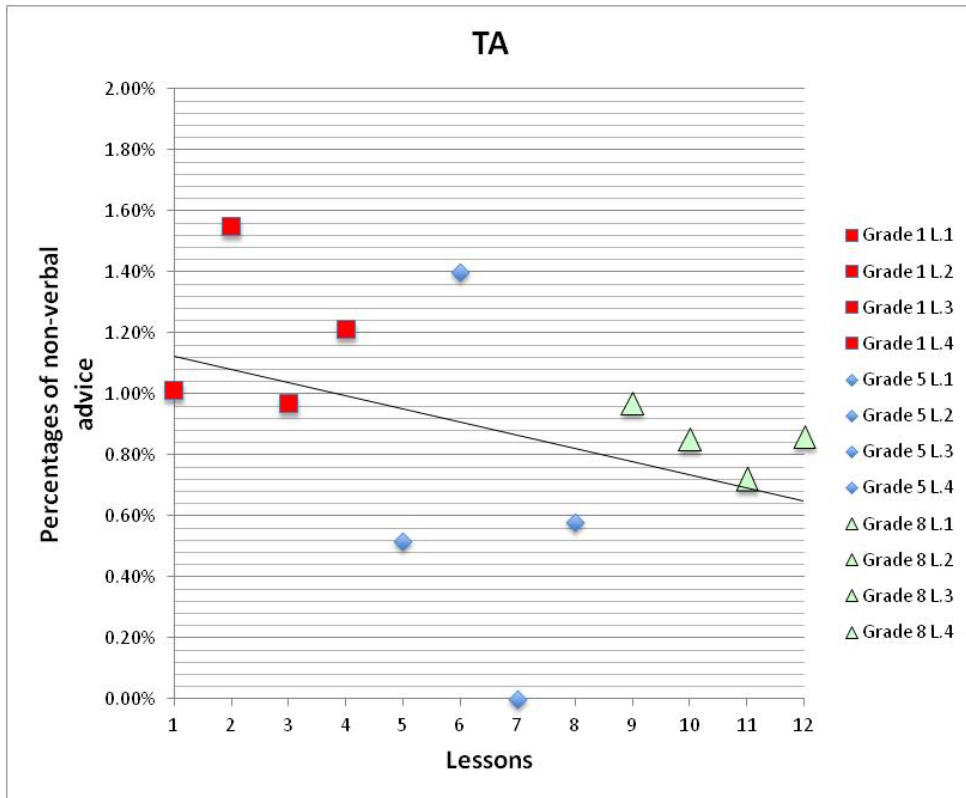
Figure 8.9 Time percentages of non-verbal advice in each lesson for TA by pupil's Grade level
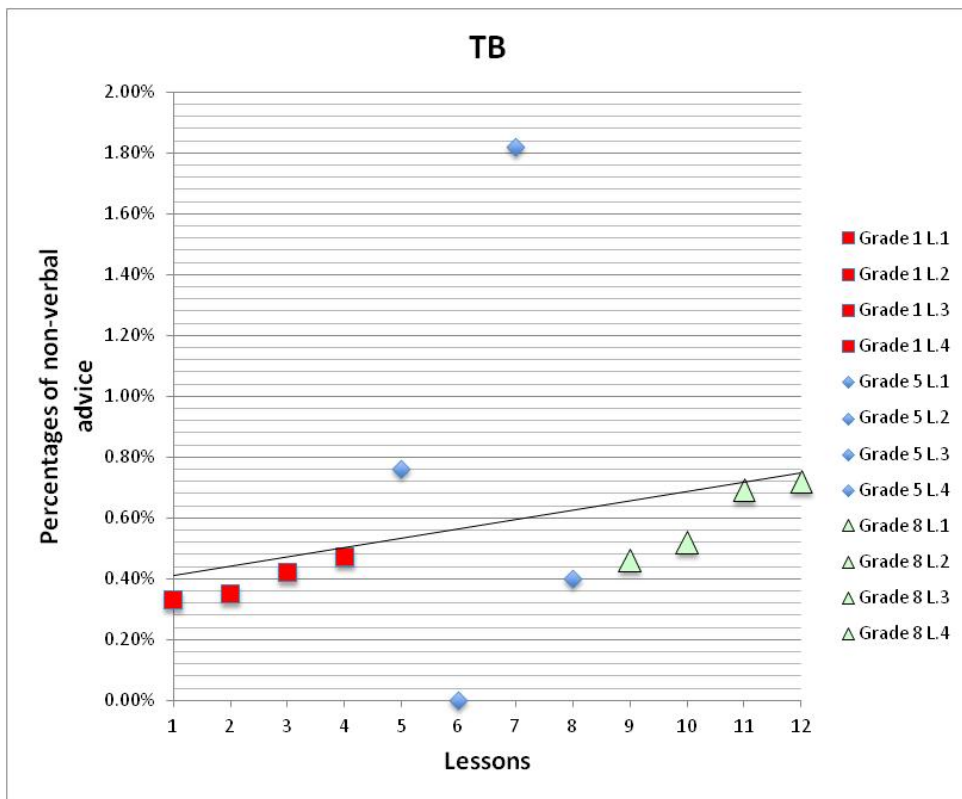
Figure 8.10 Time percentages of non-verbal advice in each lesson for TB by pupil's Grade level

Video and interview analyses showed that both teachers claimed to be using demonstration on the piano so as to enhance their discussions during the lessons (e.g., see sections 5.3.3 and 6.3.3) In addition, behavioural analysis revealed that this form of non-verbal advice was mainly used as the fastest way to correct their students' mistakes.

Table 8.8 Average time of non-verbal advice related to the student's use of a specific strategy

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	1.01	1.55	0.97	1.21	0.52	1.40	0.00	0.58	0.97	0.85	0.72	0.86
Total number of instances	1.19%				0.63%				0.85%			
TB	0.33	0.35	0.42	0.47	0.76	0.00	1.82	0.40	0.46	0.52	0.69	0.72
Total number of instances	0.39%				0.75%				0.60%			

8.2.5 Reference to previous practice

Videos analyses revealed a possible commonality of response between the two teachers with reference to students' previous practice. In most instances, both teachers referred to previous practice by using a question-and-answer method (*cf* Zhukov, 2004), so as to gather generic and detailed information. Generic information was evident mainly with reference to how much time was spent on practice during the previous week. Detailed information was usually more extended, as teachers discussed about the material that was practised, and the strategies that were used.

8.2.5.1 Instances of reference to previous practice

Overall, results demonstrated that reference to previous practice was barely evident in each of the lessons (see Table 8.9). Findings indicated that teachers placed more emphasis on the material that was practised and the strategies that were used whilst practising. In contrast, focus on the quantity of practice was barely evident, as it was found only in the case of SB8 (see section 7.6.4). Similar results were found for demonstration of how the students had practised during the previous week, as this was evident only in the case of SA1 (see section 5.3.4). Data analyses indicated that both teachers used this teaching approach to gather information mainly about the quality of practice.

Table 8.9. Instances of reference to previous practice at home prior to the lesson

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	4	1	5	3	0	1	4	3	2	5	4	1
Total number of Instances	**13**				**8**				**12**			
TB	1	2	1	2	4	7	0	2	5	11	6	3
Total number of instances	**6**				**13**				**25**			

A Pearson's correlation analysis was undertaken to explore the relationship between the Grade level and the number of instances of reference to previous practice during the lessons for each teacher (see Figures 8.11 and 8.12). A moderately strong, significant relationship was found for TB, suggesting that the students' Grade level had a large influence on reference to previous practice (TB: $r=0.634$, $n=12$, $p=0.027$). TB had the tendency to open such discussions more frequently in the lessons of her higher-level students. The opposite results were found for TA, which showed a non-significant negative relationship (TA: $r=-.089$, $n=12$, $p=0.784$). Reference to previous practice was not an important pedagogic feature for TA, as a similar amount of discussions was found for all students, regardless of their level of expertise.

Figure 8.11. Instances of reference to previous practice in each lesson for TA by pupil's Grade level
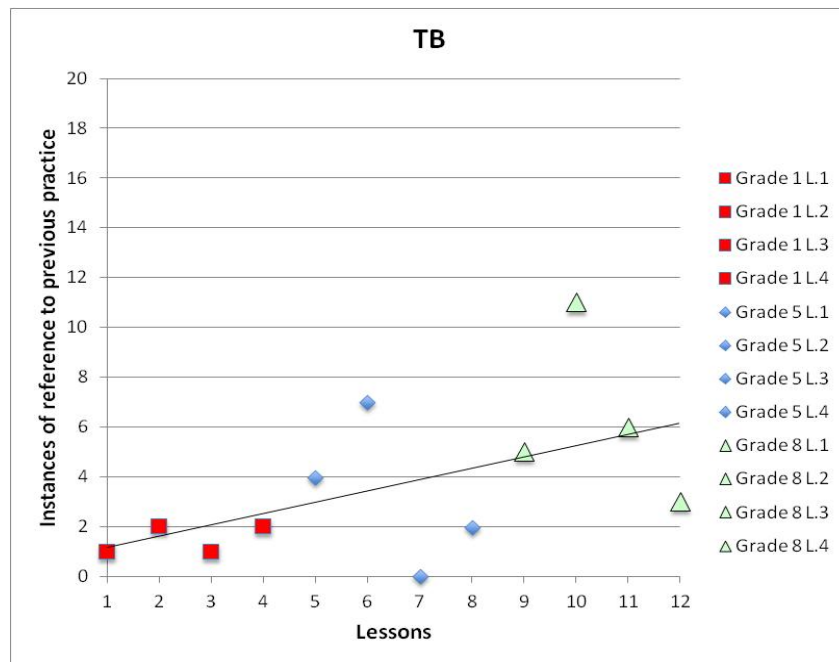
Figure 8.12. Instances of reference to previous practice in each lesson for TB by pupil's Grade level

Analyses demonstrated that the student's level of expertise had a range of impacts upon teachers when referring to previous practice. Qualitative data analysis indicated additional factors which may have had a greater and more direct influence on how frequent teachers referred to previous practice. Specifically, interview analysis with both teachers showed that a perception of insufficient progress by the student in between the lessons was the main factor of influence (see section 5.3.4 and 5.6.4). Video analysis also demonstrated that, in most of the cases, reference to previous practice was made as part of discussions related to what elements needed further improvement. Based on the findings of the small number of participants in this research, it might be suggested that the student's progress influenced usage of this teaching method. Findings were in line with previous research, suggesting that a student's' progress is an important element in instrumental teaching. An example is Lennon and Reed's (2012) study, which found that effective instrumental and vocal teachers constantly monitored, assessed and evaluated their students' progress so as to facilitate their musical development. Although the number of participants and lessons in the present research is limited, findings suggest that the students' progress in between the lessons was one of the main factors influencing whether or not the teachers make specific reference to previous practice.

The total number of references categorised by Grade levels suggested slightly different biases between teachers. Each teacher gathered differing amounts of information for each Grade level, although in some cases the totals are comparable (see Table 8.9). Specifically, TA referred to prior home practice more when working with her Grade 1 student. Although numbers were rather similar between the three students, lower numbers of references were found for SA8 and SA5. This indicated that TA placed slightly more emphasis on gathering information about previous practice in the lessons of the youngest and most inexperienced student. Findings suggested that perhaps this method was used to gather information about how lower-level students practised at home, so as to provide essential focused help. Reverse results were found for TB, as she made more references to previous practice in the lessons of SB8, followed by SB5 and lastly SB1. These findings may suggest that for TB discussions about previous practice were considered to be more essential in the case of higher-level students, so as to help them cope with more complex difficulties (Hatfield and Lemyre, 2016).

8.2.5.2 Time percentages and averages of reference to previous practice

As mentioned above, results indicated that both teachers spent relatively little time discussing previous practice (see Table 8.10). Data also demonstrated that, in one of the lessons of both Grade 5 students, reference of previous practice was not found.

Table 8.10. Percentages of total lesson time across all weeks for reference to previous practice

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA %	0.36	0.28	2.03	0.40	0.00	0.73	1.93	1.40	0.66	1.40	0.85	0.75
TB %	0.12	0.15	0.06	0.06	0.90	2.46	0.00	0.71	1.17	2.68	1.77	1.08

A Pearson's correlation analysis was computed to assess the relationship between the Grade level and the time percentage of reference to previous practice during the lessons for each teacher. Results showed a weak and non-significant relationship for TA (r=0.107, n=12, p=0.741) suggesting that the Grade level was not one of the factors that had a great influence on reference to previous practice (see Figure 8.13). In contrast, a strong and statistically significant relationship was found for TB (r=0.713, n=12, p=0.01), showing that the Grade level of the students had a greater overall importance in referring to prior practice. Figure 8.14

demonstrates that the time spent referring to previous practice tended to increase along with the students' Grade level.

Data suggest that the Grade level of the students was a factor of influence for both teachers. However, different degrees of influence were found for each teacher, showing that the students' Grade level was not the only factor affecting the teachers' decision to refer to previous practice. These results enhanced findings on the instances of reference to previous practice (see section 8.2.5.1) that the teaching methodology, in combination with the students' progress, may influence reference to previous practice.

Figure 8.13. Time percentages of reference to previous practice in each lesson for TA by pupil's Grade level
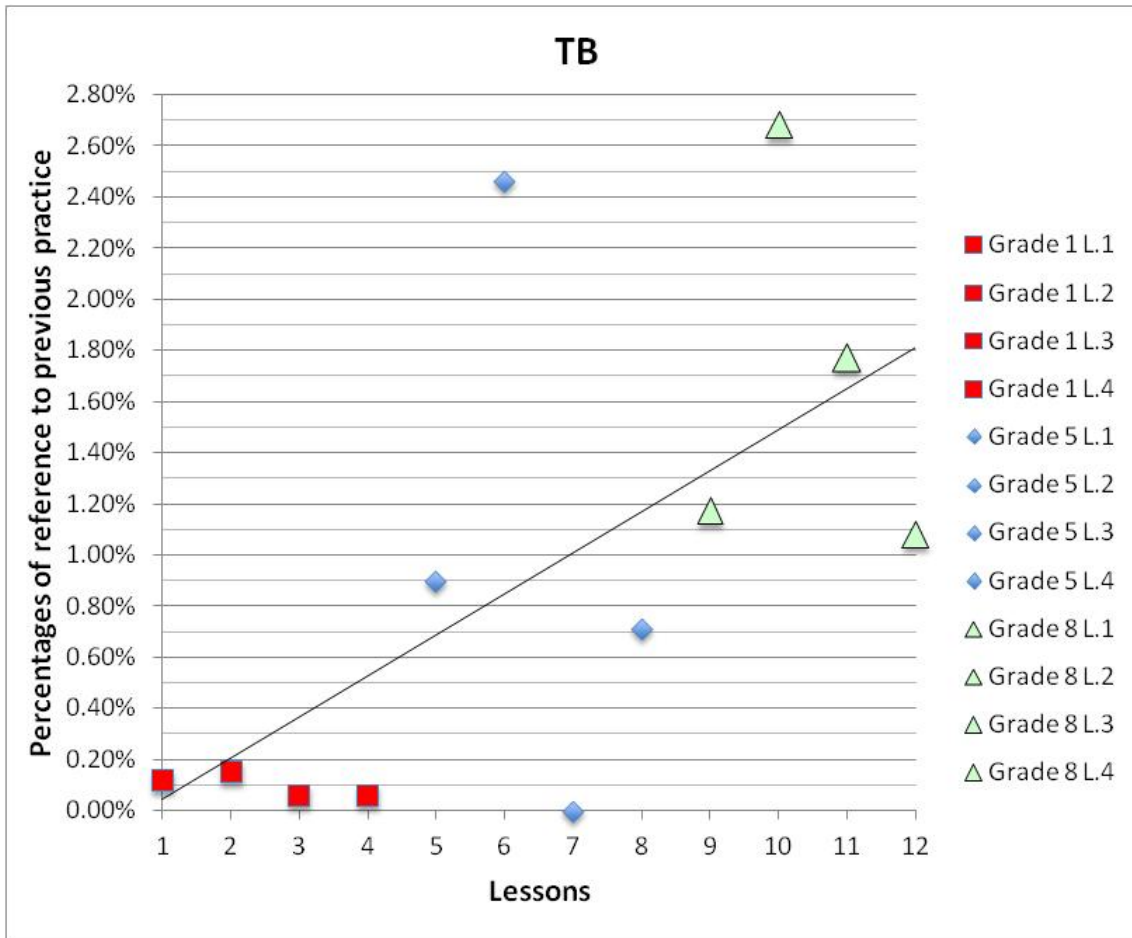
Figure 8.14. Time percentages of reference to previous practice in each lesson for TB by pupil's Grade level

The average time spent during the four lessons was also calculated as this was deemed to enable a comparison between the two teachers in regard to the Grade level of the students (see Table 8.11). Results revealed that neither teacher spent much time making reference to previous practice sessions, as the highest total did not exceed 2%. One commonality between the two teachers was that they spent much more time on asking their Grade 8 students about what or how they practised compared with the lower Grade levels. Results suggested the students' Grade level was at some level a factor of influence for both teachers.

Table 8.11. Average time for reference to previous practice for all observed lessons

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L2	L.3	L.4	L.1	L.2	L.3	L.4
TA (%)	0.36	0.28	2.03	0.40	0.00	0.73	1.93	1.40	0.66	1.40	0.85	0.75
Average time	0.77%				1.02%				0.92%			
TB (%)	0.12	0.15	0.06	0.06	0.90	2.46	0.00	0.71	1.17	2.68	1.77	1.08
Average time	0.10%				1.02%				1.68%			

8.2.6   Reference to Future Practice

Guidance of practice strategies is considered to be an important element of an effective instrumental lesson (Harris and Crozier, 2000). Teaching students effective practice strategies is believed to motivate them to take responsibility for their own learning (Weaver, 2005). Video analysis showed that, in all lessons, the teachers referred to future practice by providing direct instructions, either while working on a piece, after playing a piece, or at the end of the lesson as a reminder of what had to be practised. Both teachers used an additional teaching method to enhance their students' understanding: demonstration on the piano (see sections 5.3.5 and 7.6.5). Demonstration is considered to be one of the most effective approaches used by instrumental teachers, as it provides the opportunity for the students to observe, listen to and learn (Simones, Schroeder and Rodger, 2017). Previous research showed that demonstration is usually provided by playing and singing, while it might be also evident by clapping, conducting, counting and humming (Siebenaler, 1997). Simones, Schroeder and Rodger (2015) found that demonstration is usually used to communicate musical knowledge to the students in their instrumental lessons. Similarly—in the findings of this research—demonstration was used, along with verbal instructions, to enhance the students' understanding of the strategies they were recommended for use in future practice sessions.

8.2.6.1 Instances of reference to future practice

Data revealed that, both teachers had a tendency to discuss future practice regularly throughout the lessons. However, noticeable differences were found in relation to the number of instructions that were provided. Analyses showed that reference to future practice was more frequent in TB's lessons (see Table 8.12), with the highest number being up to 40 times in one

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lesson (Grade 8). In contrast, lower numbers of instances were found for TA, with the highest number being 17 in the fourth lesson of her Grade 1 student. As Table 8.12 demonstrates, TB often provided twice as many instructions as TA.

The total instances were also examined, as this was deemed to reveal additional information on the effects that the Grade level might have had on reference to future practice. Table 8.12 presents the total numbers that were found for the two teachers, demonstrating that TB referred to future practice up to 92 times with her Grade 1 student. Comparatively high total amounts were also found for her Grade 5 and Grade 8 students, as she provided instructions 85 times in total for each pair. Fewer instructions were found for TA, with the highest amount being 54 times for her Grade 1 student. Less reference to future practice was evident in regard to her Grade 5 and Grade 8 students, with the total amounts being 29 and 20 times respectively.

Table 8.12. Numbers of instances of lesson time and total number of instances for reference to future practice

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	11	11	15	7	8	8	7	6	7	3	7	3
Total number of instances	54				29				20			
TB	20	28	12	32	22	21	20	22	23	40	11	11
Total number of instances	92				85				85			

Qualitative data analysis of the semi-structured interviews with the two teachers revealed factors that influenced the frequency of reference to future practice. TA considered discussions about future practice to be more essential in the lessons of young students. Her comments indicated that this was due to the fact that, for her, lower-level students need more support and guidance so as to develop proper practice habits. In discussing this point of view, Weaver (2005) argues that teachers should constantly offer opportunities to young children to develop their practice repertoire, as this can encourage them to practise. Similarly, Jorgensen (2008, p.14) suggested that one of the major roles of instrumental teachers is to 'teach the students how to practice, by building up a knowledge of the elements that influence practice and the outcomes of practice, by going into strategies and gradually building up a repertory of

practice strategies. Teachers, therefore, should constantly offer these opportunities to the lessons of young students so as to develop their skills to the fullest'. Result in this study suggested that TA's actions were related to this earlier point of view.

Although teachers' beliefs were similar concerning the low-level students, differences were noted in relation to more experienced students. Based on TA's comments, provision of specific instructions was not seen as essential for the highest-level students, as they had already acquired a high level of self-regulation skills. In contrast, TB commented that discussions regarding future practice tended to take place at the end of her students' lessons, irrespective of their level of expertise. However, the interview showed that the teacher tended to approach students based on their level of expertise, by adjusting discussions accordingly so as to be effective for all students.

Despite the differences between the two teachers, results indicated a link in the approaches that they used to provide information to their students. Video analysis showed that the approach that was used by the teachers was relatively identical for all students (see Table 8.13). Results indicated that both teachers provided more instructions about 'how' their students should practise throughout the week, with the totals of 57 for TA and 113 for TB. Similar results were found for 'what to practise for the next week' with the numbers being slightly lower compared with 'how'. 'Why' and 'practice time' followed, with considerably lower totals of instances. Results suggested that, despite the frequency of referring to future practice, both teachers tended to focus on the same types of advice when providing instructions for future practice. Emphasis was given primarily on the quality of practice ('what' and 'how' to practise) so as to model effective strategies. As previously argued (Hallam et al., 2012), this behaviour is essential in instrumental lessons, as it provides opportunities to the students to develop knowledge and understanding on how to overcome difficulties while practising.

Table 8.13. Instances of all types of reference to future practice

Teacher	Student	Practice time	What to practise for the next week	How to practise for the next week	Why the student has to practise this way	Total instances
TA	SA1	2	13	34	5	54
	SA5	0	14	13	2	29
	SA8	2	6	10	2	20
	Totals	**4**	**33**	**57**	**9**	-
TB	SB1	2	39	40	11	92
	SB5	2	30	40	13	85
	SB8	2	43	33	7	85
	Totals	**6**	**112**	**113**	**31**	-

Further data analysis was also undertaken to examine the relationship between the Grade level and the instances of reference to previous practice (see Figures 8.15 and 8.16). Results from the correlation analysis showed a strong and significant negative relationship for TA ($r= -.864$, $n=12$, $p=0.01$), suggesting that reference to future practice decreased for her higher-level students. Results indicated that the level of expertise was a factor of influence for TA. Different results were found for TB ($r= -.091$, $n=12$, $p=.0.779$), indicating a weak and insignificant relationship between reference to future practice and the Grade level of the students. This implies that the student's current level of expertise was not a factor of influence for TB when referring to future practice. Data analysis from the TB's interview also verifies this finding.

> *'I usually refer to future practice based mainly on the elements that needs improvement...I believe that all students need help on how they should practise in their homes. And we are the person that will provide the help.'*

According to TB's view, provision of help is essential for all students, regardless of their level of expertise, or age. However, it has been noted elsewhere that teachers rarely provide detailed guidance to their students about how to practise at home (Leon-Guerrero, 2008). Instead, they refer to future practice with more general comments concerning what has to be practised (e.g., 'You should practise this piece for the next lesson'). Research suggested that there is a strong need for teachers to teach their students how to practise effectively. Practising is a skill that develops over time and, therefore, it has been argued that it needs to be systematically taught, along with the provision of examples, explanation and demonstration (Pitts and Davidson, 2000). Teachers also need to include these elements in the lessons of their higher-level students, as previous research has suggested that even students at higher education music conservatories may lack an understanding of how to practise effectively (Austin and Berg, 2006).
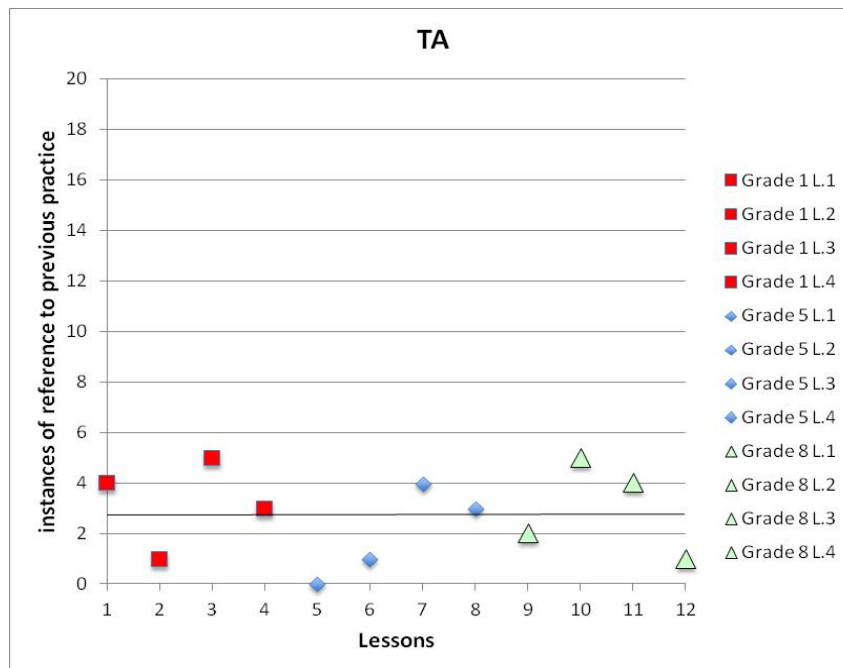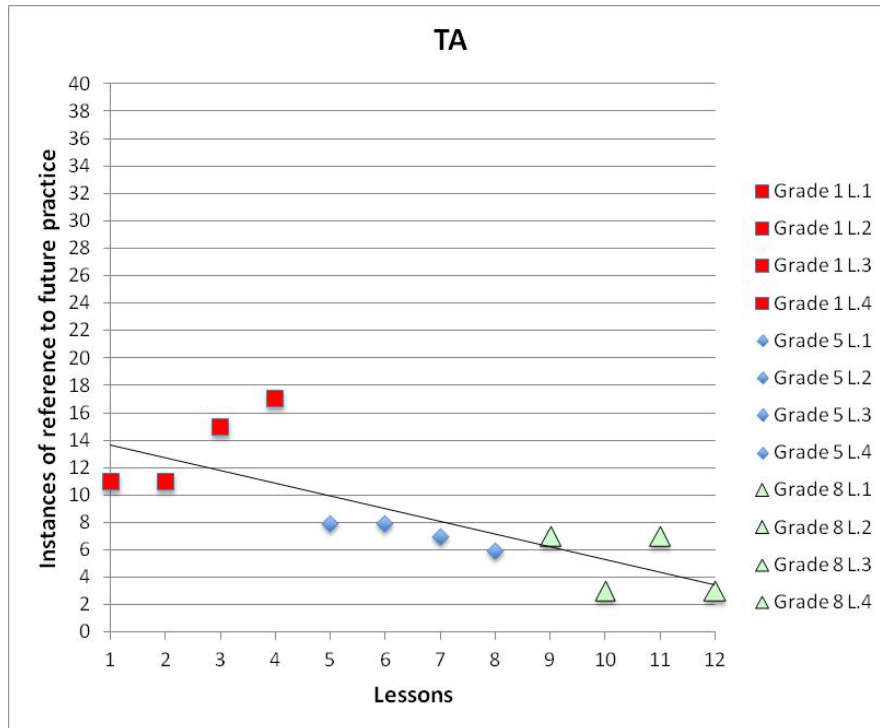
Figure 8.15. Instances of reference to future practice in each lesson for TA by pupil's Grade level
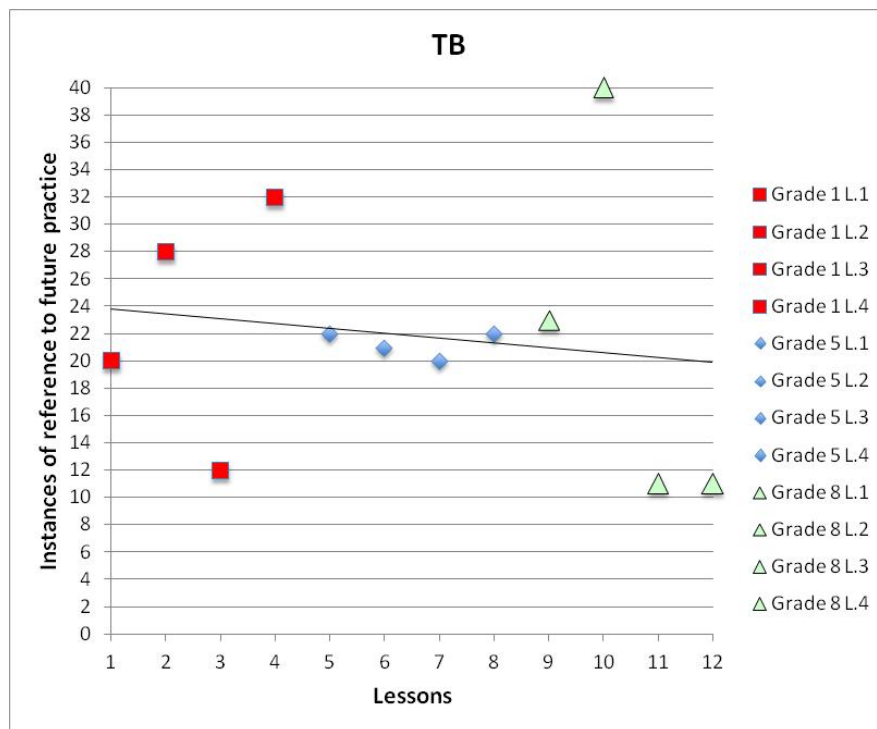
Figure 8.16. Instances of reference to future practice in each lesson for TB by pupil's Grade level

Despite the differences that were found between the two teachers, a similarity was identified concerning the students' level of expertise (see Figure 8.17). Both teachers provided more instructions to their lower Grade level students compared to other Grade levels. Results support the hypothesis (H2) that teachers have the tendency to refer to future practice more often in the lessons of their lower Grade level students, while they reduce provision of oral guidance as the level of expertise increase (H6 and H11).

These results indicated that the students' practice development was a factor of influence for both teachers. Video analyses showed that teachers promoted strategies frequently while teaching Grade 1 students so as to encourage their usage in home practice. The introduction of new strategies was also evident in the lessons of Grade 1 students, suggesting that the students' level of practice development is likely to be lower than for the higher Grade levels. As Hallam (2001b) found, the practice repertoire of novice students was limited, as they also used less well-developed strategies compared to more advanced students. Based on these findings, it is therefore expected for the teachers to introduce new strategies more to their less experienced students and also to provide help for the development of their practice repertoire. In this way, teachers can help young students to develop an awareness and understanding of the components of an effective practice session in their early years of learning.
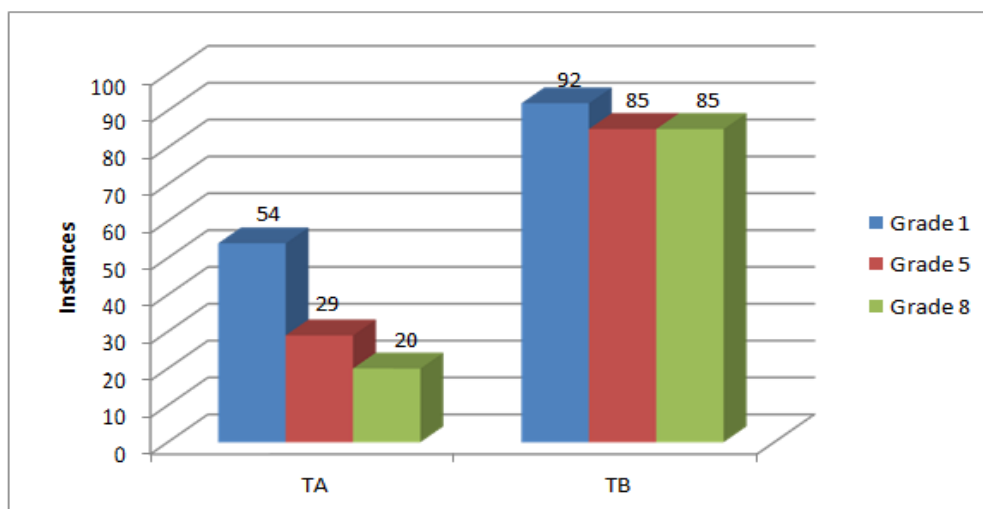
Figure 8.17. Total number of instances of reference to future practice for all weeks by teacher and Grade level

Interviews showed that the student's age was another factor that influenced teacher's behaviours. Both teachers commented that they tended to refer to future practice more often during their young student's lessons, so as to stress the importance of practising. Due to their young age, frequent reference was likely made as a reminder that practice should be seen as the most important element for achieving progress over time. As Sloboda, Davidson, Howe,

and Moore (1996, p.289) claim, in order for young students to acquire and maintain the 'habit of regular practice', teachers need to constantly provide support and encouragement during the lessons.

8.2.6.2 Percentages and average of time of reference to future practice

The lesson time percentages were also analysed to examine the extent to which the Grade levels of the students might have influenced references to future practice by their teachers. Time percentages for TA were rather low in comparison to TB, showing that any discussions of future practice were generally brief in the form of short comments (see Table 8.14). Different results were found for TB, as she spent much more time on referring to future practice. Although she referred to future practice multiple times during the lessons, video analysis showed that in all cases references to future practice were much more detailed (e.g., explanation of 'how' and 'why' to use a strategy) and, therefore, longer in time.

Table 8.14. Percentages of total lesson time across all weeks for reference to future practice by teacher and student Grade level

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA (%)	0.77	1.42	2.46	2.18	2.66	3.97	0.61	3.71	1.30	2.47	2.84	0.57
TB (%)	9.41	10.01	7.11	4.43	4.99	14.11	10.32	7.56	7.34	10.34	5.94	2.64

The average time was also explored, as this was deemed to offer a comparison on the overall time-use by the two teachers (see Table 8.15). Results demonstrated that TB spent considerably more time on providing instructions to her students. The highest average (=9.25%) for all weeks was found to be for her Grade 5 student, followed by Grade 1 (=7.74%) and Grade 8 (=6.57%). TA spent less time referring to future practice, with the highest average being 2.74% for her Grade 5 student. Lower averages were found for her Grade 8 and Grade 1 students with them being 1.80% and 1.71%.

Table 8.15. Time percentages and averages for reference to future practice across the four lessons

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA (%)	0.77	1.42	2.46	2.18	2.66	3.97	0.61	3.71	1.30	2.47	2.84	0.57
Average	1.71%				2.74%				1.80%			
TB (%)	9.41	10.01	7.11	4.43	4.99	14.11	10.32	7.56	7.34	10.34	5.94	2.64
Average	7.74%				9.25%				6.57%			

Findings indicated a strong connection between the total averages and a specific Grade level. Both teachers spent more time on referring to future practice in the lessons of their Grade 5 students. Even though the total numbers of instances showed that both teachers referred to future practice more often during the lessons of the Grade 1 students (see section 8.2.6.1), the data indicate that they actually spent more time on providing instructions to their Grade 5 students. According to findings, both teachers provided Grade 5 students with more detailed explanations of various complex practice strategies. In contrast, strategies that were recommended to the Grade 1 students were simpler and straightforward and did not require long explanations. As previous research suggests, the practice repertoire develops along with experience and musical expertise (McPherson and Davidson, 2006). Grade 5 students are, therefore, more likely to have already developed a richer practice repertoire compared to Grade 1 students (*cf* Hallam, 1997). As a result, more complex strategies may require longer time intervals during the lessons.

In contrast, Grade 8 students are more likely to have already reached high levels of practice development (Hallam 1997, see also chapter 2), based on their extended experience as learners. In these cases, the possibilities for the teacher to spend more time on suggesting strategies or introducing new strategies for future practice may be lower. Findings from the lessons supported this point of view, as both teachers spent relatively low averages of time on providing instructions for future practice. Figure 8.18 illustrates the above findings as a chart, as the usage of colours enables easier identification of the total time spent on each Grade level student by the two teachers.
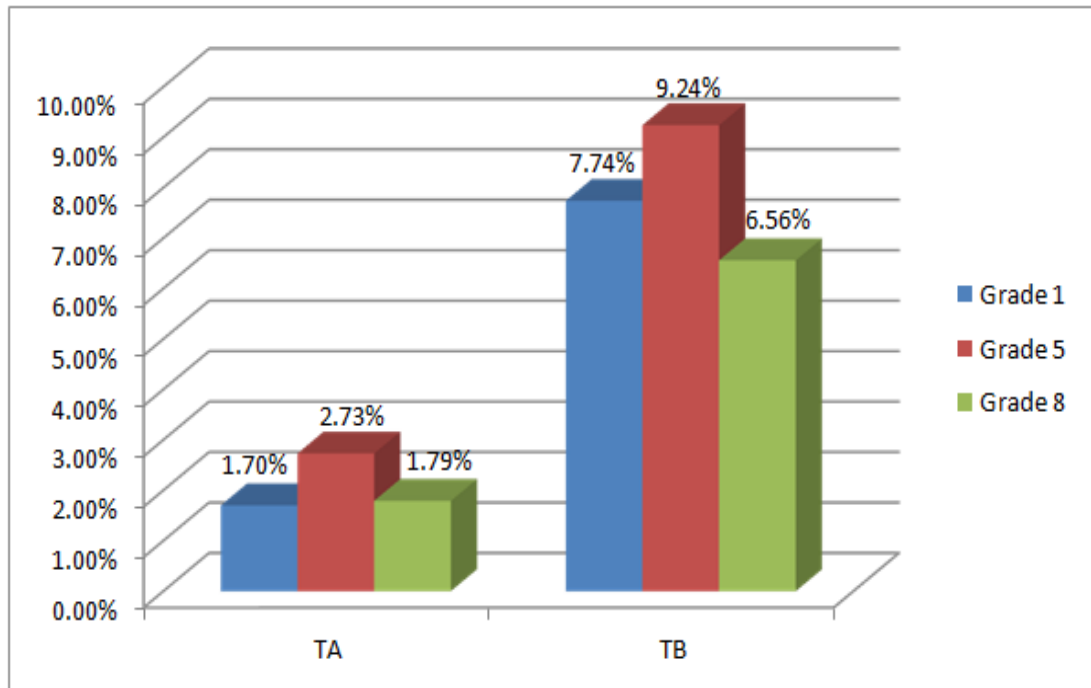
Figure 8.18. Average time of reference to future practice for all weeks by teacher and Grade level as a chart

In addition, a correlation analysis was computed to assess the relationship between the Grade level and the time percentage of reference to future practice during the lessons for each teacher (see Figures 8.18 and 8.19). A weak non-significant relationship was found for TA (r=.067, n=12, p=0.837). Similar results were found for TB (r=-.131, n=12, p=0.685). The students' level of expertise was statistically a non-significant factor for both teachers. Although findings on total averages suggested a connection between the Grade level and reference to future practice, results of correlation analysis showed that it did not increase or decrease in association with the level of the students.
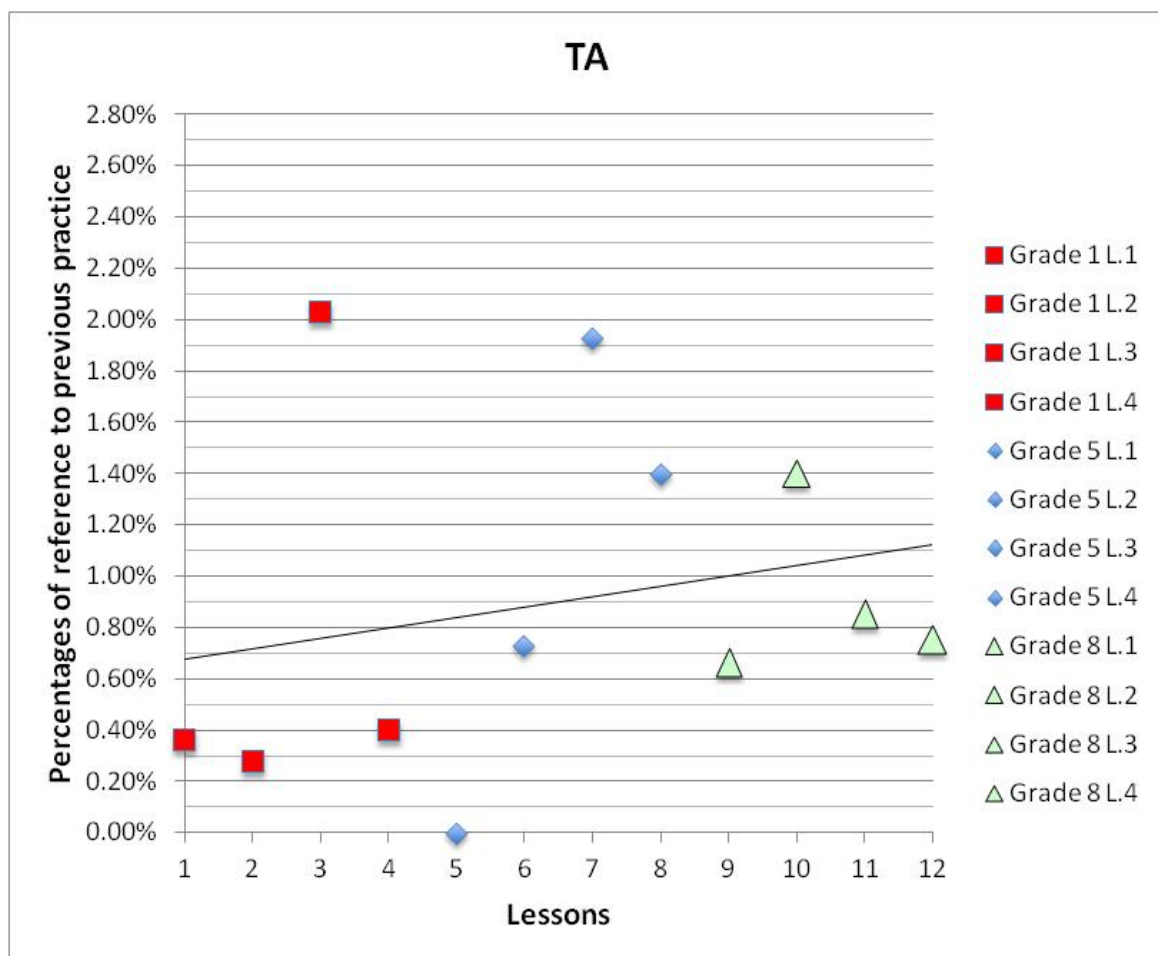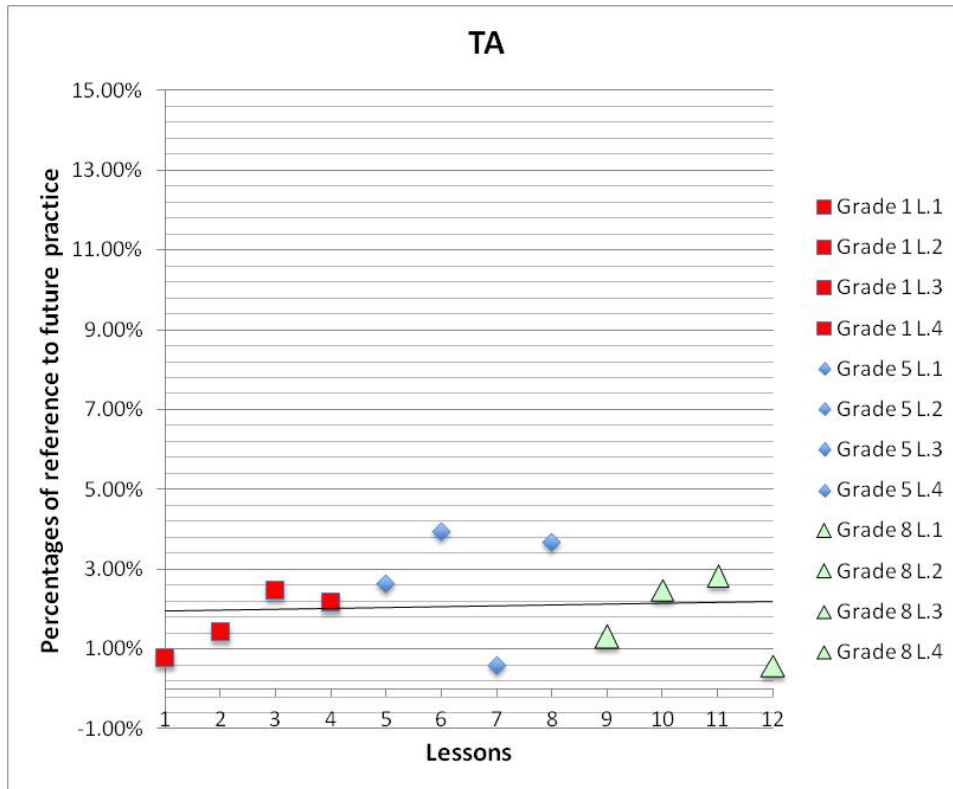
Figure 8.19. Time percentages of reference to future practice in each lesson for TA by pupil's Grade level
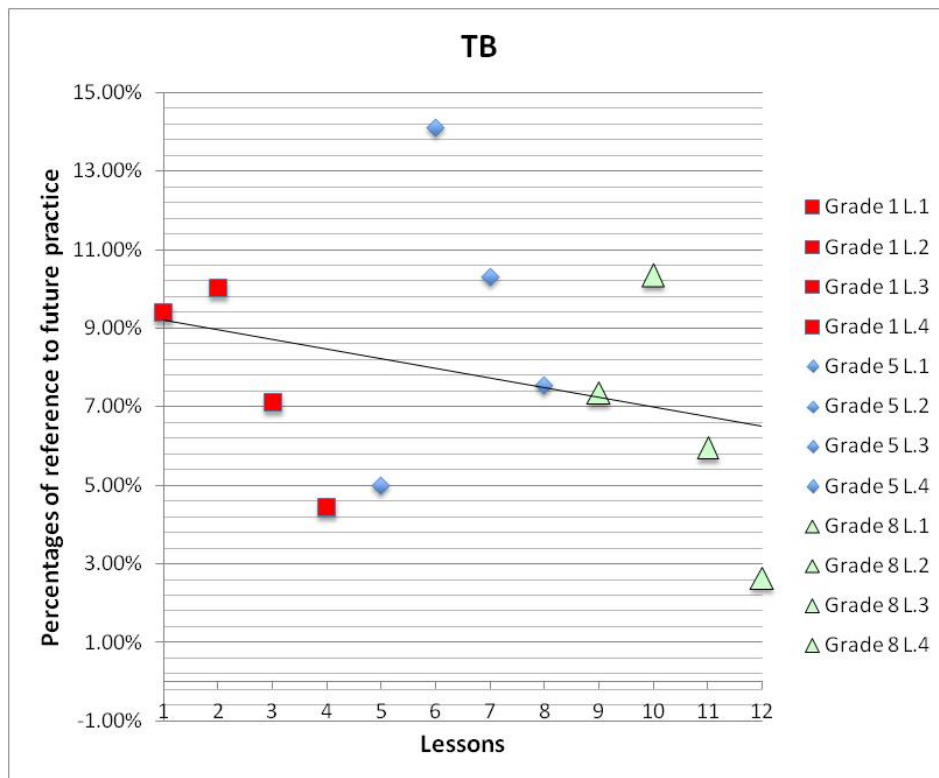
Figure 8.20. Time percentages of reference to future practice in each lesson for TB by pupil's Grade level

8.2.7   Statistical tests of comparison

8.2.7.1 Differences between the two teachers regarding teaching methodologies

A statistical analysis was undertaken to explore any similarities and differences between the two teachers in comparing the total amount of instructions given to the students. The instructions in this case are considered to be the total number of directions that were directly related to the future practice (e.g., use of metronome). Table 8.16 presents an overview of the total number of teacher's directions for each week separately, as well as the total number across the four weeks.

Table 8.16. Total number of the given instructions for each student across the four weeks

	SA1	SB1	SA5	SB5	SA8	SB8
First Week	6	16	7	11	2	11
Second Week	7	14	6	12	3	12
Third Week	9	14	4	11	4	11
Fourth Week	6	12	5	13	2	8
Total amount of instructions	28	56	22	47	11	42

T tests were undertaken to compare the total amount of verbal or written instructions (see Tables 8.16, 8.17 and 8.18) that were directly linked with future practice. Results indicated a statistically significant difference in strategy use between the two teachers [t(4) = -3.39, p=.028], with TB suggesting significantly more strategies during the first lessons (Mean=12.67, SD=2.89) compared to TA (M=5.0, SD=2.65). For the second week, similar results between the two teachers were found, as there was a statistically significant difference in strategy between them [t(4) = -5.33, p=0.06]. Specifically, during the second lesson, TB suggested significantly more strategies (M=12.67, SD=1.55) compared to TA (M=5.33, SD=2.08). Similar results were also found for the third week for the two teachers [t(4) = 3.26, p=0.31], indicating that TB provided significantly more verbal and written instructions (M = 12.00, SD=1.73) compared to TA (M=7.7, SD=2.89). Lastly, statistically analysis also revealed different results for the two teachers [t(4) = 3.43, p=0.27] during the fourth lesson, indicating that TB (M=11.00, SD=2.65) suggested more strategies compared to TA (M=4.33, SD=2.08).

Table 8.17. Comparison of the two teachers in relation to the total number of instructions for future practice[11]

	Teacher	N	Mean	Std. Deviation
Total strategies suggested by teachers during **Lessons** Week 1	TA	3	5.00	2.65
	TB	3	12.6667	2.88675
Total strategies followed by students at **Home** Week 1	TA	3	2.0000	2.00000
	TB	3	7.6667	3.51188
Total strategies suggested by teachers during **Lessons** Week 2	TA	3	5.3333	2.08167
	TB	3	12.6667	1.15470
Total strategies followed by students at **Home** Week 2	TA	3	2.6667	2.51661
	TB	3	10.0000	3.00000
Total strategies suggested by teachers during **Lessons** Week 3	TA	3	5.6667	2.88675
	TB	3	12.0000	1.73205
Total strategies followed by students at **Home** Week 3	TA	3	1.6667	.57735
	TB	3	5.3333	4.72582
Total strategies suggested by teachers during **Lessons** Week 4	TA	3	4.3333	2.08167
	TB	3	11.0000	2.64575
Total strategies followed by students at **Home** Week 4	TA	3	3.0000	1.00000
	TB	3	7.0000	2.64575

Statistical analysis verified results suggesting differences between the two teachers in the usage of the teaching methods, specifically relating to the provision of direct instructions for practice strategies. Based on the number of practice strategies that they suggested, TB was encouraging considerably more practice strategies. Taking into consideration the emphasis that they gave on providing direct information about future practice, results suggested differences in the teaching methodology used by the two teachers.

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[11] The statistical results being reported have been subjected to 'Levine's tests for the equality of variance' (Page, Braver, MacKinnon, 2008; Kim, 2015).

Table 8.18 Comparison of the two teachers in relation to the amount of instructions followed by their students in subsequent practice

	t	df	Sig. (2-tailed)
Total strategies suggested by teachers during **Lessons** in Week 1	-3.391	4	.028
Total strategies followed by students at **Home** at Week 1	-2.429	4	.072 (n.s.)
Total strategies suggested by teachers during **Lessons** in Week 2	-5.336	4	.006
Total strategies followed by students at **Home** at Week 2	-3.244	4	.032 (p<.05)
Total strategies suggested by teachers during **Lessons** in Week 3	-3.258	4	.031
Total strategies followed by students at **Home** at Week 3	-1.334	4	.253 (n.s.)
Total strategies suggested by teachers during **Lessons** in Week 4	-3.430	4	.027
Total strategies followed by students at **Home** at Week 4	-2.449	4	.070 (n.s.)

8.2.7.2 Differences between the students of the two teachers

T-tests were undertaken to compare the total amount of instructions that were followed by the students of each teacher in the subsequent home-based practice sessions. Table 8.18 presents the statistical analyses of the data on the students' practise sessions for each week separately. The home-based sessions of each week were combined to provide an insight of the practice carried out by students in between of each of the four lessons. Results indicated that there were no statistically significant differences in strategy use in their home practice between the students of Teachers A and B in Week 1 (p > .05) (see darker shading in Table 8.17). However, opposite findings were found for the Week 2, as the results indicated a statistically significant difference in strategy use during at home between their students (t (4) = -3.244, p=.032). Findings showed that students of TB followed considerably more instructions in home practice sessions (M=10.00, SD=3.00) compared to TA (M=2.67, SD=2.51). Lastly, results for Week 3 and 4 showed no statistically significant differences between the students of the two teachers (p > .05). Findings from the t-tests suggested that for three of the four weeks there were no significant differences between the students of the two teachers in following up recommended practice strategies whilst at home.

8.2.7.3 Studio-based lessons: Instances of usage of notebook

Data demonstrated that the usage of notebooks was not evident in the majority of the lessons (see Table 8.19). Only TB used a notebook to provide detailed notes about future practice, and this was evident only in the case of the Grade 1 student (SB1).

Table 8.19. Instances and time percentages for usage of notebook during the lessons

Instances for usage of notebook during the lessons											
	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	0	0	0	0	0	0	0	0	0	0	0	0
TB	7	3	2	2	0	0	0	0	0	0	0	0
Percentages of time for usage of notebook during the lessons (%)											
	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TB (%)	6.77	4.23	1.66	8.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Observations revealed that the time that TB spent in providing written instructions for future practice in the notebook varied in each lesson for this Grade 1 student (see Table 8.19). However, the lesson with the lowest time average was found to be an exception, as in most of the lessons, the teacher spent a relatively high proportion of time in using the notebook. Overall, during the four weeks the teacher provided written instructions up to 14 different times, with the total lesson time average being 5.23% (see Table 8.20).

Table 8.20. Summary of instances and average time used for usage of notebook across the four lessons

Total instances of usage of notebook across the four lessons and Average			
	Grade 1 Total	Grade 5 Total	Grade 8 Total
TA	0	0	0
TB	14	0	0
Average time (%) for usage of notebook across the four lessons			
	Grade 1	Grade 5	Grade 8
TA	0.00%	0.00%	0.00%
TB	5.23%	0.00%	0.00%

These findings for TB supported the hypothesis that Grade 1 teachers back oral guidance with written guidance (Harris and Crozier, 2000). Findings from TA's interview also support this hypothesis. Although she did not use a notebook in the lessons of her Grade 1 student, she reported having the tendency to use a notebook for her low-level students. In discussing the use of notebooks, Dade (2013) reported that this method had various positive effects on her development as a performer and as a teacher. She felt that notebooks helped her to develop habits such as organising her practice, analysing her playing and assessing her improvement over time which are considered to be critical in practising effectively. Similarly, Pearce (1992, p.8) strongly suggested that it is a must for the teachers of young and inexperienced musicians to provide 'detailed guidance for structure practice'.

Results also support the hypotheses (H6 and H11) that teachers of higher-level students provided less written guidance during the lessons, while the possibilities to use a notebook reduced noticeably as the level of expertise increased. These results were similar to previous findings from a study undertaken by Barry and McArthur (1994). As previous research showed, high skilled and experienced learners are more likely to have already developed organizational strategies and take responsibility of their own learning with the used (Bartolome, 2010). Teachers, therefore, are likely to decrease usage of a notebook for high level students and encourage them to develop an independent and autonomous behaviour as learners.

8.2.7.4 Home-based practice sessions: Usage of notebook

Although the findings concerning a notebook only apply to one of the six students, results showed that usage of a notebook during the lesson time had a direct positive influence on this student's home-based practice sessions. Previous research demonstrated that students who follow steps based on the written instructions of their teachers are likely to practise more successfully. Based on research undertaken by Barry and McArthur (1994), written steps of the practice assignment were followed almost precisely in practice sessions, increasing their efficiency. In addition, written notes were reported to encourage the use of organisational strategies, as students were found to be using them as an organising guide. Another study undertaken by Weaver (2005) showed similar results. Students who were provided with a written assignment were found to be more successfully in following practice steps, compared to those provided only verbally by the teachers during the lessons.

Similarly, results in the present study showed that SB1 used the notebook in all of the subsequent home-based practice sessions (see Table 8.21) and that the written instructions had a significant influence upon the nature of the practice sessions. SB1 successfully followed almost all instructions, while she was also found to be effectively organising her practice based on her teacher's notes.

Table 8.21. Instances and time percentages for usage of notebook during the home-based practice sessions

Instances for usage of notebook in the home-based sessions												
	Grade 1				Grade 5				Grade 8			
	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4
TA	0	0	0	0	0	0	0	0	0	0	0	0
TB	13	16	5	14	0	0	0	0	0	0	0	0
Time percentages for usage of notebook in the home based sessions (%)												
	Grade 1				Grade 5				Grade 8			
	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4
TA (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TB (%)	2.39	4.70	4.37	3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The time spent by the student on this activity was also analysed, with the results showing that the corresponding time percentages were rather low. However, this was expected as the nature of this action did not require a lot of time to be devoted. In addition, the average time that was spent by the student on using a notebook while practising was also examined. Overall, the total average for provision of written instructions was 3.91%, with the student using the notebook up to 48 different times during the four weeks (see Table 8.22).

Table 8.22. Summary of instances and average time for usage of notebook during the practice sessions

Total Number for usage of notebook across the practice sessions			
	Grade 1	Grade 5	Grade 8
TA	0	0	0
TB	48	0	0
Average time (%) for usage of notebook across the practice sessions			
	Grade 1	Grade 5	Grade 8
TA	0.00%	0.00%	0.00%
TB	3.91%	0.00%	0.00%

According to the data, SB1 made more progress in between the lessons compared to the other Grade 1 student (SA1), who did not use a notebook. Results suggest that the usage of notebook may possibly have an important impact on certain students, particularly younger children. This is considered to be a method that helps children to develop a practice strategies repertoire and also to organise their practice with a logical sequence (McPherson, 2005; Green, 2007; Dade, 2013; Harris and Crozier, 2000).

8.2.8   Notes on scores about future practice

8.2.8.1 Instances of making notes on the score

Analysis of data revealed that, in the majority of the lessons, use of written instruction on the musical score was evident by the teachers (see Table 8.23). In almost all of the cases, the teachers used this approach while they were referring to future practice verbally. Past research showed that teachers may also encourage their students to take responsibility and keep written practice objectives, although this is more likely to be suggested in higher-level students (Gledhill, 2001). Nevertheless, previous research indicated that instrumental teachers rarely use this strategy (Barr and McArthur, 1994), even though it is reported to increase students' motivation to practice (Pike, 2014; 2017).

Table 8.23. Instances for notes on musical scores about future practice

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA	2	1	6	4	6	1	0	3	0	2	3	0
Total number of instances	13				10				5			
TB	7	9	1	4	2	17	6	5	6	7	4	1
Total number of instances	21				30				18			

Analyses indicated differences between the two teachers, as TB provided more written information on the musical score(s) for her students than TA (see Table 8.23). Data from the semi-structured interviews with the two teachers suggested that the Grade level and the age of the students influenced whether they made notes during the lessons (see sections 5.6.6 and 6.3.6). During her interview, TB also talked about the benefits of using this teaching method, especially when it was combined with usage of a notebook. She noted that this can be particularly helpful for younger students who have a short memory.

'I also take notes on the score so that they can cross instructions with those that they are written on the notebook. For example, they might see on the notebook 'Do not play staccato these group of notes!' and not to remember which part of the piece it is. But if they go back to the score and see the notes marked with a ''No staccato'' phrase it's much easier for them to identify and understand what they have to do at their home….For the older students, we usually discuss what they have to practise and I might also take notes. In these cases, I usually say what I want them to do and I might take notes on the score about the most important things.'

Differences were also noted regarding the student's level of expertise. Figure 8.21 was created to enable easier visual identification of the comparison between the two teachers. Results indicated that TB made more notes on the score in the lessons of her Grade 5 student (total=30 times), while TA's highest number was for the Grade 1 student (=14 times). Perhaps this was an alternative strategy to the use of a notebook for this teacher. As Pike (2014) suggested, notes on score can be used to enhance students' short-term memory. According to her, it is often difficult for the students to make appropriate decisions with regard to practice, particularly when practice requires the isolation of parts. This is argued as related to the part of their brain (prefrontal cortex) which is responsible for making decisions and which is not yet fully developed (Pike, 2014, p.16). Use of different teaching methods, therefore, may be seen as essential, especially in the case of young students. Pike (2014) suggested that one of the methods that can be very helpful for young and inexperienced learners is the use of sticky notes on the score so as to highlight the parts that need to be practised in future practice sessions.
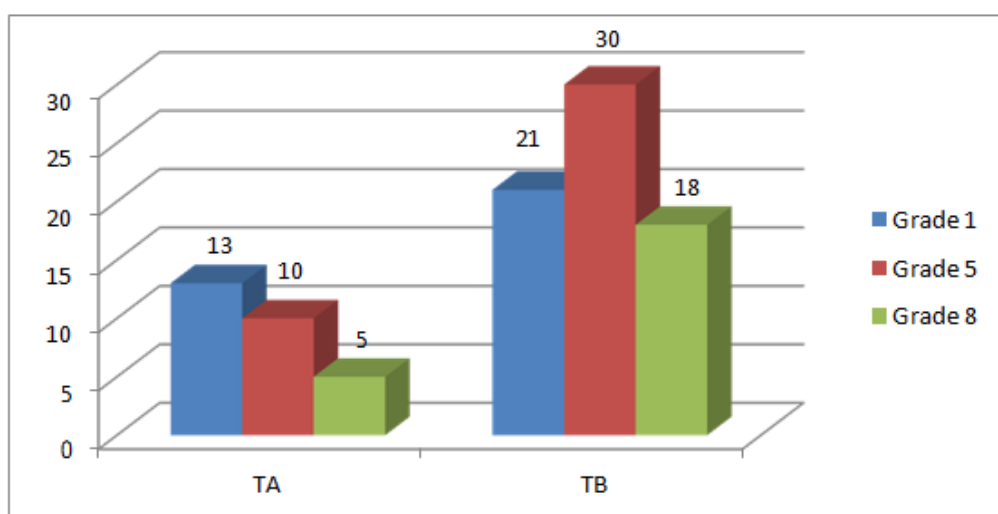
Figure 8.21. Total number of instances for all weeks for notes on scores about future practice as a chart
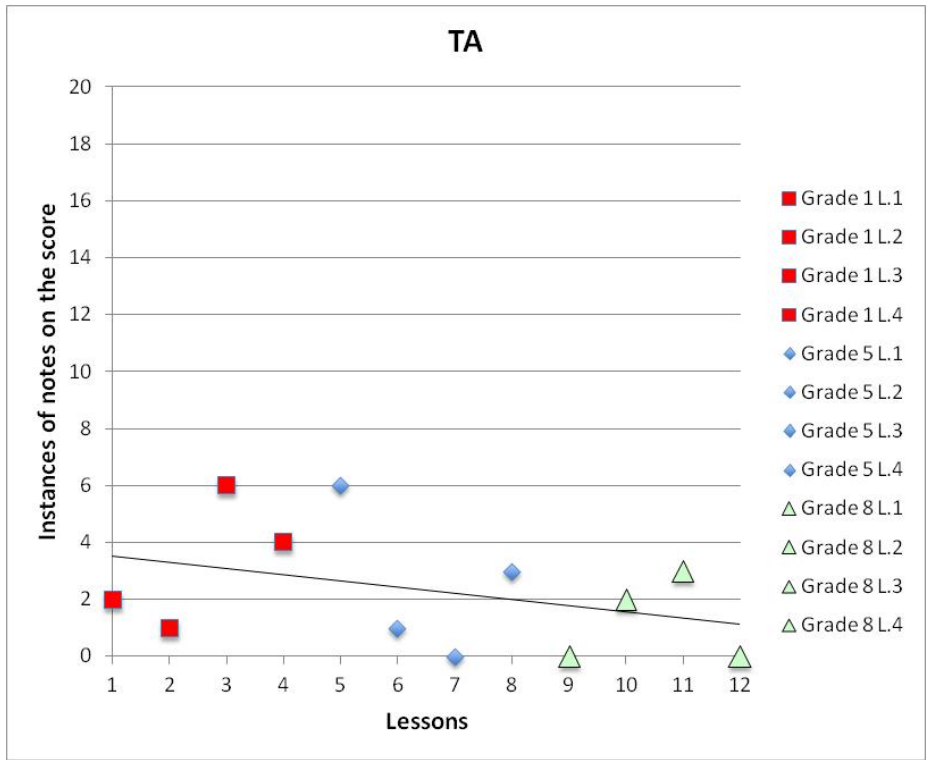
Figure 8.22. Instances of notes on the score in each lesson for TA by pupil's Grade level
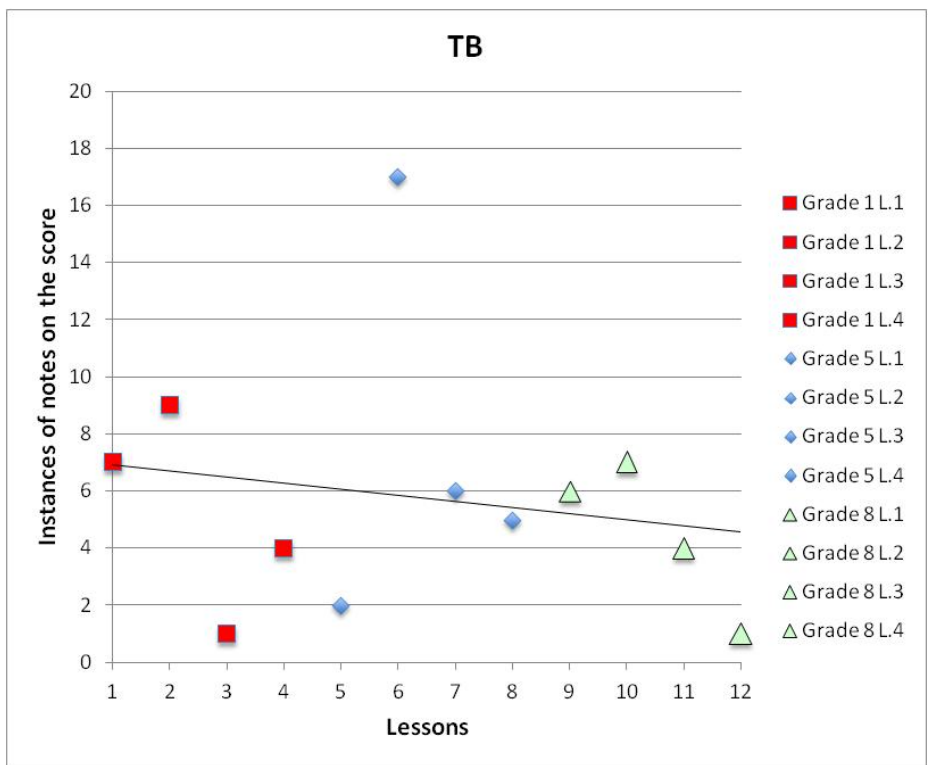
Figure 8.23. Instances of notes on the score in each lesson for TB by pupil's Grade level

Overall, results indicated a negative correlation between the numbers of written notes on the score and the student's level of expertise (see Figures 8.22 and 8.23). Specifically, a weak non-statistically significant correlation was found for TA (r= -0.391, n=12, p=0.208), demonstrating that her notes on the score decreased along with the increasing Grade level of the student. Similar results were found for TB (r= -0.49, n=12, p=0.880). These findings suggested that the level of expertise was not a factor of influence for notes on the score.

However, video analysis of the lessons revealed that the progress of the students in between the lessons was also a factor influencing the amount of written instructions. Both teachers were found to mark the score to remind their students which elements needed improvement until the next lesson. In addition, introduction to new strategies or recommendation of specific strategies from the categories – from the observation checklist – (see Appendix I) 'focus on difficult parts' and 'strategies for the conduct of practice', were also factors influencing the amount of written instructions.

8.2.8.2 Time percentages and average time spent on making notes on score

Slightly different results were detected between the total amounts and the average time that was spent on making notes on the score (see Table 8.24). In TB's case, the highest average of time was notably related to the highest total amount of instances, as she spent most of the time in making notes for her Grade 5 student (average=1.62%). In contrast, results were different for the case of TA, as they showed that she spent slightly more time in making notes for her Grade 8 student (=0.59%).

Table 8.24 Time percentages and average time for making notes on score across the four lessons

	Grade 1				Grade 5				Grade 8			
	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4	L.1	L.2	L.3	L.4
TA (%)	0.43	0.09	1.00	0.71	0.90	0.13	0.00	0.64	0.00	1.24	1.13	0.00
Average (%)	0.56%				0.42%				0.59%			
TB (%)	0.73	1.58	0.09	0.90	1.30	1.73	1.49	1.97	1.48	1.01	0.84	0.19
Average (%)	0.83%				1.62%				0.88%			

Overall, although the time that was spent on making notes on the score was particularly low in comparison to other teaching approaches, teachers had a tendency to use this method in almost all of the lessons. It is perhaps plausible for the teachers of high-level students to provide written instructions in the form of brief notes on the score instead of keeping a notebook (Pike, 2014). Results above supported the hypotheses (H6 and H11) that, as the level of expertise increases, teachers back up oral guidance by providing written guidance on the score rather than using a notebook. However, the student's progress in between the lessons was one factor that likely influenced the number of notes that the teachers provided. According to the analysis, notes on the score were evident when the discussion on what needed improvement took place, or when the teacher was giving instructions verbally about future practice.

Furthermore, a Pearson's correlation analysis was also undertaken with the aim to examine the relationship between the Grade level and the time percentage of making notes on the score by the teacher (see Figures 8.24 and 8.25). Results showed a positive but very weak and insignificant relationship for TA (r= .018, n=12, p=.956), and for TB (r=.093, n=12, p=.775). In both cases, findings indicated that the Grade level of the students was not a factor of influence.
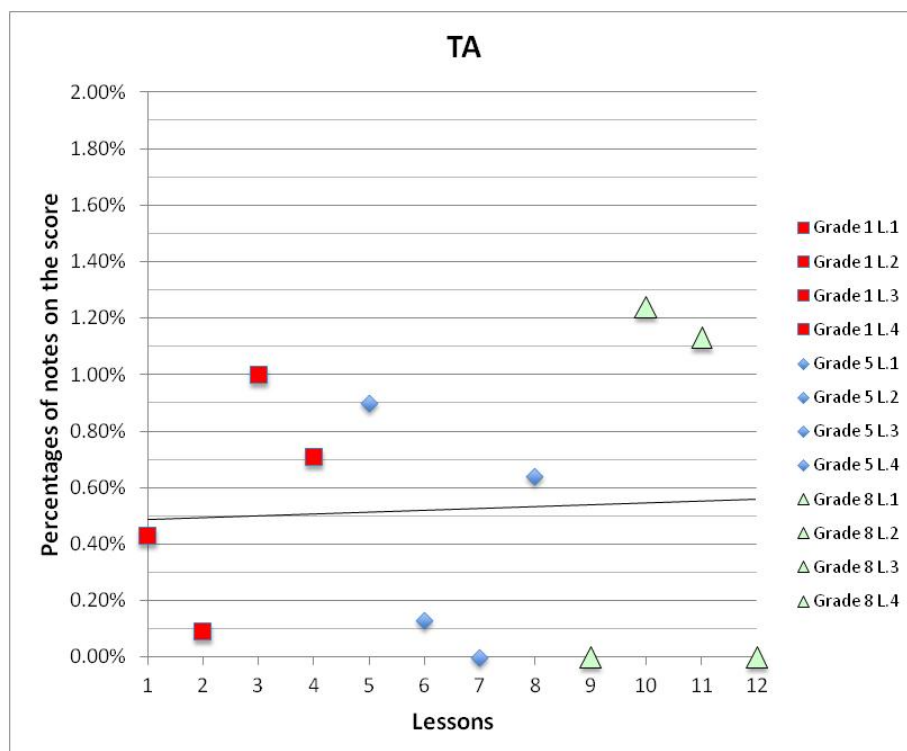
Figure 8.24. Time percentages of notes on score in each lesson for TA by pupil's Grade level
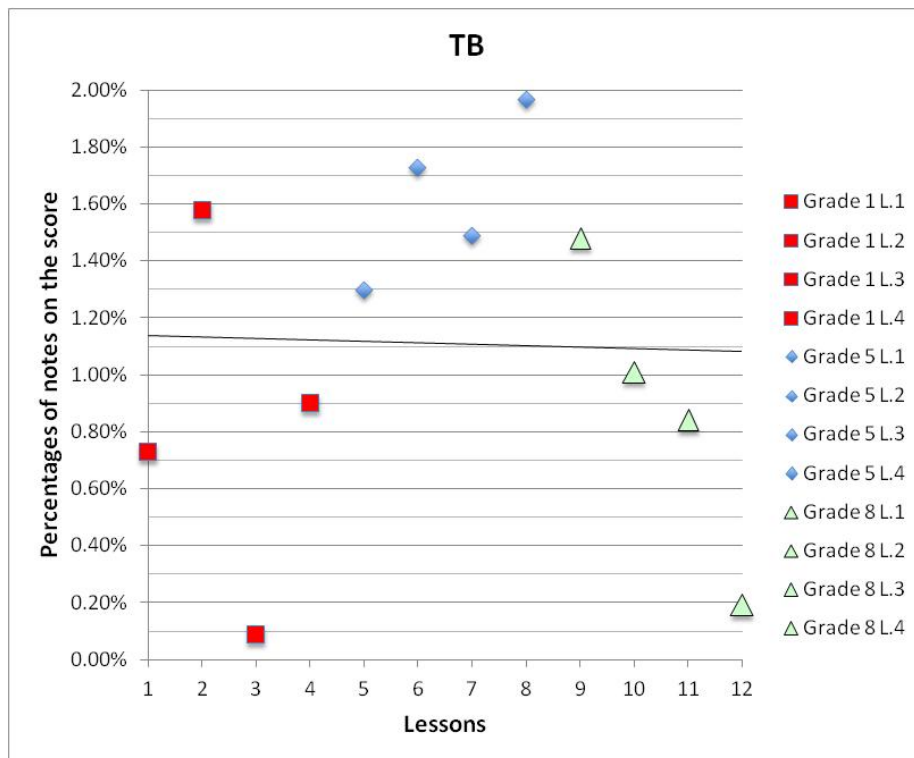
Figure 8.25. Time percentages of notes on score in each lesson for TB by pupil's Grade level

8.3 Research Question Two: To what extent and how does the nature of the lessons influence how students use their time whilst practising?

The second research question was created to test five hypotheses concerning the impacts that the one-to-one instrumental lessons have upon subsequent practice. Elements of home-based practice sessions are explored as well as factors influencing its nature, aiming to identify differences and similarities among the three levels of expertise.

- H3: Grade 1 students practise mainly by playing throughout the piece and not by using a part-whole method.
- H5: Compared to Grade 1 students, Grade 5 students are likely to practise for fewer yet longer sessions each week.
- H7: Grade 5 students practise by playing the pieces through as a whole, while they also begin to spend time on isolation on difficult parts.
- H8: Compared to Grade 1 and 5 students, Grade 8 students are likely to practise for a few long sessions each week.
- H10: Grade 8 students do not necessarily spend much time playing the piece through as a whole in their practice, unless a performance appears imminent.

8.3.1 Quantity of practice sessions

A relationship was found between the amount of practice sessions and the student's level of expertise. Totals indicated that Grade 1 students carried out significantly more practice sessions compared to the other Grade levels. SA1 carried 17 videoed sessions during the four weeks, while SB1's number was lower, with the total being 10 practice sessions (see Table 8.25). The Grade level with the next highest number of practice sessions was Grade 8. SA8 carried out 5 sessions, while SB8 practised 10 times during the four weeks. Lastly, Grade 5 was the level with the fewest practice sessions as SA5 practised 4 times and SB5 6 times. Results supported hypothesis that low level students carry out fewer practice sessions compared to higher Grade levels (H5).

Table 8.25. Number of practice sessions per week and total amount of practice sessions across the four weeks

	Grade 1				Grade 5				Grade 8			
	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4	W.1	W.2	W.3	W.4
TA	3	3	8	3	1	1	1	1	1	1	1	2
Total amount of practice sessions	17				4				5			
TB	3	3	1	3	1	2	1	2	1	5	1	3
Total amount of practice sessions	10				6				10			

A Pearson's correlation was undertaken to examine the relationship between the Grade level and the total number of practice sessions carried out by the six students. Results revealed a moderate yet negative relationship ($r = -.605$, $n=6$, $p=.203$) for the students (see Figure 8.26). Findings demonstrated that as the level of expertise increased, the number of practice sessions tended to decrease somewhat. The lowest Grade levels had the tendency to carry out more practice sessions compared to higher-levels.
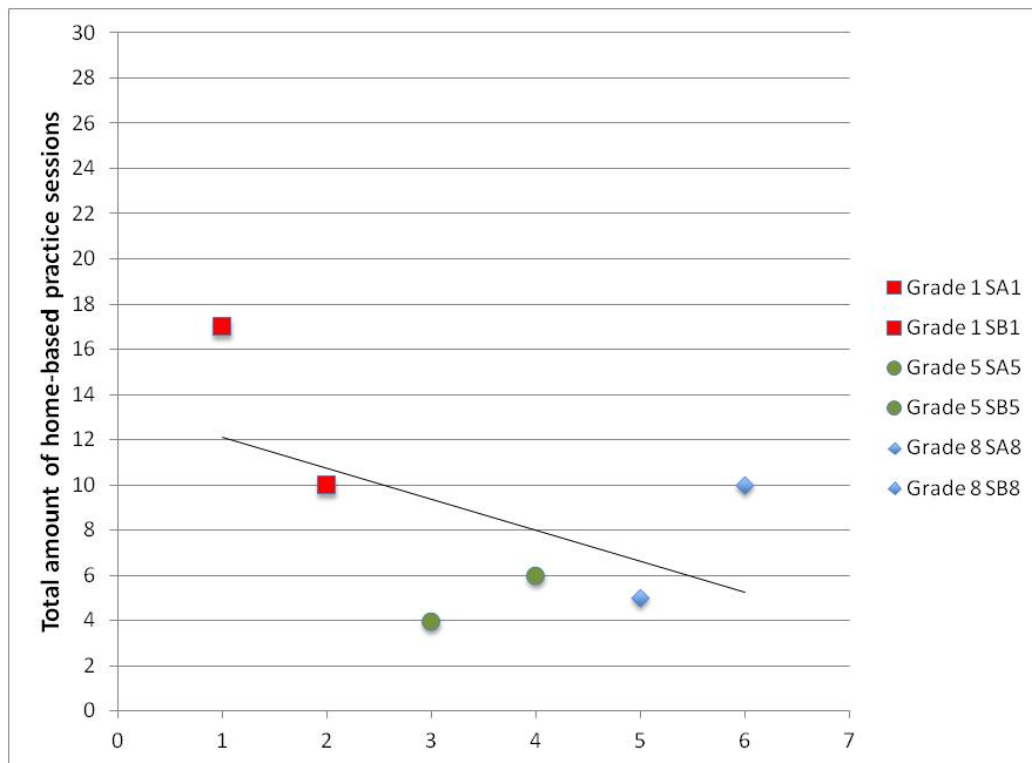
Figure 8.26. Total amount of home-based practice sessions carried by each student across the four weeks

Video analysis revealed factors of influence beyond the student's level of expertise, both intrinsic and extrinsic factors. Parental influence was one of the extrinsic factors that were found to be influencing quantity of home practice (SA1), suggesting that it may offer a benefit by increasing young student's practice time (see section 5.3.7). In contrast, health issues caused a decrease of the time spent practising (see section 5.6.7).

Interview analyses highlighted further factors that had an influence on the quantity of home practice. All students commented that other responsibilities such as school homework and private lessons had a negative impact on the quantity of practice (Ilari, 2018). Results of this study indicated that an overloaded schedule during the afternoon time was often part of students' daily lives, supporting suggestions that this is a common phenomenon in Cypriot society (Lamprianou and Lamprianou, 2013). This fact seemed to have a negative impact on student's practice and their learning in general, as they all reported to have limited time available for practising the piano. Similar findings were found in a study undertaken by Myung (2001), as she found that a tight schedule may result in a lack of practice. This might suggest that, if children have a more flexible schedule in the afternoon, they might have devoted more time to practising and, therefore, make a faster improvement over time. These findings indicated that overscheduling is likely to be one of the major implications of instrumental learning within the Cypriot context.

In addition, enjoyment of the pieces was an additional factor influencing all children's quantity of practice. Students reported that they were more motivated to practise when they were learning pieces that they liked (*cf* McPherson and Renwick, 2002). In discussing this, SA5 commented that her mood was influenced by the material that she had to practise. In addition, high level students reported that setting specific goals and reaching an examination period had a great influence on the quantity of their practice (Lehmann and Ericsson, 1998). Another point was that one of the students (SA5) commented that the usage of schedules can be very effective, especially at busy periods. However, using such a method did not have positive effects for all students, as SB8 reported that it had a negative impact for his practice. Results suggested that the personal characteristics of the students might influence their preferences to use a schedule.

8.3.2   Length of practice sessions

The length of the practice sessions was also investigated so as to examine in depth any differences between the Grade levels. Results showed noticeable differences among the Grade levels (see Figure 8.27). SB5 was the student that carried out the longest average sessions, with the average time being 32:50. She was the only student that practised up to 43 minutes, significantly longer than other students. Much lower averages of time were found for the other Grade 5 student (SA5), with the average being 14:40. In her case, a variety of lengths were found in the period of four weeks, with the shortest being 07:25 and the longest 20:27 (see section 6.3.7).
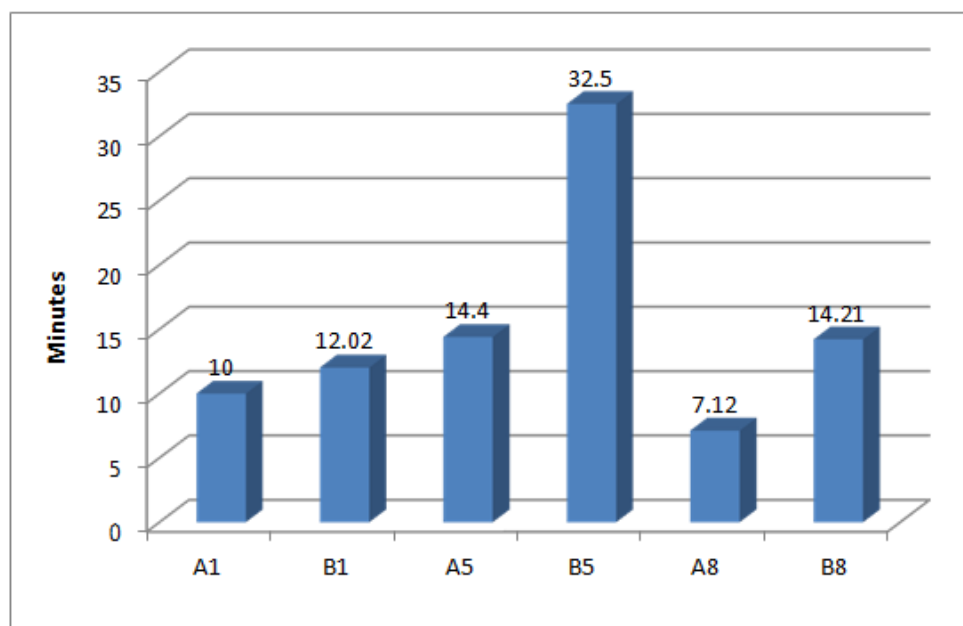
Figure 8.27. Average time length of home-based practice in minutes sessions across the four weeks

SB8 had the next longest average practice times, with the average time being 14:21 minutes. Different amounts of practice time were also found for SB8, although most of the sessions that he carried out were around 15 minutes (see section 7.6.8). The next two students in terms of average practice time were from the Grade 1 level. The average time that for SB1 was 12:02, as all her practice sessions were around 10 minutes. Similarly, the average time that was found for SA1 was 10:00. The student with the lowest average time was found for an advanced student (SA8). The average practice session length was 07:12 and all of his practice sessions tended to be relatively short, even though he might have been expected to carry out longer sessions based on his level of expertise (*cf* Bonneville-Roussy and Bouffard, 2014; Jorgensen, 2008). However, it seems that a tight schedule in the afternoon was a factor that had a strong impact on his quantity of practice. Taking into consideration his age, it is possible that this student was involved in many extra school private lessons. As Lamprianou and Lamprianou (2013) argued, students usually take various private lessons which support academic learning (e.g., core curriculum subjects) and examination preparation (e.g., GCE). This is particularly evident during the last years of schooling, as they need the certificates for entry to a college or university.

A Pearson's correlation showed a weak, non-significant positive relationship (r=.042, n=6, p=0.938) between the length of the practice sessions and the student's Grade level. Results suggested that practice time tended to increase along with the level of expertise. As video analyses indicated, the two Grade 1 students had the tendency to practise in relatively short bursts, but over several sessions. In contrast, Grade 5 students carried out longer sessions, indicating their capability to maintain concentration. Although findings of Grade 8 students showed that quantity of practice varied, overall they suggested that higher-level students were likely to carry out longer sessions compared to relative beginner students (H8). Results are generally consistent with results from previous research, which suggested that the quantity of practice increases along with the level of expertise (Hallam, 1992; 2001a; Jorgensen, 2008).

It has been argued that metacognitive skills can also be a factor influencing how much time students would spend on practising, as they have more complex and difficult tasks to achieve that requires longer sessions. Findings from the interviews agree with these points of view, as the comments demonstrated that the perceived level of piece difficulty was one of the factors influencing the length of the sessions. Specifically, results showed that higher-level students (Grade 5) had the tendency to increase the length of their sessions, based on the difficulty of the pieces. Metacognitive skills, motivation, achievement and personal characteristics such as commitment, persistence and determination are reported to be factors of influence (Barry and Hallam, 2002; Harnischmacher, 1993; Kloppel, 1998; Sloboda et al., 1996). Lastly, similar findings to those reported in the previous section (see section 8.3.1) were found, as a busy

schedule in the afternoon (e.g., other private lessons) was likely to influence the length of all students' practice sessions (Ilari, 2018).

8.3.3   Concentration while practising
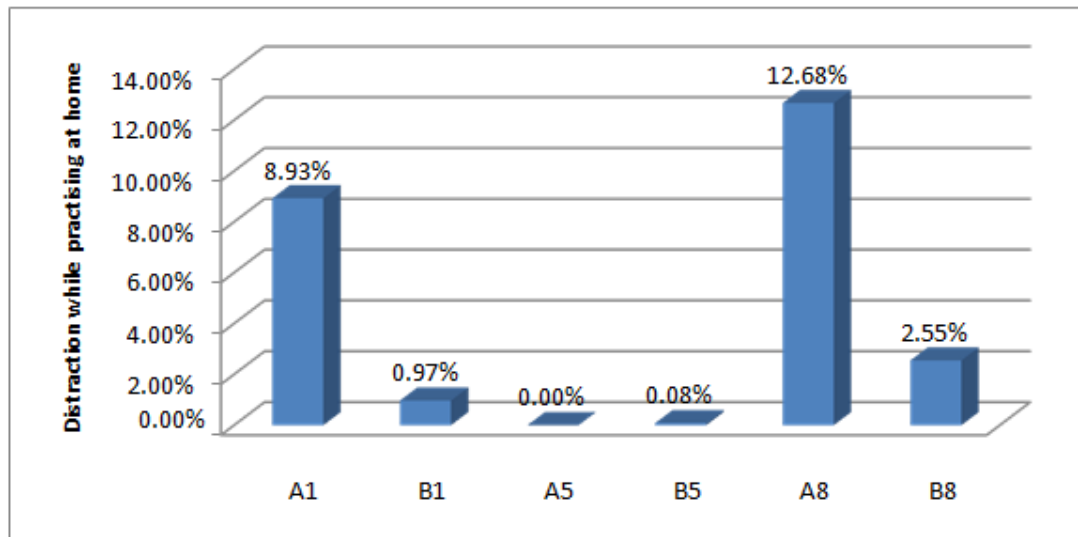
Figure 8.28. External distractions while practising at home as percentages of time across the four weeks

According to the video analyses, most of the students were able to maintain concentration for most of the time while practising, as external levels of distraction were barely evident, if evident at all (see Figure 8.28). The students that were able to maintain concentration for the longest time belonged to the Grade 5 pair. Similar results were found for student SB1, although in her case concentration was lost due to a noisy home-environment (Harris and Crozier, 2000).

Analyses indicated that the rest of the students could not always maintain concentration for a long time. They were easily distracted while practising or interrupting their own practice of activities that were irrelevant to their practice. Talking with others, using a mobile phone or walking around the room were the activities that were found the most in relation to distraction. A noisy environment (for SA1 and SA8) was, therefore, one factor influencing their ability to maintain concentration while practising (as Austin and Berg, 2006). However, results indicated that, for the majority of these students, this was not the case. Instead, students were distracted due to their inability to maintain concentration for long periods of time.

Intermediate students, on the other hand, demonstrated that they have already developed such skills, as they showed a capability to maintain concentration while practising, even though they undertook the longest sessions. Analyses supported arguments that older students have a tendency to carry out longer practice sessions and that the length of the sessions tends to increase along with age and expertise (Hallam, 1998). Findings from another

study (Nakamura and Csikszentmihalyi, 2002) showed that this behaviour is possibly linked with psychological flow, 'an experience that is characterized by complete concentration, heightened sense of control, merging of action and attention, loss of self-consciousness, distortion of time perception and autotelic experience' (Tse, Fung, Nakamura and Csikszentmihalyi, 2016, p.284). Their findings suggested that it is possible for individuals to experience flow for an activity in which they are engaged on a daily basis. Based on the research, it seems more likely for a higher-level student to experience flow, as they usually tend to express more intrinsic interest in learning an instrument (Butkovic, Ullen, Mosing, 2015). This argument is in line with findings of this research, as higher-level students were found to be motivated in practising. However, external factors such a busy schedule influenced their availability of time to practise.

However, results of a Pearson correlation showed a non-significant, weak positive relationship (r=.173, n=6, p=.743). Although Grade 8 students might have been expected to stay highly focused while practising (Barry and Hallam, 2002), results in this study showed that they had the tendency to get as distracted (little/a lot) as much as the Grade 1 students. Based on this small sample, there is the suggestion that each student's personal characteristics and the home-based environment influenced the level of their concentration while practising. As Austin and Berg (2006) found, the practice environment can have a significant effect upon actual practice. Their research demonstrated that students tend to show higher-levels of motivation and regulation when they had a comfortable and quiet place to practise. However, as results of this study showed, this is not always the case for all children. Taking into consideration that engagement in practice is a key opponent in achieving high level skills, this might result in not having equal opportunities for musical development.

8.3.4 Total number of practice strategies used in the practice sessions

A different repertoire of strategies was used by each student, although some similarities were noted among the Grade levels (see Tables 8.26 and 8.27). According to analyses, the repertoire of Grade 1 students included more practice strategies as a total compared to the other participants. Results are in line with evidence from previous research that suggested that young students use a range of strategies, although they usually do not have a well-defined focus in optimising their performance (Hallam, 2001). Students who have already developed metacognitive skills are more likely to be able to identify their strengths and weaknesses, and therefore to develop a specific practice repertoire based on them (StGeorge, Holbrook and Cantwell, 2012; McPherson and Zimmerman, 2002). According to their arguments, it is therefore expected that young students are still at a stage where they explore different type of strategies until they find what works best for them.

Table 8.26. Total number of strategies used by each student in home-based practice

SA1	SB1	SA5	SB5	SA8	SB8
25	22	19	21	19	19

A Pearson's correlation indicated a strong and statistically significant negative relationship between the total number of strategies and the students Grade level (r= -.857, n=6, p=.029). According to the results, the amount of practice strategies had a tendency to decrease as the student's level of expertise increased (see Figure 8.29). However, findings are not suggesting that Grade 1 practice was more or less effective compared to the highest Grade level students. Instead, based on the progress of the students, results suggest that it is likely for the lowest Grade level students to be exploring a wide repertoire of strategies. In contrast, video analysis showed that, in most of the cases, Grade 5 and 8 students were likely to choose fewer but more effective strategies to solve any problems that they faced. As might be expected, they had already developed knowledge and understanding of what strategies they could use so as to achieve their short-term goals. Analyses of quantitative and qualitative data tend to support the hypotheses (H9 and H12) that the practice of high(er) level students is based mostly on self-regulatory behaviour.

Specifically, Grade 8 students were found to be practising mainly by dividing their pieces into different parts and focusing on these until progress could be noted. Similarities between the five most used strategies were also noted, as the 'slow', 'focus on one scale' and 'start from the beginning' was evident in both Grade 8 cases. Additional strategies that were used included 'repeat part', 'focus on one part' (SA8), 'repeat scale' and 'repeat notes' (SB8). However, it is important to note that the musical pieces of each student were different, and therefore practice strategies were used according to the demands of the particular repertoire. Results support the hypotheses (H9) that Grade 8 students are likely to regularly self-regulate their practice by choosing suitable practice strategies to achieve their goals. Findings also support arguments made based on research undertaken by Ford, Smith, Weissbein Gully and Salas (1998). They found that experienced individuals monitored their own learning, identified repertoire difficulties, and adjusted their behaviour accordingly by choosing more suitable strategies. Findings of the present research, therefore, agree with suggestions that, as musicians develop their self-regulation behaviour, they become more able to identify the nature of the task to be completed, based on the perceived level of difficulty of the piece, and therefore to choose appropriate strategies with the aim to achieve progress by the end of the session (in line with findings from StGeorge et al., 2012; Hallam, 2001b). Overall, the

behaviour of the two Grade 8 students indicated that they were at the end of phase two of Ericsson, Krampe and Tesch-Romer's (1993) theory of musical expertise, as they showed that they had already developed high level skills and abilities.
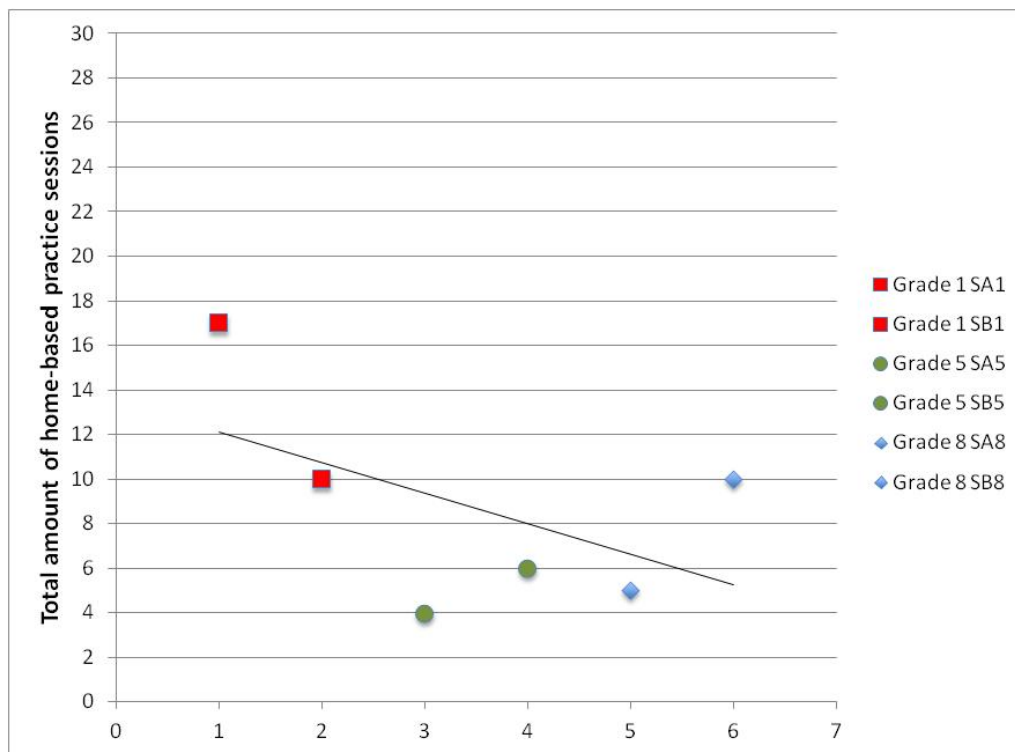
Figure 8.29. Total amount of strategies used while practising at home for each student separately

Grade 5 students demonstrated knowledge of a range of strategies, although differences in the methods used by the two students were found (see Appendix XIV). Data suggested that SA5 practised in a similar fashion to the two Grade 8 students, as in most of the sessions she focused on selected parts instead of playing through the whole piece. However, at times she appeared to lack an understanding of how to use this method so as achieve the desired results. In contrast, SB5 practised by using another method, as she mainly practised by playing through the whole piece and, in the cases when she identified parts that needed improvement, she focused on them separately.

With regard to the five most used strategies, two students had two in common; the 'focus on part' and 'focus on one scale'. The other three most used strategies were different for each student, as for SA5 these were 'repeat part', 'play with the right hand' or the 'left hand' only, and for SB5 were play at a 'slow', 'regular' or 'fast' tempo. However, it has to be noted that the statement above concerns only the five strategies that the students used the most during these four weeks. The data support the hypothesis (H4) that self-regulation and independency for Grade 5 students may be part of their practice, but not consistently. As other researchers have

reported, young learners begin as 'unsophisticated practicers' and— over time—they gradually develop a wider practice repertoire, as well as metacognitive and self-reflective skills (Miksza and Tan 2015; Hallam et al., 2012; McPherson, Davidson and Faulkner, 2012). Intermediate students are, therefore, likely to have already developed a more appropriate high level of practice strategies than relative beginners, as they have gained a level of experience as learners; however, it is also possible at times that they are not able make efficient decisions about their practice. Results suggested that, based on Ericsson Krampe and Tesch-Romer's (1993) theoretical framework, the two Grade 5 students were in the middle of phase two, as they were still in the process of acquiring the most effective practice skills.

Finally, Grade 1 students' practice was less effective than any other Grade levels, even though they used the highest number of strategies while practising. Both students could be categorised as in between the third and the fourth level of the developmental sequence of practice (Hallam, 1997), as they practised by playing through the material and corrected mistakes, either by repeating single notes or short parts. Results support the hypothesis (H3) that Grade 1 students practise mainly by playing throughout the piece and not by using a part-whole method. In addition, they support hypothesis (H1) that low level students use a range of strategies suggested by their teacher, and that these are relatively simple and straightforward, but they are probably less likely to be in a position to self-regulate their practice. This suggests that as musicians, they were at the end of phase one of Ericsson Krampe and Tesch-Romer's (1993) theory of expertise.

With an aim to identify the strategies that each student showed a preference to use while practising, the five strategies with the higher averages were gathered and presented in the table below (Table 8.27). Results showed differences between the students and the Grade levels in relation to their practice habits. However, the researcher has to acknowledge that each student practised different material while at home and that this might have had an impact on the observed behaviours. Although all students focused mostly on the pieces, some spent a lot of time on practising the scales (e.g., SB8) and this had an influence upon the five most common used strategies.

Analyses indicated that the most commonly used strategy by almost all of the students (except SA5) was to practise at a 'slow tempo', with the averages ranging from 29.32% up to 79.97%. Results also showed that intermediate and advanced students spent a lot of time on using strategies from the categories 'focus on difficult parts', and 'error correction'. Overall, their practice was based on isolating and working on difficult parts until progress was marked. Additional strategies such as play with the 'RH and LH only' and play at a 'regular' and 'fast tempi' were also used frequently by Grade 5 students. On the other hand, Grade 1 students

used alternative strategies most of the time. The strategies they mostly applied while practising were from the categories 'strategies for scales and repertoire' and 'strategies to master difficult parts'.

Table 8.27. Five strategies used most in home practice across the four weeks as total averages

SA1	Slow	Regular Tempo	Fast	Right Hand Only	Metronome
	29.32%	27.81%	17.74%	12.23%	12.04%
SB1	Slow	Count Aloud	Singing Along	Metronome	Regular Tempo
	37.95%	30.71%	30.25%	18.78%	16.92%
SA5	Focus on Part	Repeat Part	Right Hand Only	Focus on one Scale	Left Hand Only
	47.37%	32.90%	19.30%	18.60%	15.39%
SB5	Slow	Focus on one scale	Focus on Part	Fast	Regular Tempo
	59.41%	14.93%	14.21%	13.87%	13.30%
SA8	Slow	Focus on part	Repeat Part	Focus on one scale	SFB
	71.00%	29.48%	24.12%	14.78%	11.71%
SB8	Slow	Focus on one scale	SFB	Repeat scale	Repeat notes
	79.97%	37.05%	14.67%	12.80%	9.50%

Based on Hallam's (1997) developmental levels of practice, results indicate that high-level students tended to use more sophisticated strategies than the Grade 1 students. Findings suggest that SA5 was at the fifth stage of Hallam's (1997) levels of practice as she practised mainly by focusing on specific parts of the piece. Video analyses indicated that SB5 had already reached stage six as she practised mainly by playing throughout the piece so as to identify difficult parts and therefore to practise in isolation (H7). Similarly, both Grade 8 students were found to be at the sixth level of practice development. In addition, results of the present study showed that occasionally Grade 8 students also began their practice by playing directly isolated parts. Data support a hypothesis that advanced students do not necessarily spend much time playing the piece through as a whole in their practice (H10).

In contrast, although both Grade 1 students showed awareness of practice by isolating difficult parts, the majority of the time they practised by playing the whole piece and using strategies from other categories instead. Overall, results support the hypotheses of the research and also results from other studies suggesting that less advanced students mainly practise less effectively, as they usually play through whole pieces without stopping to correct mistakes

(Gruson, 1988; Hallam, 2012). Overall, the strategies that they were using while practising were simple and straightforward, and mainly suggested by their teachers (Koopman et al., 2007).

8.3.5 Identification of Mistakes

As was expected, the students at the highest level of expertise, were capable of identifying all of their mistakes and also of solving problems with the usage of appropriate strategies (Hallam, 1997). Grade 5 students could identify all of their mistakes and to correct them, although they were not always in a position to solve problems by the end of a session. In contrast, Grade 1 students could not always identify all of their mistakes, especially in the pieces that were new to them (*cf* McPherson and Renwick, 2001). Lower competency level students were mainly found to be able to identify mistakes only from the pieces on which they had been working for a longer period of time. In contrast, recognition and correction of mistakes was not evident when working on new pieces. These findings are consistent with previous suggestions that students become more able to identify their mistakes as they gradually acquire an internal representation of the piece of music that they are learning and, therefore, become more able to identify their mistakes (Jorgensen and Hallam, 2016; Hallam et al., 2012). Likewise, findings of the research showed that lower-level students were more able to identify mistakes in pieces of music with which were more familiar (see sections 5.3.11 and 5.6.11). Overall, findings were consistent with previous research suggesting that recognition of mistakes is more evident as the students' Grade level increased (Hallam, 1997).

Furthermore, results showed differences between the Grade levels and the strategies that were used after identification of an error. Findings suggested that lower-level students tended to correct a mistake mainly by using strategies from the 'error correction' category, such as repeating single notes or group of notes. Although this behaviour was detected in higher Grade levels as well, data analyses revealed that these students also used additional strategies to correct a mistake, depending on their short-term goals. Grade 5 and 8 students were found to be identifying, isolating and then focusing on parts of music until improvement took place. In all of the cases, usage of more effective strategies such as 'repeat part' 'focus on part' and 'play with the hands separately' were evident. Therefore, results revealed that application of more effective strategies after error identification increases along with the Grade level of the students.

8.4 Research Question Three: Is the level of expertise a factor of influence in the relationship between studio-based lessons and home-based practice?

- H1: Grade 1 students' practice strategies are closely related to the practice suggestions from their piano teachers in the observed lessons.
- H4: Grade 5 students' practice strategies are less closely related to the practice suggestions from their piano teachers in the observed lessons and more on a growing self-regulation.
- H9: Grade 8 students' practice strategies are not closely related to the practice suggestions from their piano teachers in the observed lessons, but more on self-regulation.
- H12: The higher the level of expertise, the greater the possibility for the practice to be self-regulated and less related to the piano teacher's instructions in the lesson.

This section will initially present results indicating the relationship between the lessons and the home based-sessions. Findings presented are related to the total number of occasions that the students followed their teachers' advice. This was deemed to offer information about the extent to which practice sessions were related to the lessons. Overarching findings relating to all students will then be presented based on the four research questions, with the aim to identify any positive relationships between different categories.

8.4.1 Number of instructions provided by the teacher and number of instructions that were followed by the students in subsequent practise

Results indicated that each student received a different amount of instructions that were directly linked with future practice. Table 8.28 illustrates the total number of the instructions that were provided to the students across all of the weeks. SB1 received the most instructions (=56) followed by SB5 (=47), SB8 (=42), SA1 (=28), SA5 (=22) and SA8 (=11). Results indicated that TB's students received considerably more instructions compared to those of TA.

Table 8.28. Number of instructions that were provided to the students during the four weeks

SA1	28
SA5	22
SA8	11
SB1	56
SB5	47
SB8	42

Results also indicated that TB's students followed more instructions during the period of four weeks (see Table 8.29). The fact that the students of TB received a larger amount of information about practice seemed to have an impact on the students' behaviour. As previously argued, constant support by teachers has been shown to enhance motivation and positive attitudes to practise effectively (McPherson and Renwick, 2002). Results of this study suggest that this may have also been the case for these students.

Table 8.29. Amount of instructions that were followed by each student across the four weeks

SA1	15 out of 28
SA5	9 out of 22
SA8	4 out of 11
SB1	38 out of 56
SB5	26 out of 47
SB8	26 out of 42

All results were also converted into averages and ranked so as to be comparable. Table 8.30 demonstrate that SB1's home-based sessions were the most related to the instructions that the teacher gave. The total average that was found for all weeks for B1 was 69.04%, as she used a great amount of the suggested strategies in each week. In contrast, the lowest average was found for SA8 with the average of 37.50%.

Table 8.30. Averages of the instructions that were followed across the four weeks from highest to lowest

SB1	69.04%
SB8	61.45%
SA1	56.74%
SB5	55.66%
SA5	40.89%
SA8	37.50%

A regression analysis was also undertaken to examine the relationship between the Grade level and the average of the instructions that were followed by the students (see Figure 8.30). Results showed a moderate negative relationship (r=-.521, n=6, p=.289) between the two. The non-significant statistical results thus showed that the level of expertise was not one of the major factors of influence.
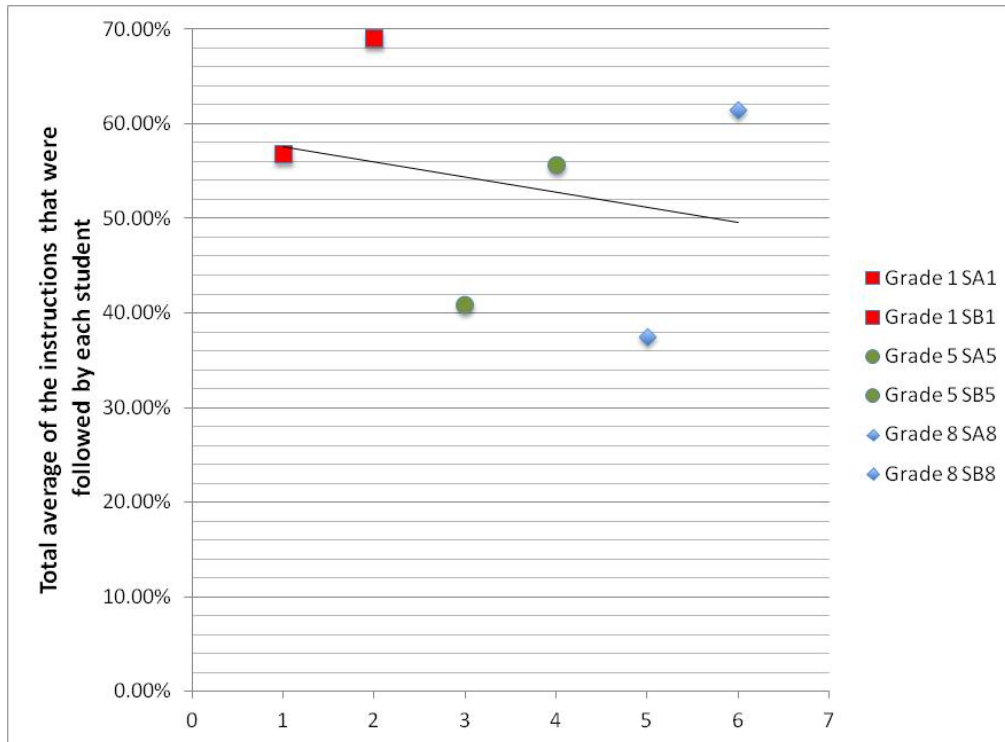
Figure 8.30 Average number of teacher instructions on private practice that were followed by each student across the four weeks

Instead, videos analysis showed a possible factor influencing the students' behaviour while practising at their homes. Specifically, a relationship was suggested between the amount of instructions and the emphasis that the teachers gave in their advice and in recommending specific strategies. Students who were strongly recommended to use specific strategies as part of their future home practice tended to apply these strategies in subsequent practice sessions. However, results for SB5 show that this might not always be the case. Although this student received a high number of instructions, she used fewer strategies compared to other students, indicating that other factors may also have an influence. This finding might suggest that other factors contributed in influencing her behaviour. Based on video data (see section 6.7 for more), she had already developed skills related to self-regulation (Zimmerman, 2002), and this might have influenced her practice to be more independent (Barry and McArthur, 1994).

Analyses also demonstrated that the methodology applied by each teacher had a great influence upon students' subsequent home practice. As Figure 8.31 shows, the students that followed more instructions throughout the period of four weeks were the students (SB1 and SB8) of the same teacher. Overall, data analyses showed that TB's teaching methodology considers 'practice' to be one of the main ingredients in the students' development as musicians. According to her statements, she tries to exploit any opportunity to refer on practice

while teaching. However, TB stressed the importance of how teachers should engage their students to practise.

> *'As a teacher I believe that referring to practice in every lesson is a must. However, the way that we, as teachers, use to encourage student to practise influence to a large extent whether they will follow our instructions or not. For example, I avoid saying things like 'You should practise immediately.' or 'Why haven't you practised?' Instead, I always try to use a more friendly approach to encourage practice.'*
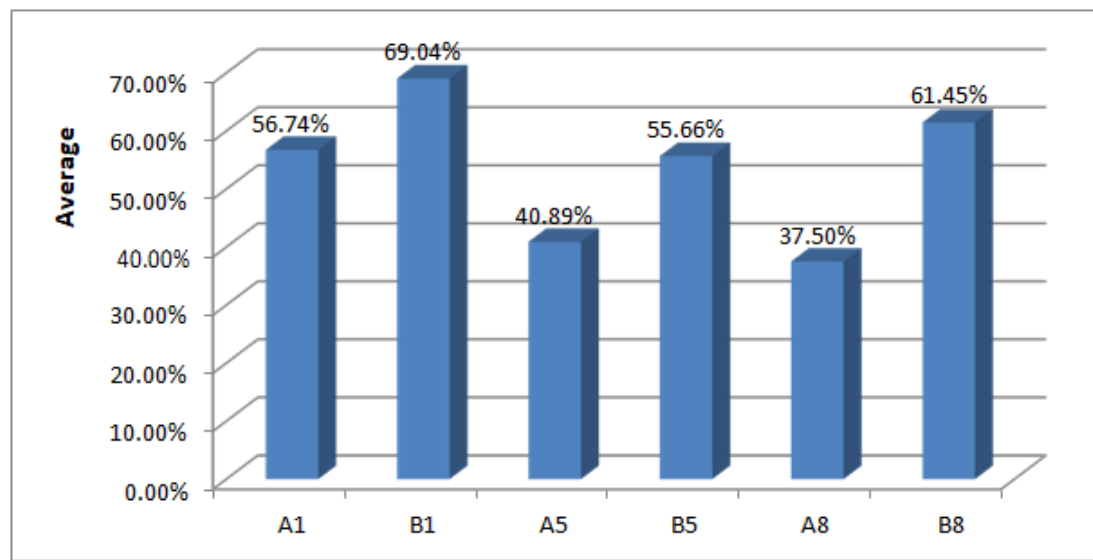
Figure 8.31. Average proportions (%) of the teacher instructions that were followed by each student

According to Teachers' B statement, the approach that teachers use to promote practice can have a direct impact on student's behaviour in the subsequent practice sessions. Results of this study were very similar to previous research that focused on the practice relationship of the lessons and individual private practice. Several studies showed that the teachers' approaches influenced subsequent practice (Chen, 2015; Koopman et al., 2007; Barry, 2007). If teachers criticize and are seen to impose ideas, this may often discourage practice, especially taking into consideration that practice itself is a highly demanding activity and often seems to be not enjoyable for a learner (Ericsson et al., 1993; Ericsson, 2006). On the contrary, a study undertaken by Davidson, Howe, and Sloboda (1997) showed that the teachers who were considered friendly and entertaining were more likely to motivate their students to practise. Findings from another study undertaken by Mali (2014) also support this point of view, as they showed that teachers who established a good learning relationship with their students were more likely to create a harmonious teaching atmosphere. Mali also found that, in such cases, it is more likely for students to trust and cooperate with their teachers, but

most importantly to develop their learning enthusiasm. The ideal picture to encourage practice thus would be to create a friendly environment where teachers remind and inspire students about the desired result (*cf* Hallam, 2006; McPherson and Zimmerman, 2002). Findings from the current research also revealed similar results, showing that the teaching methodology, therefore, can have a great influence upon the students' home practice.

In addition to the above tables, Table 8.31 shows the results for each student by presenting each week separately. SB1 had the highest average among all students (=69.04%). However, findings suggested that she was still not in a position to make effective decisions about her practice. The fact that she was using the notebook the entire time while practising and still not following precisely all of the instructions, suggested that reference to specific strategies may not always be effective for children. Nevertheless, as McPherson (2005) argued, usage of practice notebooks can help students to monitor and control their learning by following written notes on what and how to practise. In addition, Hong and Milgram (2000, p.145) suggested that this strategy can serve as a visual reminder of what needs to be practised, while it also 'encourages students to complete homework on schedule'. Findings in the present study suggested that usage of notebook had similar effects for SB1, as she was able to achieve most of her weekly goals, by modelling strategies written down by her teacher.

SB8 followed almost all the suggested strategies in most of the weeks, apart from the third week when he did not apply any of the suggested strategies. This implies that, at times, he may not have been in a position to make correct decisions about his practice, despite his level of expertise. However, he was generally in a position to self-regulate his practice, as he consciously chose to use alternative strategies from those that were suggested so as to achieve progress (*cf* Barry and Hallam, 2002; Lehmann and Ericsson, 1997).

Analyses showed that SA1 followed most of the suggested strategies, apart from the third week when she used only two of them. During that week, she received the most advice on using specific strategies; however, she chose to use a lot of error corrections strategies, instead of the recommended ones. Findings from the interview indicated that this student chose strategies depending on enjoyment (see section 5.4.5), suggesting that she was still not in a position to identify the importance of using the recommended strategies. Although, she demonstrated knowledge and understanding of a range of strategies at times, she was not able to identify what worked best for her so as to achieve her goals by the end of the sessions. This indicated that she was in a developmental phase in which she could not always make appropriate decisions (Ericsson et al., 1993; Hallam et al., 2012). Another factor that may have influenced effectiveness of her practice was that her teacher did not provide written instructions to enhance her memory of what needed to be practised (Leon-Guerrero, 2008;

McPherson, 2005). As previous research argues, children in this age have the tendency of forgetting their home-assignments (e.g., McPherson and Davidson, 2006; McPherson and Zimmerman, 2002). However, findings of the present research showed that although she did not use a notebook, she followed most of the given instructions.

Table 8.31. Weekly analysis of the relationship between lessons and practice sessions

Number of Instructions that were followed across the four weeks					
	First Week	Second Week	Third Week	Fourth Week	Total number for all weeks
SA1	4/6	5/7	2/9	4/6	15/28
SB1	8/16	13/14	7/14	10/12	38/56
SA5	2/7	3/6	1/4	3/5	9/22
SB5	4/11	7/12	9/11	6/13	26/47
SA8	0/2	0/3	2/4	2/2	4/11
SB8	11/11	10/12	0/11	5/8	26/42
Average of instructions that were followed across the four weeks					
	First Week	Second Week	Third Week	Fourth Week	Averages of all weeks
SA1	66.66%	71.42%	22.22%	66.66%	56.74%
SB1	50%	92.85%	50%	83.33%	69.04%
SA5	28.57%	50%	25%	60%	40.89%
SB5	36.36%	58.33%	81.81%	46.15%	55.66%
SA8	0.00%	0%	50%	100%	37.50%
SB8	100%	83.33%	0.00%	62.5%	61.45%

SB5 was the student with the next highest average (=55.66%). She followed a variety of instructions that were related to specific strategies, although she also chose to use alternative strategies at various times. Self-regulation thus may have been a factor of influence in the decision whether usage of all of the recommended strategies would take place. Empirical studies have demonstrated that finding alternative strategies with the aim to accomplish difficult tasks is one of the characteristics of advanced students (Concina, 2019; Ericsson et al., 1993; Lehmann, Sloboda and Woody, 2007). However, this type of behaviour develops along with self-regulation behaviour. Therefore, intermediate students are still in the process of developing such behaviour, and so their decisions may be regularly influenced by their teacher's advice. As previous research has showed, this might also be the case for students with higher-level of expertise (Hatfield, and Lemyre, 2016).

Results for SA5 showed that during the period of the four weeks she followed fewer than half of the strategies that she was recommended to use (average=40.89%). SA5 was selective in the material that she was asked to practise. At various times, she ignored her teacher's instructions and used alternative strategies while practising. This indicated that her practice sessions were not so closely related to the lessons, and that instead she based her practice on self-regulation. However, her decisions regarding practising only a part of the material, as well as her decisions to ignore strategies that were emphasised by her teacher, indicates that she was still not always in a position to practise effectively. In such cases, additional written information on the score or on a notebook might enhance the effectiveness of student's practice, until full development of effective self-regulation behaviour can be evidenced (Concina, 2019; McPherson and Renwick, 2001). In addition, teachers can also encourage students to start keeping their own notes (Gledhill, 2001). With this approach, they encourage usage of organisational and planning strategies, while they also provide opportunities for them to become autonomous learners (Harris and Crozier, 2000).

Lastly, results indicated a weak relationship between SA8's practice sessions and the lessons. He used less than the half of the suggested strategies over the period of four weeks (average=37.50%). Overall, he exhibited a tendency to ignore suggested strategies, even though he received the smallest number of instructions compared to the other students. Results showed that this student mainly applied self-regulation behaviour while practising rather than depending on his teacher's instructions. He chose to use alternative strategies to achieve his goals, showing that he had developed relative independency as a learner. As has been argued by Araujo (2015), this is a common behaviour among high level skilled musicians, as they tend to choose, modify and adapt their own strategies while practising.

Overall, on the basis of this small sample of learners, data analyses suggest that it is more likely for teachers who have a commitment to encourage future practice to influence their students' subsequent practice in a positive way. Participants in this study followed a higher amount of instructions when teachers gave more emphasis on future practice during the lessons. Provision of technical, but most importantly emotional support, seemed to influence students' motivation to practise, as they displayed a more positive attitude (McPherson and Davidson, 2002; Ruzek et al., 2016). However, results indicated that the level of expertise had a direct influence on their behaviour (Hallam, 2006). Higher-level students tended to practise mainly by choosing strategies from their own repertoire although at times they also modelled strategies suggested by their teachers (H6 and H9). In contrast, lower-level students based their practice mostly on their teacher's instructions (H1). In addition, personal characteristics of the student (e.g., self-motivation and self-efficiency) also had an impact on engagement to tasks, as well as on their personal effort (Concina, 2019).

Although limited to one student, analyses also indicated a strong relationship between the amount of the followed instructions and the usage of a notebook. The student (SB1) that was using a notebook followed the instructions most while practising at home. Other research has indicated that a notebook can have a positive influence upon students, as it can work as a reminder of what they were asked to do for the next lesson (Barry and McArthur, 1994; Leon-Guerrero, 2008; McPherson and Renwick, 2001; Harris and Crozier, 2000). In discussing usage of notebook, TB referred to many points, including that of recognising and encouraging the development of a young student's short-term memory. She also raised an issue that instrumental teachers may have to face during teaching. Usage of a notebook can be used in cases in cases when students claim that they did not know what they were assigned to practise. In discussing this issue, Green (2007) reported that in such cases the notebook can be used so as to quickly refer to the last entry.

> TB: 'I keep notes for students up to 12 and 13 years old who are in the second grade of high school…Children tend to forget…It also helps me as a teacher in two ways, firstly to remember what we discussed in the previous lesson and secondly to have 'evidence' of what I told them to do throughout the week. I can also use the notebook to say to them for example 'Look, we said that you have to practise the arpeggios. It's in the notebook. Why didn't you practise them?' With this way I have 'evidence' of what I asked them to do throughout the week. I usually tell them for example 'use the notebook to see what I told you to practise.'

On the other hand, TB commented that she used an alternative approach for older students. According to her perception, simple written-notes with key-words on the score can be enough to enhance students' practice. With this method, higher-level students may feel more autonomous, perhaps due to the fact that they feel that they are being trusted to take responsibility for their own learning (Gledhill, 2001; Weaver, 2005).

> 'For older students I usually give them instructions verbally. I might keep notes on the score only about things that are in high need to do them in the following week so as to make progress.'

However, results showed that despite their ages, students at higher Grade levels did not always follow instructions that were given, whether verbally or written down. SA5 (average=40.85%) and SA8 (=37.50%) were the students with the two lowest averages with regard to the teacher instructions that were followed. Despite the fact that both students were advised to use specific strategies, analyses indicated that they chose to ignore these strategies and use alternative ones. The results suggested that high(er) level students who

received fewer verbal and written instructions were more likely to self-regulate their practice. In contrast, students who received more detailed instructions about their practice were more likely to follow instructions throughout the week, even in high(er) level Grades. According to previous research, demonstration of keen interest and encouragement to practice may enhance students' engagement (Ruzek et al., 2016; Sloboda et al., 1996).

Another positive relationship was found between the provision of written information and the extent to which the instructions were followed. With the exception of one student, results suggested that the higher the amount of written information on the scores about future practice, the higher the possibility for the students to follow instructions while practising at home. Results indicated that the students who received a high amount of written information in the lessons followed a large amount of the suggested strategies while practising at their homes. The only exception was SB5; although she was provided with the most of the written information, she did not use all of the suggested strategies while practising. Results suggested that, despite the students' age and level of expertise, the provision of key notes or marks on the scores about future practice can aid as a reminder, especially when the amount of verbal instructions is large. Previous research had demonstrated that written instructions can have a positive impact on students, as it is a type of guidance on how to practise effectively at home so as to achieve weekly goals (Harris and Crozier, 2000; Pearce, 1992).

Apart from the written information, a link was identified between the total number of the verbal instructions and the extent to whether instructions were followed. Results suggested that the longer the amount of lesson time that was spent on giving instructions verbally, the higher the probability for the students to follow instructions during their home-practice. Similar results were found for the total amount of the given instructions, with slight differences. The order for the two categories was almost identical, apart from one student that followed less instructions compare to the number that she was given. However, a relationship between the levels of expertise of all students was not evident. Although teachers gave more information to their lowest Grade levels, there appeared to be no link between them in relation to the averages and the level of expertise. This might suggest that the emphasis given by the teachers on modelling strategies is possibly more of a factor of influence.

A positive relationship between verbal instructions and the number of instructions that were followed was also found. SB1 was the student that received the most verbal instructions about future practice (=92), followed by SB8 and SB5 (=85), SA1 (=54), SA5 (=29) and SA8 (=20). Results showed that the higher the numbers of instructions, the higher the probabilities were for the students to follow instructions while practising alone at their homes.

Lastly, a positive relationship was found between the frequency of reference to future practice and the extent to which the instructions would be followed after the lesson. The teacher that referred to future practice more often during the lessons influenced positively their students' practice, as they followed more of their instructions while practising. The highest amount corresponding to reference to practice was found for SB1 with 92 different times followed by SB5 and SB8 with 85 times each. Lower numbers were found for the other three students of TA, with 54 times for SA1, 29 times for SA5 and, lastly 20 times for SA8. Results indicated that the instructions that were followed were almost the same, with the exception of one student, SB5. She was the only student that, even though reference to future practice was made frequently, she followed less instructions that she was expected to use in the subsequent home-based sessions. Despite the fact that results suggest a link between the two categories, a factor influencing this relationship was also found. Findings of this research with a small sample suggested that the teaching methods used by each teacher had an influence, as the students of the teacher that made less reference in the lessons were observed to follow a smaller proportion of instructions. The findings of this research support the claim that instrumental teachers should constantly refer to practice during their lessons and to encourage the development of practice strategies. As previously suggested, one of the major roles of the teachers is to teach their students how to practise effectively and gradually to develop students independency as learners (McPherson et al., 2017; Hallam et al., 2012; Jorgensen, 2008).

8.5 Summary

This chapter examined findings about practice from two different perspectives: teaching and learning. Findings on teaching suggested various factors that influenced the students of the two participating teachers. Specifically, the teaching methodologies applied by the teachers seemed to influence student's behaviours and actions accordingly. Additional factors such as personal characteristics and ability to self-regulate influenced students' practice effectiveness, and relative independence was also an influence.

Chapter 9
Summary and Implications

9.1 Introduction

The final chapter addresses key points regarding the present research, such as the aims of the study. It also reviews the methodology and the methods used for the study. The chapter then summarises the main findings along with a discussion of a proposed learning cycle. Lastly, a discussion of the implications and limitations of the study are provided, as well as recommendations for further study.

9.2 Synopsis of the aims and the methodology of the study

The topics of 'private instrumental practice', 'instrumental teaching and learning processes' and 'musical expertise' have been a key interest for a very long time in the field of music education. However, limited previous research has been undertaken on the nature of the relationship between instrumental lessons and the subsequent private practice sessions. Previous studies on this topic were designed mainly in the context of higher education, with the participants studying at colleges and universities (Barry, 2007; Chen, 2015), or conservatories (Koopman et al., 2007). This is the first study that focuses on a lower-level of education (pre-college), and with the participants being at different levels of expertise up to ABRSM Grade 8 level. In the present study, the central focus on this relationship was on 'practice', so this was explored through the use of multiple methods.

For the purposes of this research, practice was examined within two different settings: (i) one-to-one lessons in a Cypriot private music conservatory and (ii) home-based practice sessions that were carried out individually by each student. One of the researcher's priorities was to design an ethical framework for this doctoral study (for more, see section 3.7). Careful considerations of issues related to the settings and context of the research, the methods used and the data reporting were, therefore, taken at all of the stages of the research process (*cf* Iphofen, 2011; Aguinis and Henle, 2008; Boddy et al., 2013). All steps taken in relation to ethics sought to ensure the protection of participants, and they also played an important part in enhancing the validity and reliability of the research in general (as reported by Busher, 2002).

The analyses of the relationship between studio-based piano lessons and home-based practice revealed information about the process of learning for students at different levels of expertise. Results provided an insight into how precisely students paid attention to the suggested practice strategies while practising the piano in a non-controlled environment. The nature of the 'practice' relationship was tested by triangulating the three main topics ('music practice', 'musical expertise' and 'teaching and learning processes'), revealing a deeper knowledge and understanding of how teachers can aid their students' practice development. Student's level of expertise was a major factor that was tested to see its influence upon this relationship.

Multiple methods were used to accomplish completion of this study, including video-taped lesson observations, videotaped home-based practice sessions and individual semi-structured interviews with the teachers, separately, and their students. All methods used were sensitive in terms of ethics, and all the relevant recommended considerations were undertaken (see section 3.7). Special attention was given to the risks of harm (e.g., feelings of anxiety) so as to ensure that all participants would be protected in all of the phases of the research process (Boddy et al., 2013).

The nature of the study required detailed micro-analysis and, therefore, case studies were used to achieve the goals of the study. The analyses that were undertaken aimed to answer three main research questions and to test twelve hypotheses. Data were subjected to quantitative analysis based on an observation checklist that was specially designed for this study, as well as with the use of quantitative software. Qualitative methods of analysis were also used in the data analysis of the semi-structured interviews. Eleven themes that relate to the term 'practice' were identified in the literature review and applied to the data collection and analyses, and used as a structure for this research. The researcher took into account the risks for participants' identification while using micro-analyses. All data were carefully processed reporting, such as related to anonymity, and redaction of personal information, so as to prevent any identification and to protect the participants' rights (Iphofen, 2011).

9.3 Summary of the main findings

Findings of the present study indicated various factors influencing the relationship between the studio-based lessons and home-based practice for these participant pianists. Internal factors were found to be related to the students' level of expertise, age, practice development level, self-regulation and independency, personal characteristics, motivation and enjoyment of activity. External factors that influenced the relationship were the teaching approaches used in the lesson, students' availability of time for practice in their schedule, other responsibilities and commitments, parental involvement, health issues and home environment. Findings

indicated that these factors had an impact on all students, notwithstanding their current level of musical expertise (Ericsson et al., 1993). However, the extent to which each of these factors influenced the relationship between the lesson and the home-based practice varied among students. The following sections summarise findings by taking into consideration all the above factors.

9.3.1   Teaching approaches related to practice

9.3.1.1 Types of verbal discussions

Findings indicated that practice was a central element of piano lessons. Both teachers provided emotional support (Margiotta, 2011) to all of their students, either through encouragement or praise. Analyses indicated that the teachers engaged each of their students differently, seeking to enhance students' commitment towards practising. The students' personal characteristics (e.g., self-esteem, self-beliefs, level of motivation) also influenced the effectiveness of this emotional support. Practical support was also evident in all of the lessons, with the use of various teaching approaches (Hatfield and Lemyre, 2016). Results suggested that 'verbal feedback' was the most commonly used approach amongst others, as it was constantly evident with the aim to encourage students' practice. Advisory comments were found to be a major approach used by the two teachers so as to model appropriate practice strategies (*cf* Simones, Rodger and Schroeder, 2017).

The students' current level of expertise was a major factor of influence for the two teachers and the results showed that student Grade level impacted on the teachers' methods. This indicated other factors of influence, one of which was the progress of the students in between the lessons. As results showed, advisory comments were strongly linked with discussions on what needed improvement, based on the student's perceived performance during the lessons. Perceptions of insufficient progress led to the recommendation to adopt effective practice strategies, with the aim to help their students to make progress on specific tasks set during the time of the lesson (*cf* Siebenaler, 1997). Demonstration was also used alongside advisory comments with a view to enhancing students' understanding of how to use the recommended strategies (*cf* Simones et al., 2015). In such instances, students were found to be responding faster during the lessons, by showing a better understanding of how to use the suggested strategies.

However, although the use of 'advisory comments' was found to be an approach regularly evidenced by teachers, data analyses showed that the time spent on this approach varied by teacher and student. The Grade level of the students was found to be a factor of influence; however, it had a direct impact only for one of the two teachers (TA). Also, the teachers'

pedagogical approach was one of the factors determining time spent on 'advisory comments', along with factors such as the progress of the students and their practice development.

Another type of verbal feedback that was directly linked with practice was 'reference to future practice'. It was used by both teachers in all of the lessons regardless of the students' age and Grade level. This teaching approach included mainly direct instructions on how their practice should take place during the week following the lesson. This type of discussion included mainly instructions about what and how to practise a piece of music or scales, while at times an explanation of the effects (='why') of the suggested strategy was also provided. Findings from the interviews proposed that the applied teaching methodology can influence the nature of any 'reference to future practice'. While both teachers considered the discussions of future practice essential in the lessons of lower-level students, they had different points of view with regards to the higher-level students. TA did not consider discussions of future practice essential for higher-level students, as they might prevent the development of independence and self-regulation at this level of expertise. In contrast, TB considered this type of discussion to be crucial, notwithstanding Grade level, although she stressed the importance of adjusting the discussions according to the student's age. The two teachers approached high-level students with multiple teaching methods based on their teaching philosophies and methodologies. The students' practice development was reported to be one of the major factors of influence on their teaching methodologies.

However, similar teaching methodologies were found for the lower-level students. Both teachers considered frequent discussions of future practice to be essential for less inexperienced students. The students' perceived short memory was considered to be one of the factors having a negative impact on the effectiveness of practice (*cf* Pike, 2014). This perception of memory capacity related to the age of the students also influenced the frequency of 'reference to future practice'. Findings showed that the teaching methodologies, in combination with perceptions of the students' progress in between the lessons and their current level of practice development, determined reference to future practice.

Although teachers referred to future practice multiple times while teaching, results concerning the average amount of time spent on this activity suggested that such discussions were relatively brief. Both teachers spent more time on this in the lessons with their intermediate students. Analyses revealed that the level of difficulty of the strategies that the teachers suggested was a factor linked to this behaviour. Teachers recommended and also demonstrated more complex strategies to their intermediate students compared to others. As results suggested, intermediate level students were at a stage where they experimented with a variety of more complex strategies so as to build their own practice repertoire (as suggested

by Hallam, 2001b; McPherson and Davidson, 2006). In contrast, the strategies suggested to lower-level students were more straightforward and did not require a long explanation. Lastly, in the case of advanced students, demonstration of how to use strategies was rarely evident by the teachers, possibly for the reason that the students had already reached a high level of practice development. Results thus suggested that the student's Grade level was a particular factor of influence on time spent on discussions for future practice.

Subsequent data analyses showed one other type of verbal feedback, 'reference to previous practice'. Teachers were gathering information by questioning their students about what material they had practised, and also what strategies they had used at home. Student's demonstration of how they practised was also found, although this was usually evidently based on teacher's directions. Discussions of previous practice were often found due to a perception of students having made insufficient progress between the lessons. Students' achievement thus determined whether discussions on previous practice took place (cf Lennon and Reed, 2012).

9.3.1.2 Non-verbal approaches

During the lessons, both teachers tended to communicate non-verbally with their students. They were using many forms of non-verbal behaviour (Zhukov, 2012) to encourage the usage of practice strategies. All of the non-verbal approaches were found to be common among the two teachers, despite their different teaching methodologies. Non-verbal advice included singing or playing on the piano, as well as a variety of body movements (e.g., clapping and pointing to the score). The teachers applied these methods to mainly in support of 'error correction' strategies to correct mistakes of musical material that emerged during the lessons. Non-verbal feedback was thus found mostly in pieces that needed improvement, suggesting that the relative non-familiarity with the material might be a factor of influence.

9.3.1.3 Writing approaches

The teachers applied two different types of writing approaches. Usage of a notebook was the first approach, although it was evident only in one case study. TB was found to be using a notebook so as to back up all verbal instructions for future practice for her Grade 1 student (as Pearce, 1992; Barry and McArthur, 1994). Findings suggested that usage of the notebook had considerably positive effects on the student's subsequent practice (*cf* Weaver, 2005). It increased motivation to practise, as in all sessions the student displayed a positive attitude (*cf* McPherson and Renwick, 2002). In addition, the notebook appeared to aid considerably in using organisation and planning strategies. All practice sessions were highly related to the order of the written instructions, showing that this method can perhaps help young students to

learn how to organise practise with a logical sequence (cf Bartolome, 2010). Lastly, the notebook supported development of an appropriate practice repertoire, as the student practised by modelling strategies suggested by her teacher (Madsen and Geringer, 1981; McPherson, 2005; Green, 2007).

Written notes on the score, was the second approach that the teachers used. This approach mainly included brief notes on the score, and it was often employed alongside verbal advice on what needed an improvement (Harris and Crozier, 2000; Green, 2007). While the students' level of expertise was not found to be a factor of influence, interviews showed that the age of the students had an impact on its frequency. For TA, the highest amount of written notes was found for the Grade 1 student. Notes on the score were also found to be used by TB to back up her written instructions in the notebook (SB1). This behaviour derived from her beliefs that a combination of notes on score and usage of a notebook can enhance the practice advice for young students, as this enables them to cross-reference information. For the oldest and most accomplished students, notes on the score were used to emphasise key points about future practice sessions. In these cases, this teaching approach was also used as a means to enhance the development of students' independency as learners (Gledhill, 2001; Harris and Crozier, 2000; Barry and McArthur, 1994). The progress of the students was one of the main factors influencing the selection of teaching approaches (Barry, 2007; Baughman, 2016). In addition, notes on the score were strongly related to discussions that referred to future practice, and they were used to back up oral information. Lastly, introduction to new practice strategies was also found to be linked to this writing approach. In such cases, notes on the score were provided to remind their students how to use new strategies accurately while practising at home.

9.3.2   Home-based practice: Student's behaviour and actions

9.3.2.1 Factors influencing quantity of practice

This research demonstrated that one of the main factors of influence was the student's level of expertise. Results pointed that the number of private practice sessions observed at home of intermediate and advanced students decreased compared to the beginner students (Hallam, 2001a). However, findings also suggested additional factors that also had an influence.

Parental involvement, for instance, appeared to have a direct impact on students' practice. It seemed that parents who were involved to their children's practice, but not necessarily in an active way, increased the overall quantity of practice. As previously reported, a common parental behaviour is to encourage children by reminding them to practise for a certain amount

of time (Margiotta, 2011). This points out the importance of a positive teacher-parent-child relationship, as shared goals about the quantity of practice can guide parents on how best to help their children. By determining a set amount, the teacher ensures that parents are 'not placing an unrealistic expectation upon the child' (Chardos-Camilli, 2015, p.10). Such suggestions were in line with the findings of this doctoral study, as they showed that both teachers set a time for their lower-level students to guide their practice. However, this behaviour decreased in the case of higher-level students, as by that point, they simply referred to quantity by reminding them that they had to practise on a regular basis. Interviews with higher-level students also support these findings, as they reported that their teachers did not set a specific time for their practice.

Findings revealed that parental involvement was primarily evident in the case of younger children. In both cases, they provided support mainly by reminding and encouraging children to practise. Overall, parental behaviours and attitudes towards their children's learning had a positive impact, as their support motivated children to practise systematically. However, this type of behaviour might not always be evident, as parental attitudes are often influenced by their perceptions on the value of music (Shiakou and Belsky, 2013; Dai and Schader, 2001). Although previous research indicated that Cypriot parents are often willing to provide opportunities for their children to participate in activities (including music-related) that can aid in building high-social status, this might not always be the case. The socio-economic status of the family might mean that tuition funding is challenging (Ilari, 2013; Cho, 2015), leading to unsupportive parental behaviours because parents are working (Margiotta, 2011). In addition, a busy schedule for the parents (e.g., work commitments) may also lead to negative behaviours, as learning in Cyprus is likely to require driving their children to the conservatory (Purves, 2019; Ilari, 2018; Ilari, 2013). In Cyprus, these issues are often raised due to the fact that the educational system in Cyprus offers limited opportunities to the children to receive instrumental learning in public state schools (for more, see Chapter 4). However, in the current study, all participant children and young people were provided with opportunities to receive formal musical learning in various musical topics (e.g., piano, singing and music theory lessons). Although music-related activities varied in each case, results indicated that musical parenting was evident in all cases, as families provided different types of support (financial, practical and emotional support).

Additional external factors influencing the quantity of student's practice were also found in this study. School responsibilities (e.g., homework), or a busy schedule (e.g., other private lessons in the afternoon) seemed to decrease the practice time of all students. The fact that children in Cyprus attend to a range of private lessons (e.g., English lessons) during the afternoon (Lamprianou and Lamprianou, 2013) means that they have limited time available for practice

time (Myung, 2001). Results indicated that this was also the case for these students, as each of them reported that they had a busy schedule in the afternoon, due to their involvement in other private lessons. As previously suggested, in these cases, parents have a crucial role in helping children to plan and organise their practice (Upitis et al., 2015). The creation of a schedule seems to be one of the most effective strategies in managing the organisation of time (Dade, 2013). Although other research suggested that this approach is often used in the case of young students (Bartolome, 2010), results here showed that intermediate students also found this type of support to be effective. The student's personal characteristics (e.g., self-efficacy beliefs, level of motivation, self-interest) may also have influenced preferences in how to schedule their practice (Barry and Hallam, 2002; Harnischmacher, 1993; Kloppel, 1998).

In addition, data analyses indicated a strong link between the quantity of practice and enjoyment of the pieces. All students reported that they were highly motivated to practise when they worked on pieces that they liked. This factor seemed to influence their perceptions of home practice in general. In addition, they appeared to be more enthused about practising pieces that they chose for themselves (e.g., extra pieces) rather than the exam pieces. As previously found by others, the selected repertoire can be an important element in the lessons, as it seems to motivate children to apply more sophisticated practice strategies (McPherson and Renwick, 2002). This might suggest that teachers can stimulate their students' interest by offering opportunities to choose pieces that they enjoy as part of the practice repertoire.

Factors influencing the length of the practice sessions were also found. Results showed that the length of practice sessions increased along with the level of expertise (Bonneville-Roussy and Bouffard, 2014), verifying that high-level students can maintain concentration for a longer time. In contrast, young students tended to carry out shorter, but more, practice sessions. It appears that use of metacognitive strategies by higher-level students requires longer time than those applied at lower Grade levels (Hallam, 2001a; Jorgensen, 2008). In addition, personal characteristics such as commitment, persistence and determination were also found to be related to an increase in the length of practice sessions (Barry and Hallam, 2002). Lastly, the level of difficulty of the pieces was one of the factors influencing the length of home-based practice sessions (Barry and Hallam, 2002). Based on results, students reported increasing practice time when learning musical pieces with a higher-level of difficulty.

9.3.2.2 Usage of strategies and Self-regulation

Data analyses revealed a diversity in student's practice repertoire. However, similarities were noted between students at the same level of expertise. Lower-level students used a wider practice repertoire compared to higher Grade levels. Past research revealed that lower-level students are more likely to explore a wide repertoire until they find what works better for them as learners (Miksza and Tan, 2015; Hallam et al., 2012). As previously found, lower-level students tend to use simple and straightforward strategies suggested by their teachers during the lessons (Koopman et al., 2007). Similar findings were also found in this doctoral study, whilst they also indicated that a recognition of mistakes was not always evident (McPherson and Renwick, 2002; Hallam, 1997). For example, students tended to use 'error correction' category strategies instead of those suggested by their teacher (Hallam et al., 2012; Gruson, 1988). At times, they also attempted to apply strategies from other categories that had been synthesised from the literature; however, a lack of knowledge and understanding of how to choose and use strategies was often noted in such cases. This behaviour often led to insufficient progress by the end of the sessions, verifying that they were still not always in a position to practise effectively. Overall, results suggested that Grade 1 students were in a developmental phase in which they experimented with practice strategies (Hallam, 1997).

Learning in this phase involves the introduction of multiple practice strategies (Hatfield and Lemyre, 2016; Burwell and Shipton, 2013; Jorgensen and Hallam, 2009). In this research, introduction was often found to be provided with a full explanation; what is the strategy ('what is the name of the strategy?'), how to use it ('what steps do I have to follow when using the strategy?'), why to use this strategy ('what do I try to achieve by using this strategy?') and when is applicable ('when and under what circumstances can I use this strategy?'). In these instances, results showed that teachers also used demonstration (Simones, Schroeder and Rodger, 2017; Siebenaler, 1997; Simones et al., 2015) to indicate how these strategies can be used.

Intermediate students used more sophisticated strategies compared to lower-level students. However, at times, they showed a lack of understanding of how to use specific methods effectively. Findings were similar to those from previous studies, suggesting that students develop their self-regulation skills gradually over time (Miksza and Tan, 2015; McPherson, Davison and Faulkner, 2012). Intermediate students are, thus, in a phase in which they are still developing self-regulation skills. They are building their practice repertoire, such as by regularly experimenting with more complicated strategies. Teachers should have an active role in this process so as to help them adopt appropriate strategies (Jorgensen, 2008). The progress of the students can be used as a main tool of assessment for practice efficiency.

When progress is not sufficient, teachers can recommend alternative strategies to help their students to build a more ideal practice repertoire (Concina, 2019; Araujo, 2015; McPherson et al., 2017; Hallam et al., 2012; Jorgensen, 2008).

Lastly, advanced students applied strategies that generally aided their progress in-between the lessons. They were able to identify all of their mistakes and solve problems by using a particular strategy. Although they used fewer practice strategies than lower Grade levels, their practice was more targeted and focused. They showed knowledge and understanding of a range of strategies, demonstrating that they have already developed their practice repertoire based on simple and complex strategies. They also showed independence and an awareness of what worked best for them as, at times, they used alternative strategies to those suggested by their teacher. Results support previous views suggesting that advanced students are more likely to have already reached a high level of metacognition (Hallam et al., 2012; Lehmann, Sloboda and Woody, 2007).

9.4 Relationship between private lessons and home-based sessions

This research focused on the relationship between one-to-one piano lessons and subsequent home-based practice sessions by examining any related aspects. Based on the findings of this study, the researcher proposes a framework that illustrates the practice learning process of piano learners. Figure 9.1 presents the cycle of this process, which refers specifically to students between Grades 1 and 8 who receive a formal private instrumental music education. However, it has to be noted that this framework does not represent the learning process in terms of the students practice development. Instead, it refers to a short-term cycle, starting from an individual piano lesson, moving to subsequent private practice, and ending with the beginning of the next scheduled lesson. The figure demonstrates different phases in which learning related to practice can be found. Results illustrated that all phases are expected in the student's lessons, although the order of the first four phases may vary among teachers.

The procedure begins within the context of a studio-based lesson with the student performing the material that they were asked to practise during the previous week. Their playing automatically marks the level of their progress in comparison to the previous lesson in the mind of the teacher, demonstrating whether progress was perceived to be sufficient or insufficient. Therefore, the student progress is one of the main factors of influence on teaching, as it can have a direct effect on the subsequent choice of teaching methods by the teachers.

Following the student's performance, the teachers initially provide feedback based on the student's playing during the lessons. Feedback in these cases is provided mainly verbally and generally includes guidance on what needs further improvement. Along with the provision of feedback, teachers apply additional methods, although these are influenced by how sufficient the progress was compared to the previous lesson. Insufficient progress might lead to the application of methods that are barely evident when progress is satisfactory, such as reference to previous practice. The progress of the student has a direct impact on the nature of the verbal feedback and consequently on the learning cycle.

After the provision of feedback, three main types of teaching approaches might be found, regardless of the student's age and level of expertise: (i) verbal, (ii) non-verbal, and (iii) writing approaches. The student's progress can have a direct influence on the frequency and the time used in applying these methods. Advisory comments and direct oral instructions for future practice mainly include suggestions of effective strategies so as to solve any emergent problems. Modelling and demonstration are likely to be used while recommending strategies to help students make faster progress (Simones et al., 2017; Siebenaler, 1997).

The teachers also use writing approaches to enhance practice efficiency. This phase includes teachers backing up their verbal instructions about future practice in the form of written notes, primarily on the music score. Usage of a notebook is one of the approaches that teachers may use so as to provide detailed information about future practice (McPherson, 2005). In this case, the student's memory performance might influence provision of written assignments in a notebook (Harris and Crozier, 2000). Therefore, it is more likely to be found in the case of younger/beginner students as an enhancement of the quality and quantity of their practice (Wagner, 1975; Green, 2007). The second teaching approach is written notes on the score. This includes mainly brief notes and usage of different types of signs to indicate elements that have to be practised. It is likely possible that teachers use this approach as an alternative, to encourage self-independency along with practice development, while—at the same time— they support their students by giving them a clear direction. The age and the level of expertise can therefore be main factors influencing the selection of written approaches.

Overall, the first four phases vary amongst teachers, as the applied teaching methodology can have a strong influence. This framework is, therefore, not suggesting a set order of these approaches. However, it signifies that these teaching approaches are likely to be evident in piano lessons, with frequency and time spent on them varying.

The next phase of learning takes place within a completely different setting, the home environment. In this phase, students practise autonomously by using different strategies. In most cases, practice takes place in a non-controlled environment, as parental supervision may not always be evident (Ilari, 2013; Margiotta, 2011). This is a critical moment for the learning cycle, as the student's decision to follow their teacher's instructions appears to have a large impact on progress. As the figure demonstrates, multiple factors might affect the student decision and, consequently, the relationship between the lessons and home-based practice. Apart from external factors (e.g., other responsibilities and commitments) that may have an impact, various internal factors can also directly affect this relationship. One of the main factors of influence is the student's level of expertise. It seems likely that, as the level of expertise increases, the amount of instructions followed by the students decreases. In this phase, the way that teachers approach practice is critical, especially in the higher Grade levels when students are likely to be in their adolescence. Criticizing and imposing on students may discourage practice, especially if we consider that practice itself can often be a non-enjoyable activity (Ericsson, 2006; Ericsson et al., 1993; Lehmann and Davidson, 2002). Therefore, a friendly environment in the lesson would have been one of the main ingredients to approach successfully and motivate students (Davidson et al., 1997). Teachers need to know each student's personal characteristics so as to adjust any discussions about practice and, therefore, to be able to inspire their students. Despite differences among the students, there is a need for the teachers to find a way and refer to future practice as a reminder in their discussions. Exploiting every opportunity to refer to practice may lead to positive results, especially in the case of young students. It is more likely for students who receive higher proportions of instructions to follow instructions in subsequent home-based practice. In contrast, students who receive a low number of instructions tend to ignore at least some of them. The emphasis given by the teachers while recommending a strategy is also a factor of influence. By strongly recommending strategies, teachers increase possibilities for these strategies to be used in home-based sessions.

Apart from the Grade level, the student's practice development influences how dependent their practice is on their teacher's instructions. The practice of lower-level students tends to be more related to the directions about future practice by showing an apparent reliance on their teachers in general. Exploration and application of additional strategies to those suggested are also evident in lower-level students' practice. However, a lack of awareness and understanding may often result in choosing unsuitable and inappropriate strategies. As the level of expertise gradually increases, learners show more practice skills, including self-regulatory behaviour. As a result, their practice becomes less related to the teacher's instructions. It seems that advanced students are more influenced by the teacher's feedback

than their instructions about future practice. All types of feedback can enhance students' motivation to practise at home so as to accomplish an improved performance by the next lesson.

While internal factors influence the practice relationship directly, external factors also have an impact, mainly on the quantity of home-based practice and, therefore, on the whole learning process. Teaching approaches is perhaps the major factor of influence. The amount of practical support offered in the lessons may influence students' engagement during the following week. Emphasis given in usage of specific practice strategies, can motivate students to follow instructions given in relation to practice. Provision of emotional support can also impact students' commitment during the following week. Positive behaviours are more likely to be evident when teachers encourage and motivate their students constantly.

In addition, availability of time is perhaps the most common influencing factor, as students usually have other responsibilities and commitments in their daily life. School homework and additional private lessons (e.g., mathematics) may be one of the most common reasons for a decrease in practice time (Myung, 2001). This is perhaps more likely to be evident in the case of older students, especially years preceding college or university entrance which students have to prepare for examinations (Lamprianou and Lamprianou, 2013). In addition, health issues can also have similar effects on student's practice. Lastly, the home environment may, at times, have a negative impact on students' practice. An unsuitable home environment can cause a regular distraction for the students, and therefore affect time devoted in practising. It can also have an impact on the quality of practice, and therefore on student's commitment to this highly demanding activity (Harris and Crozier, 2000).

On the other hand, parental involvement can have positive effects on students' practice (through behavioural, emotional and practical support). Motivation and praise—when appropriate—can be two of the most important parts of this process as they might affect students' commitment (Creech, 2009). Parents can also help their children to increase their practice, as they have a central role in initiating practice, reminding children that they have to practise, helping them organise their practice, or even moving to the next step and supervise their practice (Upitis et al., 2015; Hallam, 1998; Margiotta, 2011; Barry, 1992). However, pragmatically, this is not always the case, as some parents lack musical knowledge and cannot provide this type of support. Also, there is always the possibility for parental involvement not to be feasible due to work commitments (Ilari, 2013). The background of the family is essentially different, and thus some children may not have equal levels of parental support. Some parents may even not be willing to support their children's practice because of the perceived value of the subject 'music' (Dai and Schader, 2001). The family's socio-

economic status can also influence parental support; parents who face difficulties supporting their children's learning financially may feel pressure which can result in limited or no involvement (Margiotta, 2011). In these cases, a good relationship between the teacher-parent and the child can be beneficial, as this allows the teacher to support students accordingly when is needed (Creech, 2010).

The learning cycle is completed with the outcome of the student's practice. The last phase is a result of the practice undertaken at home by the students in terms of progress. This is the moment in which the student's outcome demonstrates the level of effectiveness of the practice undertaken in between the two lessons. The improvement over a set time and the achievement or failure of short-term goals that were set during the previous lesson can be the main criteria to evaluate the learning that took place in this short-term cycle.

One-to-one Piano lessons
➢ Insufficient progress →
  Reference to previous
  practice
➢ Encouragement of effective
  strategies to solve emerging
  problems during the lesson
➢ Modelling -> practice
  repertoire

**Verbal & non-verbal advice for
Future Practice**
➢ Recommendation of specific
  strategies for improvement
➢ Suggestion of alternative
  strategies when progress is
  not evident
➢ Direct oral instructions for
  future practice

**One-to-one Piano lessons:
Student's Performance and
provision of Verbal Feedback**

➢ Sufficient or insufficient
  Progress in between the
  piano lessons

Internal Factors	**External Factors**
▪ Level of Expertise	▪ Teaching approaches
▪ Age	▪ Availability of time
▪ Practice Development	▪ Other responsibilities and
Level	commitments (e.g. school
▪ Self-regulation and	homework)
Independency	▪ Parental Involvement
▪ Personal Characteristics	▪ Health issue
▪ Motivation and	▪ Home Environment
Enjoyment of Activity	

Writing information
➢ Teachers back up verbal
  instructions:
  ▪ Notebook->lower
    Grade levels
  ▪ Brief notes on the
    Music score
    (including signs) -> all
    Grade levels

**Decision to
follow
instructions**

Outcome of private practice
➢ Achievement or failure of
  short-term goals set during
  the lesson
➢ Self-regulation based on age
  and level:
  ▪ Lower levels: teacher's
    feedback
  ▪ Higher levels: Self-
    assessment

Learning: Home-based Practice
➢ Usage of strategies based on
  practice development
➢ Independency: Usage of
  strategies advised by
  teachers
➢ Self-regulation behaviour
  based on age, Grade level

Figure 9.1 The cycle of short-term practice learning process

9.5 Relationship to previous research

In terms of the first two research questions, which looked at the relationship between private studio-based instrumental lessons and home-based practice, the findings of this study are consistent with previous research as reviewed in Chapter 2. Specifically, the findings of the present research are broadly in line with those from research that was undertaken by Koopman et al. (2007), Barry (2007) and Chen (2015). All of the studies revealed a strong relationship between the lessons and the subsequent private practice, as actions and behaviours of the students were clearly connected with those applied in the previous lessons. The teaching approaches used during the lessons were a key factor influencing the student's practice, illustrating that it plays a vital role in their practice development. In addition, the findings of this research seem to back up those from previous research, suggesting that teaching approaches such as discussions and direct instructions about future practice can enhance practice efficiency.

Although findings were generally compatible with these earlier studies, there are several aspects in which they differ from the present research. Previous studies focused on higher-levels of expertise to examine the practice relationship (college, university or conservatoire). In contrast, the present research was designed to examine lower-level students (pre-college). Another difference was that a major component of the current study was the level of expertise. Therefore, three different Grade levels were used to examine whether this is a factor of influence upon the practice relationship. Overall, the findings of this research enhanced knowledge and understanding of the relationship between the lessons and the subsequent practice. In addition, this study revealed important information about factors that may have an influence on instrumental learning within the Cypriot context.

9.6 Limitations of the research

9.6.1 Difficulties during data collection

Several difficulties arose during the procedure of data collection. To begin with, the design of this doctoral study raised particular issues concerning the validity and reliability of results. The use of observations and video as methods increased possibilities for changed behaviours, especially since the majority of the participants were young children (Lockyer, 2008). The researcher was aware of that risk and used multiple strategies to minimize the effects. By taking the decision to arrange *a priori* meetings about the research, the researcher gave the opportunity for participants to become familiar and to feel comfortable with the presence of the researcher. The provision of detailed information also enhanced participants' understanding of the aims of the study (Onwuegbuzie and Leech, 2007). In addition, by increasing the number

of observations to four weeks, participants became more used to the presence of the researcher (Muijs, 2004). It also allowed the researcher to assess the consistency of behaviours and actions (Onwuegbuzie and Leech, 2007). However, this caused other difficulties, as many teachers and parents refused to participate in the study, either because of the length of the study, or because of the use of video-taped observations as a tool. Lastly, triangulation was one of the main strategies used to manage observer bias. Usage of multiple methods enabled the researcher to cross-check information and increase the validity and reliability of data (Mouselli and Massoud, 2018; Johnson and Onweuegbuzie, 2004; Feilzer, 2010).

Similarly, usage of video-taped home-based practice sessions as a method raised concerns in relation to the Hawthorne effect (Lockyer, 2008; Oswald, Sherratt and Smith, 2014). However, one positive element was that the researcher had the opportunity to observe behaviours earlier during the participants' lessons and, therefore, to form an opinion about how each student usually behaved while working on a piece of piano music or scales. In addition, prolonged engagement increased validity and reliability.

Another challenge in using observations and interviews to collect data was that ethical issues were raised. Usage of these methods has higher possibilities for risks of harm, such as experiencing negative feelings. By following ethical guidelines (BERA), the researcher was able to take all the essential recommended steps to ensure the protection of participants. Informing the participants about the nature of the methods (Iphofen, 2011) and reminding participants that they had the right to talk with the researcher or withdraw if they experienced such feelings (Aguinis and Henle, 2008; Alderson and Morrow, 2020) decreased the possibilities of being harmed.

A difficulty that the researcher faced during data collection was that gathering data of the home-based sessions was a non-controlled activity as it depended primarily on the young participants. As a result, there was a high risk of loss of data, as the possibilities for participants to forget to record some of their sessions were high. The researcher responded by asking children's' parents to provide help if needed. Although, this, decreased possibilities of data loss, it caused concerns in relation to validity and reliability of data, as parental involvement may have had an impact upon normal behaviours of children. In an effort to manage this, the parents were asked to be involved in their children's practice by creating a similar environment to that in the children's daily programme. In addition, the researcher asked all participants to bring the video-camera to each lesson so as to transfer all videos onto a safe database. In this way, the organisation of each week's data collection was more effective, and most importantly, it prevented data loss.

An additional problem occurred, although it concerned only one participant. During one of the four weeks, a student reported to the researcher that she could not carry out as many practice sessions as usual due to illness. One of the difficulties for the researcher was to examine the data at a later point so as to test reliability (Kumar, 2011). The researcher acted by examining the number of sessions of the other three weeks to identify whether there was any inconsistency. A comparison across the four weeks was made, and based on results, the researcher came to the conclusion that the impact of the student's illness was observable. However, in this research, the home-based practice was an un-controlled activity, and factors decreasing quantity were considered to be additional information about the home-based practice.

Lastly, the researcher had to face a problem while collecting data for one student. An unexpected meeting was arranged between the teacher and the student's parent, which involved parental involvement during the lesson. Although this raised concerns about all data being collected under the same conditions, the researcher decided that a request for a cancellation of the meeting was not appropriate due to ethical reasons. Intervention into the participant's schedule could create changed behaviours and as a result to have less valid/invalid data (Bautista, Tan, Wong and Conway, 2019; Onwuegbuzie and Leech, 2007). Instead, it was seen as an opportunity to gather further information about possible factors of influence.

9.6.2 Problems resulting from the research design and analysis

One of the main problems of the research design was the per-second analysis of all of the videos (lessons and home-based sessions). For each video, the analysis initially had to be done manually on a piece of a printed paper for the observation checklist, which contained over 100 activities. Each activity was therefore marked down as to how long it lasted (e.g., 14:35-14:40), and then the total time spent on this activity was counted. A total amount of instances was also counted at the end of each analysis. All of the data were then transferred into Excel files so as to enable statistical analysis with the use of software. This analysis process was a very long and slow procedure, mainly because multiple practice activities were evident simultaneously in most instances. Overall, the micro-analysis was a time-consuming procedure, especially when taking into account that the length of the videos was up to one hour, and elements were being counted in groups of minutes and seconds. However, despite the difficulties faced throughout the analysis process, the chosen method is thought to have enhanced the validity of the findings by building the database from the bottom up. Therefore, it can be applied for studies that require a micro analysis and are also undertaken by more than one researcher so as to reduce the time spent on the process of analysis.

Another difficulty was that the research design allowed the researcher to include only a limited number of participants. Although the use of a case study method has the advantage of allowing in-depth investigation and achieving high levels of conceptual validity (George and Bennett, 2004), a disadvantage is believed to be a lack of generalizability (Tight, 2017). Findings of this study thus cannot be representative of a diverse population, as they addressed to a specific group of people that were examined within a specific context (Cyprus). The researcher was aware of issues related to generalizability but acknowledged that findings from the current study could be used for other related studies in the future as it provides key information. This study provided important information in relation to the details of the focus practice teaching and learning contexts that can have either direct or indirect influence on the practice relationship. Findings could also be combined with future studies that examine practice behaviours to identify similarities and differences among different types of personalities.

In addition, all these findings can serve as hypotheses for the development of a theory of the learning process in terms of the lesson–practice relationship. However, subsequent application of these aspects to a larger population should aid a deeper understanding to emerge of their effects on the practice relationship. Lastly, the findings of this study revealed valuable information about instrumental learning in Cyprus. Taken into consideration that this is the first study undertaken into this context, it provides information about the educational context, as well as factors influencing the quality of learning. In addition, it demonstrated issues related to the student's practice (e.g., availability of time), which can be used by researchers who are interested in exploring further these topics.

9.7   Recommendations for Future Research

The research presented in this thesis has demonstrated some valuable results and conclusions about the practice relationship of one-to-one piano lessons and home-based sessions. However, practical limitations in the research point towards the need of further investigation of the topic. Because of time-limitation, the present research used a case studies approach, which allowed the investigation of a small number of participants only. Examination of a broader population thus would enhance our knowledge and understanding of the practice teaching and learning process, which at the present time is limited. This would also enable generalizability of findings, an important element of reliability and validity (Englander, 2019; Idowu, 2016).

In addition, expanding our knowledge about factors influencing the whole process may lead to improved teaching methods and, therefore, an enhancement in the quality of the lessons, but most importantly in the quality of the student's private practice. Overall, findings of further investigation would also enhance the validity of the proposed learning cycle (see section 9.5), and, therefore, enable its application in theory building.

Also, further investigation of this topic with young instrumentalists as participants can be beneficial to gain a deeper understanding, as there is only limited published research on this group. Other studies that were undertaken about the practice relationship between the lessons and the practice sessions had as the target sample learners of higher education. Additional findings of younger students can also enable a comparison between different levels of expertise and, therefore, reveal additional information about the age and the level of expertise as factors of influence.

Future work can also include an examination of additional possible factors influencing the lesson–practice relationship. One of the factors that may reveal additional information is the choice of musical instrument, as the present study has focused only on one instrument, the piano. Although other studies have used participants learning different types of instruments, comparative research of two or more instruments may reveal variation in findings, for the reason that each instrument may require different amounts of practice time and, at times, different types of approaches. Lastly, understanding the process of teaching and learning of practice should examine the impact of musical genre. Different musical genres may require particular types of practice (e.g., jazz and improvisation), and this will possibly have a direct impact on the lesson–practice relationship.

There is also the need for further investigation of instrumental teaching and learning within the Cypriot context. At the moment, there is limited information about private musical conservatories which are located in Cyprus. A higher number of studies would enhance understanding and knowledge of how the educational system works but most importantly they would enable identification of factors influencing teaching and learning (e.g., socio-economic status of the family). In addition, it would reveal important information about current issues in relation to children's teaching and learning. In general, research within this context can offer valuable information, which can be used to improve the educational system within Cypriot private musical conservatories.

9.8 Summary

The last chapter of the thesis reviewed key points and discussed all of the main findings of the research. A proposed framework model of the learning cycle in regard to practice is also presented in this chapter, which can be used as a framework for future research. Overall, the present research provides insights into a hitherto limited topic in the existing literature that needed to be explored to the fullest; but most importantly, it opens the doors to expanding our knowledge and understanding as educators.

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Appendix I: Observation Checklist

Main Categ	Sub-Categories	Activities	Code	0-29	30-59	1-1'2	1'30'
Musical	Musical Material	Musical Material	O				
Scales	Playing	Student playing scales	A1				
		Student playing exercise(s)	A2				
Pieces	Playing	Student playing the whole piece	B1				
		Student Playing with the use of strategies	B2				
		Both Hands	B3				
Aural	Aural tests	Aural tests with the teacher	C1				
Sight Read	Sight Reading	Sight Reading	D1				
	Error Correction	Repeat Note(s)	E1				
		Repeat Bar	E2				
		Repeat Part	E3				
		Repeat Chord(s)	E4				
		Repeat Trill	E5				
		SFB- As a part/section	E6				
	Strategies for the Conduct of Practice	Variable Practice	F1				
		Increasing Gradually the Tempo	F2				
		Count Aloud	F3				
		Count Off	F4				
		Singing Along	F5				
		Use of Metronome	F6				
		Say the notes	F7				
		Sing the notes	F8				
		Sing a part in her head	F9				
		Closed Eyes	F10				
	Strategies to master Difficult Parts	Play Right Hand Only	G1				
		Play Left Hand Only	G2				
		Link two parts together	G3				
		Accentuation	G4				
		Slow	G5				
		Regular Tempo	G6				
		Fast	G7				
		Work chords at a fast tempo	G8				
		Break down Chords	G9				
	Interpretation	Dynamics	H1				
		Pedal	H2				
		Phrases	H3				
	Final Adjustments	Memorize part(s)	I1				
		Memorize the whole piece	I2				
		Singing from memory	I3				
	Focus on Difficult Parts	Focus on Group of Notes	J1				
		Focus on Bar	J2				
		Focus on Part	J3				
		Focus on each voice separately	J4				
		Focus on Trill	J5				
	Strategies for Scales	Semitone - Semitone	K1				
		Play key signature as a chord	K2				
		Reference to the key signature	K3				
		Repeat Scale	K4				
		Focus on one scale	K5				
		Play Tonic Chord	K6				
		Starting Note	K7				
	Recordings	Record themselves	L1				
		Listen to recordings of the piece	L2				
	Practice during week previous week	Practice time	M1				
		What the student practised	M2				
		How the student practised	M3				
		Ask student to dem how she/he practised	M4				
	Practice for the next week	Practice time (Quantity)	N1				
		What to practise for the next week	N2				
		How to practise for the next week	N3				
		Why the student has to practise this way	N4				
	Feedback	What needs improvement	O1				
		Instructions how something should sound	O2				
		Ask to recognise if it needs improvement	O3				
		Ask to recognise what needs improvement	O4				
		Ask to recognise what is the improvement	O5				
	Motivation	Praise (progress)	P1				
	Images	Teacher create images	Q1				
	Advice to do	Advisory comments to use a strategy	R1				
		Fingering	R2				
		Correction of a Note	R3				
		Steady Tempo	R4				
		Synchronization	R5				
		Rhythm	R6				
		Work voices separately	R7				
		Body Language - Talking	R8				
	Concert	Reference to concert	S1				
	Examinations	Reference to examinations	T1				
	Parents	Parental Involvement	U1				
		Reference to parents	U2				
	Talking	Self- Talking	V1				
		Talking with Others	V2				
	Homework Notebook	Use of Notebook	W1				
		Notes on score - what to practise	W2				
		Notes on score - how to practise	W3				
	Marks on Score	Make notes on the book	X1				
	Non-talking	Non-verbal Advice to use a strategy	Y1				
	Gestures/Body Movements	Body Language - Non- talking	Z1				
		Clapping - Student	Z2				
		Clapping - Teacher	Z3				
		Tapping student's shoulder	Z4				
		Tapping foot - Teacher	Z5				
		Tapping foot - Student	Z6				
		Tapping hand - Student	Z7				
		Tapping hand - Teacher	Z8				
		Clicking Tongue	Z9				
		Walk to find the tempo	Z10				
		Snapping Fingers - Student	Z11				
		Snapping Fingers - Teacher	Z12				
		Head movement for counting	Z13				
		Finger pointing the score (Teacher)	Z14				
		Finger pointing the score (Student)	Z15				
	Other	Play Other	AA1				
		Moving in the Room	AA2				
		Sign of Frustration	AA3				
		Other	AA4				

The leftmost column spans: **Music Foci** (Musical, Scales, Pieces, Aural, Sight Read rows) and **Other Musical Related** (Talk, Written, Non-Verbal Behaviour rows). The Talk / Written / Non-Verbal Behaviour are secondary sub-column labels.

Appendix II: Consent Form

International Music Education Research Centre (iMerc) Institute of Education, University of London

ΕΝΤΥΠΟ ΣΥΓΚΑΤΑΘΕΣΗΣ

Εστίαση έρευνας: «Διερευνώντας την σχέση μεταξύ των ατομικών μαθημάτων πιάνου και της πρακτικής εξέτασης στο σπίτι»

Καλείστε να συμμετάσχετε σε μια ερευνητική μελέτη. Πριν αποφασίσετε αν θέλετε να λάβετε μέρος, είναι σημαντικό να καταλάβετε γιατί διεξάγεται η έρευνα και τι συμπεριλαμβάνει. Παρακαλώ πάρτε λίγο από τον χρόνο σας να διαβάσετε τις ακόλουθες πληροφορίες προσεκτικά. Μην διστάσετε να ρωτήσετε αν έχετε απορίες ή ερωτήσεις.

Ποιός ο σκοπός της έρευνας;

Η έρευνα εξετάζει την σχεση μεταξύ των ατομικών μαθημάτων πιάνου των παιδιών και πώς αυτά διαβάζουν όταν είναι μόνα τους στο σπίτι, όπως επίσης και το κατά πόσο το επίπεδο των μαθητών
μπορεί να επιρεάσει την σχέση αυτή. Πιο συγκεκριμένα, η έρευνα εξετάζει πώς οι μαθητές διαφόρων επιπέδων εξασκούνται απο μόνοι τους και πώς η εξάσκηση στο σπίτι μπορεί να επηρεαστεί απο τον τρόπο που διεξάγονται τα μαθήματα.

Ποίοι συμμετέχουν στη έρευνα;

Παιδιά που κάνουν μαθήματα πιάνου, σε διαφορετικά επίπεδα (Grades– ABRSM) καλούνται να λάβουν μέρος σ'αυτή τη έρευνα. Οι πληροφορίες που συλλέγονται διατηρούν την ανωνυμία σε οποιαδήποτε αναφορά, έτσι ώστε να είναι αδύνατο να προσδιοριστεί το άτομο.

Τι θα συμβεί σε σας εαν θα λάβετε μέρος στην έρευνα;

Αν συμφωνήσετε να λάβετε μέρος, θα σας ζητηθεί να είστε κάτω απο παρακολούθηση κατά την διάρκεια του μαθήματος (τέσσερα διαδοχικά μαθήματα), όταν το μάθημα θα διεξάγεται κανονικά μεταξύ του δασκάλου και του μαθητή. Επιπρόσθετα, θα σας ζητηθεί να βιντεογραφήσετε όλες τις πρακτικές εξασκήσεις που θα πραγματοποιηθούν στο σπίτι κατά την διάρκεια της εβδομάδας, σύμφωνα με το καθημερινό πρόγραμμα της πρακτικής εξάσκησής σας. Κατά την διάρκεια της πρακτικής εξάσκησης που γίνεται στο σπίτι, είστε ελεύθεροι να χρησιμοποιήσεται τον χρόνο σας όπως θέλετε. Μετά απο κάθε πρακτική εξάσκηση θα πρέπει να κρατάτε σημειώσεις για την ημερομηνία, τον χρόνο διάρκειας της εξάσκησης και να γράψετε λίγα λόγια για το τι και πώς έχετε μελετήσει. Επίσης, μετά το τέλος όλων των πρακτικών εξασκήσεων, θα έχω μαζί σας μία προσωπική συνέντευξη η οποία θα ηχογραφείτε.

Θα θέλατε να λάβετε μέρος;

Αυτό εξαρτάται από εσάς αν θέλεται ή όχι να συμμετέχετε. Αν αποφασίσετε να λάβετε μέρος, είστε ελεύθεροι να αποσυρθείτε ανά πάσα στιγμή για οποιαδήποτε λόγο ή χωρίς λόγο. Ολα τα προσωπικά στοιχεία θα είναι εμπιστευτικά. Τα στοιχεία των ατόμων που θα λάβουν μέρος θα είναι ανώνυμα, και δεν θα δημοσιοποιηθούν.

Παρακαλώ να υπογράψετε το έντυπο συγκατάθεσης στο κάτω μέρος. Θα σας δοθεί αντίγραφο για να κρατήσετε στο δικό σας αρχείο. Σας ευχαριστώ πολύ για την βοήθεια σας και για την συμμετοχή σας στην έρευνα.

Υπογραφή Μαθητή:_____ **Ημερομηνία:**_____/_____/_____

Υπογραφή Γονέα:_____ **Ημερομηνία:**_____/_____/_____

Υπογραφή Δασκάλου:_____ **Ημερομηνία:**_____/_____/_____

Appendix III: Extract from the observation checklist with all students

Main Category	Sub-Categories	Activities	Code	Student A1				Student B1			
				1	2	3	4	1	2	3	4
				Percentage %				Percentage %			
Music Foci	Musical Material — Scales / Playing	Student playing scales	A1	15%	13%	15%	12%	5%	4%	7%	5%
		Student playing exercise(s)	A2	0%	0%	0%	0%	0%	0%	0%	0%
	Pieces / Playing	Student playing the whole piece	B1	7%	13%	12%	9%	15%	19%	25%	16%
		Student Playing with the use of strategies	B2	24%	15%	16%	14%	26%	20%	16%	21%
		Both Hands	B3	23%	25%	27%	15%	37%	35%	36%	33%
	Aural / Aural tests	Aural tests with the teacher	C1	0%	18%	0%	26%	8%	0%	0%	10%
	Sight Reading / Sight Reading	Sight Reading	D1	0%	16%	16%	0%	15%	17%	0%	8%
	Error Correction	Repeat Note(s)	E1	0%	0%	0%	0%	0%	0%	0%	0%
		Repeat Bar	E2	0%	0%	0%	0%	0%	0%	0%	0%
		Repeat Part	E3	0%	0%	0%	0%	0%	0%	0%	0%
		Repeat Chord(s)	E4	0%	0%	0%	0%	0%	0%	0%	0%
		Repeat Trill	E5	0%	0%	0%	0%	0%	0%	0%	0%
		SFB- As a part/section	E6	0%	0%	0%	0%	0%	0%	0%	0%
	Strategies for the Conduct of Practice	Variable Practice	F1	0%	0%	0%	0%	0%	0%	0%	0%
		Increasing Gradually the Tempo	F2	0%	0%	0%	0%	0%	0%	0%	0%
		Count Aloud	F3	2%	11%	8%	0%	21%	27%	18%	6%
		Count Off	F4	0%	1%	0%	0%	0%	0%	1%	1%
		Singing Along	F5	6%	22%	10%	2%	21%	26%	25%	6%
		Use of Metronome	F6	0%	0%	0%	23%	0%	15%	0%	7%
		Say the notes	F7	0%	0%	0%	0%	0%	0%	0%	0%
		Sing the notes	F8	3%	0%	1%	0%	0%	0%	0%	0%
		Sing a part in her head	F9	0%	0%	2%	0%	0%	0%	0%	0%
		Closed Eyes	F10	0%	0%	0%	0%	0%	0%	0%	0%
	Strategies to master Difficult Parts	Play Right Hand Only	G1	11%	10%	9%	10%	4%	3%	8%	4%
		Play Left Hand Only	G2	12%	6%	6%	8%	5%	6%	4%	4%
		Link two parts together	G3	0%	0%	0%	0%	0%	0%	0%	0%
		Accentuation	G4	0%	1%	1%	0%	0%	0%	0%	0%
		Slow	G5	28%	28%	34%	29%	40%	34%	24%	21%
		Regular Tempo	G6	7%	7%	5%	3%	2%	2%	14%	13%
		Fast	G7	9%	6%	5%	2%	3%	7%	7%	5%
		Work chords at a fast tempo	G8	0%	0%	0%	0%	0%	5%	0%	0%
		Break down Chords	G9	1%	0%	0%	0%	0%	0%	0%	0%
	Interpretation	Dynamics	H1	5%	1%	3%	3%	11%	4%	8%	2%
		Pedal	H2	0%	0%	0%	0%	0%	0%	2%	0%
		Phrases	H3	1%	0%	1%	0%	1%	2%	14%	1%
	Final Adjustments	Memorize part(s)	I1	1%	0%	0%	0%	0%	0%	0%	0%
		Memorize the whole piece	I2	0%	0%	0%	0%	0%	0%	0%	0%
		Singing from memory	I3	0%	0%	0%	0%	0%	0%	0%	0%
	Focus on Difficult Parts	Focus on Group of Notes	J1	0%	0%	0%	0%	0%	0%	0%	0%
		Focus on Bar	J2	0%	0%	0%	0%	0%	0%	0%	0%
		Focus on Part	J3	0%	0%	0%	0%	0%	0%	0%	0%
		Focus on each voice separately	J4	0%	0%	0%	0%	0%	0%	0%	0%
		Focus on Trill	J5	0%	0%	0%	0%	0%	0%	0%	0%
	Strategies for Scales	Semitone - Semitone	K1	0%	0%	0%	0%	0%	0%	0%	0%
		Play key signature as a chord	K2	0%	0%	0%	0%	0%	0%	0%	0%
		Reference to the key signature	K3	1%	3%	0%	1%	1%	0%	0%	0%
		Repeat Scale	K4	0%	0%	0%	0%	0%	0%	0%	0%
		Focus on one scale	K5	0%	0%	0%	0%	0%	0%	0%	0%
		Play Tonic Chord	K6	0%	0%	0%	0%	0%	0%	0%	0%
		Starting Note	K7	1%	0%	0%	0%	0%	0%	4%	4%
	Recordings	Record themselves	L1	0%	0%	0%	0%	0%	0%	0%	0%
		Listen to recordings of the piece	L2	0%	0%	0%	0%	0%	0%	0%	0%
Other Musical Related	Talk — Practice during week previous week	Practice time	M1	0%	0%	0%	0%	0%	0%	0%	0%
		What the student practised	M2	0%	0%	0%	0%	0%	0%	0%	0%
		How the student practised	M3	0%	0%	2%	0%	0%	0%	0%	0%
		Ask student to dem how she/he practised	M4	0%	0%	0%	0%	0%	0%	0%	0%
	Practice for the next week	Practice time (Quantity)	N1	0%	0%	0%	0%	0%	0%	0%	0%
		What to practise for the next week	N2	0%	0%	1%	0%	5%	3%	3%	2%
		How to practise for the next week	N3	0%	1%	2%	2%	4%	7%	5%	2%
		Why the student has to practise this way	N4	0%	0%	0%	0%	0%	1%	0%	0%
	Feedback	What needs improvement	O1	21%	12%	20%	10%	17%	9%	15%	5%
		Instructions how something should sound	O2	4%	3%	5%	2%	4%	1%	4%	2%
		Ask to recognise if it needs improvement	O3	0%	0%	0%	0%	1%	1%	0%	0%
		Ask to recognise what needs improvement	O4	1%	0%	0%	0%	0%	1%	0%	0%
		Ask to recognise what is the improvement	O5	0%	0%	0%	0%	0%	0%	0%	0%
	Motivation	Praise (progress)	P1	0%	1%	0%	0%	1%	1%	1%	1%
	Images	Teacher create images	Q1	3%	0%	2%	0%	1%	1%	1%	0%
	Advice to do	Advisory comments to use a strategy	R1	24%	12%	15%	11%	15%	19%	11%	12%
		Fingering	R2	2%	0%	1%	1%	0%	0%	0%	1%
		Correction of a Note	R3	1%	1%	1%	1%	2%	1%	2%	1%
		Steady Tempo	R4	5%	0%	2%	1%	0%	0%	2%	1%
		Synchronization	R5	0%	1%	0%	0%	0%	0%	0%	0%
		Rhythm	R6	4%	3%	8%	1%	5%	1%	2%	0%
		Work voices separately	R7	0%	0%	0%	0%	0%	0%	0%	0%
		Body Language - Talking	R8	9%	2%	3%	1%	1%	0%	1%	1%
	Concert	Reference to concert	S1	0%	0%	1%	2%	0%	0%	1%	0%
	Examinations	Reference to examinations	T1	0%	0%	0%	1%	1%	1%	2%	1%
	Parents	Parental Involvement	U1	0%	0%	99%	0%	0%	0%	0%	0%
		Reference to parents	U2	0%	0%	0%	0%	0%	0%	0%	0%
	Talking	Self- Talking	V1	0%	0%	0%	0%	0%	0%	0%	0%
		Talking with Others	V2	0%	0%	0%	0%	0%	0%	0%	0%
	Written — Homework Notebook	Use of Notebook	W1	0%	0%	0%	26%	7%	4%	2%	8%
		Notes on score - what to practise	W2	0%	0%	0%	0%	0%	0%	0%	1%
		Notes on score - how to practise	W3	0%	0%	1%	1%	0%	0%	0%	0%
	Marks on Score	Make notes on the book	X1	0%	0%	1%	0%	1%	0%	1%	0%
	Non-Verbal Behaviour — Non-talking	Non-verbal Advice to use a strategy	Y1	1%	2%	1%	1%	0%	0%	0%	0%
	Gestures/Body Movements	Body Language - Non- talking	Z1	0%	0%	1%	0%	0%	0%	0%	0%
		Clapping - Student	Z2	1%	0%	2%	0%	1%	1%	0%	1%
		Clapping - Teacher	Z3	2%	1%	1%	0%	0%	0%	1%	0%
		Tapping student's shoulder	Z4	0%	0%	1%	1%	0%	0%	0%	0%
		Tapping foot - Teacher	Z5	0%	2%	4%	2%	0%	3%	11%	1%
		Tapping foot - Student	Z6	1%	2%	0%	0%	0%	0%	0%	0%
		Tapping hand - Student	Z7	0%	0%	0%	0%	0%	0%	0%	0%
		Tapping hand - Teacher	Z8	8%	2%	4%	1%	0%	0%	0%	0%
		Clicking Tongue	Z9	0%	0%	1%	0%	0%	0%	0%	0%
		Walk to find the tempo	Z10	0%	0%	0%	0%	0%	0%	0%	0%
		Snapping Fingers - Student	Z11	0%	0%	0%	0%	0%	0%	0%	0%
		Snapping Fingers - Teacher	Z12	0%	1%	1%	1%	0%	1%	1%	0%
		Head movement for counting	Z13	2%	3%	4%	0%	0%	0%	0%	0%
		Finger pointing the score (Teacher)	Z14	0%	1%	6%	1%	23%	13%	17%	2%
		Finger pointing the score (Student)	Z15	0%	0%	2%	0%	0%	0%	1%	0%
	Other	Play Other	AA1	0%	0%	0%	0%	0%	0%	0%	0%
		Moving in the Room	AA2	0%	0%	0%	0%	0%	0%	0%	0%
		Sign of Frustration	AA3	0%	0%	0%	0%	0%	0%	0%	0%
		Other	AA4	3%	3%	4%	5%	3%	13%	10%	15%

Appendix IV: Extract from the Observation Checklist of a Grade 5 Student

| | Main Categories | Sub- Categories | Activities | Codes | SA5 | | | |
					1	2	3	4
	Musical Material	Musical Material	Musical Material	Codes	Reps %			
Music Foci		Strategies to master Difficult Parts	Play Right Hand Only	G1	1.34	3.36	3.20	5.07
			Play Left Hand Only	G2	1.43	3.83	1.12	3.65
			Link two parts together	G3	0.00	0.00	0.00	0.00
			Accentuation	G4	0.89	0.86	0.00	0.44
			Slow	G5	18.57	14.83	13.57	15.21
			Regular Tempo	G6	0.71	1.41	1.04	0.00
			Fast	G7	0.00	0.08	0.09	0.00
			Work chords at a fast tempo	G8	0.00	0.00	0.00	0.00
			Break down Chords	G9	0.00	0.08	0.00	0.44
		erpretation	Dynamics	H1	1.16	4.76	5.45	6.32
			Pedal	H2	0.18	0.78	0.17	0.98
			Phrases	H3	0.00	0.39	2.42	1.87

Appendix V: Student Semi-structured Interview

Category	Outline Question	Prompts and Possible Directions for Discussion
Views on practice	Tell me about how you like to spend your practice time at home.	-
	Tell about how much you enjoy practising at home.	• Can you refer to any factors that may affect this?
Number of practice sessions	Tell me about how much time do you usually spend on practising at home.	• Tell me what factors may affect your decision to practise in general.
	How many days during the week do you usually practise?	• Tell me about the factors that usually affect your weekly practise time.
	What period of the academic year do you usually practise more?	• What factors influence this?
Frequency and length of practice sessions	Tell me about the length of your practice sessions.	• What factors may influence your practice time?
Order of material	Do you follow a specific order of material when you are practising?	• Does your teacher recommend following a specific order of material when practising at home? • With what material do you usually begin your practise with?
	Can you tell me about the order of the material that you usually follow when you are practising?	• Tell me what factors may influence this.
Reference to future practice during lessons	What can you tell me about reference to future practise in the lessons?	• Tell me how often your teacher gives instructions about future practise. • Describe a typical example of a discussion with your teacher in relation to future practise. • What factors might affect such discussions?
	Does your teacher advise you **what** you have to practise for the next lesson?	• How often?
	Does your teacher give instructions about **how** you have to practise for the next lesson?	• How often? • Tell me about the methods that your teacher usually uses to explain how you have to practise. • Does your teacher use any other teaching methods apart from verbal explanations? What teaching method do you find more helpful? • How often does your teacher demonstrate on the piano how you have to practise?

	Does your teacher also explain **why** you have to use this strategy?	• How often?
	What can you tell me about any type of discussions with your teacher in relation to practise time?	• Do you set along with your teacher a specific length of time that you have to spend practising?
Instructions for future practice	Is it always clear to you what/how/why you have to practise for the next lesson?	-
Usage of practice strategies suggested by the teacher	In general, do you usually follow the instructions that your teacher give in relation to practise?	• What factors may influence your decision to follow your teacher's instructions? • Do you always remember your teacher's instructions when you practise at your home? • What are you usually doing when you cannot remember what you were asked to practise?
Written notes for future practice	Does your teacher keep notes for you about how you have to practise at home?	• How often? • Describe how your teacher usually keeps notes for future practise. • At the present, do you find written notes to be useful? What about in the past? • If you had the choice to keep notes about practise, would you prefer to do so?
	Do you use a notebook to keep notes about future practise? Did you ever use a notebook? Are you using a notebook at the moment?	• Do/Did you find it useful? • What are your preferences in relation to usage of a notebook? (If you had the choice to use a notebook at the present, would you prefer to do so?)
Feedback & discussions on desired result	Do you discuss about what needs improvement and the desired result along with your teacher?	• Does your teacher demonstrate how something should sound? How?
Long-term & short-term goals	Do you discuss with your teacher about the goals that you want to achieve?	• How often do you discuss with your teacher your goals? • Do you set long-term goals with your teacher? • Describe an example. • Tell me about the short-term goals that you set with your teacher.
New strategies	Describe an example of how your teacher may introduce to you a new practise strategy.	• Is it usually clear to you how and when to use this strategy? • Can you tell me what teaching methods does your teacher usually use to explain new strategies?
Reference to previous practice	What can you tell me about discussions in relation to previous practise?	• How often do you discuss about previous practise with your teacher? • What factors do you think may cause discussions in relation to previous practise?
	Tell me about discussions in relation to: What/how/practise time.	

Tasks assigned and current skill	How would you describe the level of difficulty of the pieces that your teacher assigns to you (Easy/ attainable/ difficult)?	-
Repertoire of practise strategies	Tell me a few practise strategies that you usually use while practising.	-
Development of practice repertoire	Do you believe that the way that you are practising have changed over the years?	• How? • Why do you think this happened?
Parental involvement	Are your parents involved in any way to your practise at home?	• Describe how your parents may be involved to your home-practise. • Do your parents remind you to practise?
Nature of the lessons	Do you feel that the lessons affect your home-based practise in any way? How?	• If you had the opportunity, would you like to change anything in the way that the lessons are carried out? • Describe a few examples.

Appendix VI: Teacher Semi-structured Interview

Category	Outline Question	Prompts and Possible Directions for Discussion
Views about Practice	What are your thoughts about practice in general?	• How important reference to practise is during the lessons?
	How important do you believe that practise is?	• How often do you refer to practise in your lessons?
Reference to practice during lessons	How frequent do you believe that reference to practice needs to be?	• Do you believe that reference to practice is essential in every lesson? • What factors may have an influence on this type of discussions?
Nature of the lessons and its influence on practice	To what extent and in what way do you think that the lessons may have an influence over the student's practice?	• Do you believe that you have any responsibility for the way that students practise at their homes?
Influence of the level of the students on instructions for home practice	Tell me about the factors that may have an influence in the way that you usually refer to practise.	• To what extent do you think that the level of the students can be a factor of influence? • What other factors may affect the instructions that you give apart from the level of expertise (e.g., personal characteristics, external influences/internal influences)?
Quality and Quality of practice	Can you tell me your views about the quantity and quality of practise?	• Quality or Quantity? (Which of the two do you emphasize more?)
Quantity of practice	How much emphasis do you usually give to quantity in your lessons?	• Do you set a specific length of time for the practise sessions of your students? • Do you think that the student's level of expertise can be a factor influencing the frequency of discussions in relation to quantity?
	Describe how you usually refer to quantity of practice in your lessons.	
Order of Material in practice sessions	Tell me your thoughts about following a specific order of material while practising (e.g., finger exercise -> scales -> pieces).	• Reasons?
Practice strategies	Can you mention a few practise strategies that you consider to be effective?	-

Instructions & advisory comments for strategies	How often do you usually advise your students to use specific practise strategies during the lessons?	• What factors may affect frequency?
	Describe how you usually recommend practise strategies.	• Does discussion include how/when/why? • What teaching methods you may use when you recommend a strategy? • What factors may affect these discussions? • Does the student's level of expertise may affect such discussions?
New practice strategies	Describe how you teach/introduce new practice strategies to your students.	• How often do you teach new practise strategies? • Do you also discuss about the effects of the strategy? • What factors may cause such discussions? • What factors may affect when you are teaching new strategies? • Does the student's level of expertise affect such discussions?
Reference to previous practice	What is your opinion about reference to previous practise?	• What are the reasons you are referring to previous practise? • Can you describe an example of such discussions?
	How often do you discuss about previous practise with your students?	
Reference to future practice	What can you tell me about reference to future practise?	• Describe an example of a typical discussion. • How often do you discuss about future practise in your lessons? • Tell me what factors may have an influence on reference to future practise. • Are the level of expertise and the age of the student's factors of influence for this type of discussions? • How does the level of expertise may affect the frequency of instructions for future practise? • In which level of expertise do you think that students need the most support?
Feedback	How do you usually provide feedback to your students?	• How often do you discuss about what needs improvement? • Do you also discuss about the desired result with your students? Can you give an example? • What teaching methods are you using to explain to your students what need an improvement?
Written notes	Do you provide any type of written information to your students about future practise?	• How does the level of the students may affect your decision to use this teaching method? • Do you also keep notes about your students' homework as a reminder?
	Can you describe what methods are you using so as to keep notes for your students (e.g., notes on score, notebook)?	

Motivation: Rewards and Praise	How important do you think praise and usage of rewards are for home-practise?	• Does the student's level of expertise influence in any way your decision to use rewards?
	Can you give an example of how you might reward your students?	
Parental involvement	Can you tell me your opinion in relation to the parental involvement of home-based practise?	• How do you usually encourage them to be involved in their children's practise?

Appendix VII: Table of Main Results

Categories	SA1	SB1	SA5	SB5	SA8	SB8
Advisory comments	I[12]=552 A[13]=15.69%	I=296 A=14.47%	I=520 A=11.90%	I=456 A=20.03%	I=360 A=9.85%	I=537 A=16.04%
Non-verbal	I=71 A=1.19%	I=31 A=0.39%	I=55 A=0.63%	I=42 A=0.75%	I=55 A=0.85%	I=66 A=0.60%
Reference to Previous practice	I=13 A=0.77%	I=6 A=0.10%	I=8 A=0.02%	I=13 A = 1.02%	I=12 A=0.92%	I=25 A=1.68%
Reference to future practice	I=54 A=1.71%	I=92 A=7.74%	I=29 A=2.74%	I=85 A=9.25%	I=20 A=1.80%	I=85 A=6.57%
Usage of Notebook	-	Usage of notebook	-	-	-	-
Notes on score	I=13 A=0.56%	I=21 A =0.83%	I =10 A = 0.42%	I = 30 A = 1.62%	I=5 A=0.59%	I=18 A=0.88%
Total Number of practice sessions	17	10	4	6	5	10
Length	A=10%	A=12.02%	A=14.4%	A=32.5%	A=7.12%	A=14.21%
Distraction	A=8.93%	A=0.97%	A=0.00%	A=0.08%	A=12.68%	A=2.55%
Total Amount of Strategies used in Practice	25	22	19	21	19	19
Total Amount of instructions	28	56	22	47	11	42
	Week 1					
	4/6 A=66.66%	8/16 A=50%	2/7 A=28.57%	4/11 A=36.36%	0/2 A=0.00%	11/11 A=100%
	Week 2					
	5/7 A=71.42%	13/14 A=92.85%	3/6 A=50%	7/12 A=58.33%	0/3 A=0.00%	10/12 A=83.33%
	Week 3					
	2/9 A=22.22%	7/14 A=50%	1/4 A=25%	9/11 A=81.81%	2/4 A=50%	0/11 A=0%
Instructions followed in practice sessions	**Week 4**					
	4/6 A=66.66%	10/12 A=83.33%	3/5 A=60%	6/13 A=46.15%	2/2 A=100%	5/8 A=62.5%
	Total of all Weeks					
	15/28 A=56.74%	38/56 A=69.04%	9/22 A=40.89%	26/47 A=55.66%	4/11 A=37.50%	26/42 A=61.45%

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[12] I=Total Amount of Instances
[13] A=Mean Average

Appendix VIII: Supporting tables for SA1 (Chapter 5)

VIII.1 Summary of the material used in the four lessons by SA1

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	66%	38%	55%	42%
Scales	31%	25%	25%	27%
Sight Reading	0%	16%	16%	0%
Aural Tests	0%	18%	0%	26%
Other	3%	3%	4%	5%

VIII.2 Structure of the four lessons for SA1

First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Scales	Scales	Scales	Pieces
Pieces	Pieces	Pieces	Scales
-	Sight Reading	Sight Reading	Aural Tests
-	Aural Tests	-	-

VIII.3 Advisory comments and Non-verbal advice to use a specific strategy for SA1

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Advisory comments	23.63%	169	12.33%	151	15.36%	124	11.45%	108
Non-verbal Advice	1.01%	22	1.55%	22	0.97%	18	1.21%	9

VIII.4 Reference to previous practice for SA1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What the student practised	0.15%	2	0.28%	1	0.09%	1	0.12%	1
How the student practised	0.00%	0	0.00%	0	1.94%	4	0.28%	2
Demonstration	0.21%	2	0.00%	0	0.00%	0	0.00%	0
Totals	**0.36%**	**4**	**0.28%**	**1**	**2.03%**	**5**	**0.4%**	**3**
	Total Instances = 13 **Average = 0.77%**							

VIII.5 Reference to future practice for SA1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.06%	1	0.00%	0	0.19%	1
What to practise for the next week	0.34%	5	0.37%	3	0.56%	5	0.00%	0
How to practise for the next week	0.34%	5	0.93%	6	1.84%	9	1.71%	14
Why the student has to practise this way	0.09%	1	0.06%	1	0.06%	1	0.28%	2
Totals	**0.77%**	**11**	**1.42%**	**11**	**2.46%**	**15**	**2.18%**	**17**
	Total Instances = 54 **Average = 1.71%**							

VIII.6 Percentages and Instances for written notes for SA1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Notebook-Lesson	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notebook-Home practice (totals of weeks)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notes on score: What to practise	0.25%	1	0.00%	0	0.25%	2	0.00%	0
Notes on score: How to practise	0.18%	1	0.09%	1	0.75%	4	0.71%	4

VIII.7 Number of weekly practice sessions recorded on video by SA1

First Week	Second Week	Third Week	Fourth Week
3	3	8	3

VIII.8 Length of practice sessions (MM:SS) for SA1

Practice Sessions								
	1st	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**
First Week	06:47	04.34	09:12	-	-	-	-	-
Second Week	06:07	13:06	10:13	-	-	-	-	-
Third Week	22:48	08:14	13:03	03:43	04:48	10:01	12:20	07:23
Fourth Week	12:41	09:14	09:05	-	-	-	-	-

VIII.9. Distraction whilst practising at home for SA1

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	%	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Talking with Others	6.49%	1.32%	0.27%	0.41%	4.40%	2.69%	4.88%	3.65%	**4.01%**	**2.02%**
Moving in the Room	1.87%	0.32%	0.00%	0.00%	2.19%	0.90%	2.92%	0.56%	**1.75%**	**0.44%**
Other	7.28%	1.32%	0.00%	0.00%	2.50%	1.02%	2.92%	0.56%	**3.17%**	**0.72%**

VIII.10. Total percentages and average of strategies used in SA1's home practice

Sub-categories	Strategies	Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average of all Weeks
Playing	Playing scales	25.2%	4.60%	0.00%	0.00%	**7.45%**
	Playing exercise(s)	7.40%	0.20%	1.10%	0.00%	**2.18%**
	Playing the whole piece	36.1%	53.5%	61.80%	47.51%	**49.73%**
	Playing with the use of strategies	8.20%	24.8%	15.30%	18.80%	**16.78%**
	Both Hands	50.00%	61.40%	73.10%	63.55%	**62.02%**
Error Correction	Repeat Notes	3.80%	7.00%	6.80%	2.70%	**5.08%**
	Repeat Bar	1.20%	3.10%	3.00%	2.54%	**2.46%**
	Repeat Part	1.60%	2.40%	5.80%	1.83%	**2.91%**
	Repeat Chords	0.70%	2.70%	2.40%	0.78%	**1.65%**
	SFB-As a part/section	3.60%	4.40%	4.20%	1.26%	**3.37%**
Strategies for the Conduct of Practice	Count Off	0.00%	0.40%	0.00%	0.00%	**0.10%**
	Count Aloud	2.4%	0.00%	0.1%	0.00%	**0.63%**
	Singing Along	0.10%	3.00%	1.20%	0.17%	**1.12%**
	Use of Metronome	0.00%	0.00%	0.00%	48.15%	**12.04%**
	Increase gradually the tempo	0.00%	0.00%	0.00%	0.72%	**0.18%**
	Say the notes while playing	2.30%	0.30%	0.00%	0.00%	**0.65%**
	Closed Eyes	1.50%	0.00%	0.00%	0.00%	**0.38%**
Strategies to master difficult parts	Right Hand Only	24.20%	19.40%	3.40%	1.88%	**12.22%**
	Left Hand Only	2.80%	2.80%	1.20%	0.00%	**1.70%**
	Slow	27.70%	30.60%	20.80%	39.37%	**29.62%**
	Regular Tempo	19.00%	43.30%	35.20%	13.75%	**27.81%**
	Fast	29.80%	11.10%	17.40%	12.66%	**17.74%**
Focus on difficult parts	Focus on Bar	0.00%	0.30%	1.90%	1.99%	**1.05%**
	Focus on Part	2.80%	10.20%	5.40%	0.98%	**4.85%**
Strategies for Scales	Repeat Scale	6.20%	3.10%	0.00%	0.00%	**2.33%**
	Focus on one scale	13.40%	4.60%	0.00%	0.00%	**4.50%**
Body Movements	Tapping foot	0.20%	1.30%	0.10%	0.00%	**0.40%**
	Head Movement for counting	1.00%	0.00%	0.00%	2.26%	**0.82%**
	Clicking tongue	0.00%	7.30%	0.30%	0.18%	**1.95%**

Appendix IX: Supporting tables for SB1 (Chapter 5)

IX.1. Summary of the material used in the four lessons by SB1

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	65%	62%	73%	53%
Scales	9%	8%	17%	14%
Sight Reading	15%	17%	0%	8%
Aural Tests	8%	0%	0%	10%
Other	3%	13%	10%	15%

IX.2. Structure of the four lessons for SB1

	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
1.	Aural Tests	Pieces	Pieces	Scales
2.	Pieces	Scales	Scales	Pieces
3.	Scales	Pieces	Pieces	Aural Tests
4.	Pieces	Sight Reading	-	Pieces
5.	Sight Reading	-	-	Sight Reading
6.	Pieces	-	-	-

IX.3. Advisory comments and Non-verbal advice to use a specific strategy for SB1

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Advisory comments	15.14%	102	19.19%	79	11.21%	63	12.32%	52
Non-verbal advice	0.33%	9	0.35%	8	0.42%	6	0.47%	8

IX.4. Reference to previous practice for SB1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What the student practised	0.12%	1	0.06%	1	0.06%	1	0.03%	1
How the student practised	0.00%	0	0.09%	1	0.00%	0	0.03%	1
Demonstration	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Totals	**0.12%**	**1**	**0.15%**	**2**	**0.06%**	**1**	**0.06%**	**2**
	Total Instances = 6 **Average = 0.10%**							

IX.5. Reference to future practice for the SB1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.00%	0	0.15%	2
What to practise for the next week	5.17%	11	2.65%	7	2.50%	5	2.20%	16
How to practise for the next week	4.06%	8	6.59%	14	4.52%	6	1.85%	12
Why the student has to practise this way	0.18%	1	0.77%	7	0.09%	1	0.23%	2
Totals	**9.41%**	**20**	**10.01%**	**28**	**7.11%**	**12**	**4.43%**	**32**
	Total Instances = 92 **Average = 7.74%**							

IX.6. Percentages and Instances for written notes for SB1

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps	%	Reps	%	Reps	%	Reps
Notebook- Lesson	6.77%	7	4.23%	3	1.66%	2	8.26%	2
Notebook - Home practice (totals of weeks)	2.93%	13	4.70%	16	4.37%	5	3.64%	14
Notes on score: What to practise	0.40%	4	0.29%	3	0.09%	1	0.63%	3
Notes on score: How to practise	0.33%	3	1.29%	6	0.00%	0	0.27%	1

IX.7. Number of weekly practice sessions recorded on video by SB1

First Week	Second Week	Third Week	Fourth Week
3	3	1	3

IX.8. Length of practice sessions (MM:SS) for SB1

	First Session	Second Session	Third Session
First Week	14:31	13:04	10:56
Second Week	19:16	10:49	10:50
Third Week	11:49	-	-
Fourth Week	11:41	8:43	8:36

IX.9. Distraction whilst practising at home for SB1

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	%	Reps	%	Reps	%	Reps	%	Reps	%	Reps
Talking with Others	0.00%	0.00%	0.48%	0.71%	0.71%	0.93%	1.72%	2.94%	**0.73%**	**1.14%**
Moving in the Room	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	**0.00%**
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	**0.00%**	**0.00%**

IX.10. Total percentages and average of strategies used in SB1's home practice

Sub-categories	Strategies	Totals				
		Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average for all weeks
Playing	Student playing scales	24.02%	12.48%	17.21%	1.21%%	**13.73%**
	Student playing the whole piece	49.49%	47.80%	46.54%	49.69%	**48.38%**
	Student playing with the use of strategies	1.73%	3.71%	6.63%	15.12%	**6.80%**
	Both Hands	49.83%	49.27%	47.39%	60.19%	**51.67%**
Error Correction	Repeat Notes	1.63%	1.22%	2.82%	0.91%	**1.65%**
	Repeat Bar	0.13%	0.00%	0.00%	0.00%	**0.03%**
	Repeat Part	0.00%	1.01%	1.83%	4.03%	**1.72%**
	Repeat Chords	0.78%	0.54%	0.85%	0.66%	**0.71%**
	SFB-As a part/section	0.12%	1.37%	0%	0.10%	**0.40%**
Strategies for the Conduct of Practice	Count Off	0.59%	1.10%	1.69%	1.52%	**1.23%**
	Count Aloud	35.78%	38.05%	21.44%	27.54%	**30.70%**
	Singing Along	35.78%	37.80%	21.44%	25.97%	**30.25%**
	Use of Metronome	17.39%	31.68%	13.40%	12.64%	**18.78%**
	Increase gradually the tempo	0.00%	5.62%	0.00%	0.00%	**1.41%**
Strategies to master difficult parts	Right Hand Only	12.05%	6.01%	14.95%	5.01%	**9.51%**
	Left Hand Only	11.47%	6.42%	8.18%	0.52%	**6.65%**
	Slow	51.13%	33.38%	27.36%	39.92%	**37.95%**
	Regular Tempo	0.00%	16.32%	27.36%	24.02%	**16.93%**
	Fast	24.13%	14.25%	17.21%	1.81%	**14.35%**
Focus on difficult parts	Focus on Part	1.65%	0.49%	6.63%	15.30%	**6.02%**
Strategies for Scales	Repeat Scale	0.77%	0.00%	0.00%	0.00%	**0.19%**
	Focus on one scale	22.62%	8.01%	16.36%	1.24%	**12.06%**
Body Movements	Tapping foot	0.00%	1.38%	0.00%	0.00%	**0.35%**
	Walk to find the tempo	0.00%	0.17%	0.00%	0.00%	**0.04%**
	Clapping	0.00%	0.56%	0.00%	0.00%	**0.14%**

Appendix X: Supporting tables for SA5 (Chapter 6)

X.1. Summary of the material used in the four lessons by SA5

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	27%	79%	70%	91%
Scales	71%	20%	21%	6%
Sight Reading	0%	0%	0%	0%
Aural Tests	0%	0%	0%	0%
Other	2%	1%	9%	3%

X.2. Structure of the four lessons for SA5

	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
1.	Scales	Pieces	Pieces	Pieces
2.	Pieces	Scales	Scales	Scales

X.3. Advisory comments and Non-verbal advice to use a specific strategy for SA5

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Advisory comments	9.26%	115	15.76%	141	13.03%	145	9.57%	119
Non-verbal advice	0.52%	11	1.40%	31	0.00%	0	0.58%	13

X.4. Reference to previous practice for SA5

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What the student practised	0.00%	0	0.00%	0	1.45%	3	1.34%	2
How the student practised	0.00%	0	0.73%	1	0.48%	1	0.06%	1
Demonstration	0.00%	0	0.00%	0	0.00%	0	0.00%	0
	0%	**0**	**0.73%**	**1**	**1.93%**	**4**	**1.4%**	**3**
Totals	**Total Instances = 8** **Average = 1.02%**							

X.5. Reference to future practice for SA5

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What to practise for the next week	1.00%	4	1.50%	3	0.29%	3	1.95%	4
How to practise for the next week	1.59%	3	2.10%	4	0.32%	4	1.76%	2
Why the student has to practise this way	0.07%	1	0.37%	1	0.00%	0	0.00%	0
Totals	**2.66%**	**8**	**3.97%**	**8**	**0.61%**	**7**	**3.71%**	**6**
	Total Instances = 29 **Average = 2.74%**							

X.6. Percentages and Instances for written notes for SA5

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Notebook- Lesson	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notebook - Home practice (totals of weeks)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notes on score: What to practise	0.90%	6	0.00%	0	0.00%	0	0.22%	1
Notes on score: How to practise	0.00%	0	0.13%	1	0.00%	0	0.42%	2

X.7. Number of weekly practice sessions recorded on video by SA5

First Week	Second Week	Third Week	Fourth Week
1	1	1	1

X.8. Length of practice sessions (MM:SS) for SA5

	First Session
First Week	15:32
Second Week	20:27
Third Week	14:12
Fourth Week	07:25

X.9. Distraction whilst practising at home for SA5

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	Reps	**%**	**Reps**	**%**	**Reps**	**%**	**Reps**	**%**	**Reps**	**%**
Talking with Others	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Moving in the Room	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Other	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

X.10. Total percentages and average of strategies used in SA5's home practice

Sub-categories	Strategies	Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average for all weeks
Playing	Playing scales	0.00%	74.41%	0.00%	0.00%	**18.60%**
	Playing the whole piece	15.45%	0.00%	21.95%	0.00%	**9.35%**
	Playing with the use of strategies	73.39%	9.62%	66.78%	84.72%	**58.63%**
	Both Hands	66.74%	41.81%	62.21%	34.83%	**51.40%**
Error Correction	Repeat Note(s)	7.08%	21.27%	6.69%	16.40%	**12.86%**
	Repeat Bar	3.54%	0.00%	1.64%	4.72%	**2.48%**
	Repeat Part	23.39%	6.19%	28.52%	73.48%	**32.90%**
	Repeat Chord(s)	2.47%	0.08%	1.29%	2.02%	**1.47%**
	SFB-As a part/section	0.00%	16.46%	0.23%	0.00%	**4.17%**
Strategies for the Conduct of Practice	Use of Metronome	13.52%	2.36%	19.37%	0.00%	**8.81%**
	Say the notes while playing	0.43%	0.00%	0.12%	0.00%	**0.14%**
Strategies to master difficult parts	Right Hand Only	11.48%	18.99%	17.72%	28.99%	**19.30%**
	Left Hand Only	8.69%	24.53%	8.80%	19.55%	**15.39%**
	Link two parts together	0.11%	0.00%	0.00%	0.00%	**0.03%**
	Slow	86.89%	73.92%	67.84%	82.92%	**77.89%**
	Regular Tempo	0.00%	11.57%	20.89%	1.80%	**8.57%**
	Fast	0.00%	0.00%	0.00%	0.90%	**0.23%**
	Break down chords	2.58%	0.00%	0.00%	1.12%	**0.93%**
Focus on Difficult Parts	Focus on Part	47.21%	4.73%	52.82%	84.72%	**47.37%**
Strategies for Scales	Repeat Scale	0.00%	33.90%	0.00%	0.00%	**8.48%**
	Focus on one scale	0.00%	74.41%	0.00%	0.00%	**18.60%**
	Reference to the Key Signature	0.00%	0.24%	0.00%	0.00%	**0.06%**

Appendix XI: Supporting tables for SB5 (Chapter 6)

XI.1. Summary of the material used in the four lessons by SB5

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	56%	60%	70%	74%
Scales	27%	25%	0%	9%
Sight Reading	14%	14%	0%	15%
Aural Tests	0%	0%	28%	0%
Other	3%	1%	1%	2%

XI.2. Structure of the four lessons for SB5

	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
1.	Scales	Pieces	Pieces	Pieces
2.	Pieces	Sight Reading	Aural Tests	Sight Reading
3.	Sight Reading	Scales	-	Scales

XI.3. Advisory comments and Non-verbal advice to use a specific strategy for SB5

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**	**%**	**Reps.**
Advisory comments	19.17%	152	16.81%	111	23.62%	136	20.52%	57
Non-verbal advice	0.76%	13	0.00%	0	1.82%	26	0.40%	3

XI.4. Reference to previous practice for SB5

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What the student practised	0.39%	3	0.50%	3	0.00%	0	0.00%	0
How the student Practised	0.51%	1	1.20%	3	0.00%	0	0.71%	2
Demonstration	0.00%	0	0.76%	1	0.00%	0	0.00%	0
Totals	**0.90%**	**4**	**2.46%**	**7**	**0.00%**	**0**	**0.71**	**2**
	Total Instances = 13 **Average = 1.02%**							

XI.5. Reference to future practice for SB5

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.76%	1	0.66%	1	0.00%	0
What to practise for the next week	2.73%	10	7.71%	6	3.71%	7	1.46%	7
How to practise for the next week	1.47%	9	5.07%	9	5.35%	10	5.75%	12
Why the student has to practise this way	0.79%	3	0.57%	5	0.60%	2	0.35%	3
Totals	**4.99%**	**22**	**14.11%**	**21**	**10.32%**	**20**	**7.56%**	**22**
	Total Instances = 85 **Average = 9.25%**							

XI.6. Percentages and Instances for written notes for SB5

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps	%	Reps	%	Reps	%	Reps
Notebook-Lesson	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notebook-Home practice (totals of weeks)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notes on score: What to practise	0.45%	1	0.79%	2	0.00%	0	0.00%	0
Notes on score: How to practise	0.85%	1	0.94%	15	1.49%	6	1.97%	5

XI.7. Number of weekly practice sessions recorded on video by SB5

First Week	Second Week	Third Week	Fourth Week
1	2	1	2

XI.8. Length of practice sessions (MM:SS) for SB5

	First Session	Second Session
First Week	33:53	-
Second Week	43:21	25:05
Third Week	38:47	-
Fourth Week	23:47	30:09

XI.9. Distraction whilst at home for SB5

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Talking with Others	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Moving in the Room	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.34%	0.32%	0.00%	0.00%	0.09%	0.08%

XI.10. Total percentages and average of strategies used in SB5's home practice

Sub-categories	Strategies	Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average of all Weeks
Playing	Playing scales	17.66%	10.27%	20.93%	27.95%	**19.20%**
	Playing the whole piece	54.45%	55.84%	49.46%	53.84%	**53.40%**
	Playing with the use of strategies	15.59%	23.27%	16.42%	6.81%	**15.52%**
	Both Hands	86.57%	83.29%	86.29%	83.35%	**84.88%**
Error Correction	Repeat Notes	3.34%	3.45%	1.89%	2.52%	**2.80%**
	Repeat Bar	0.10%	0.52%	0.00%	0.14%	**0.19%**
	Repeat Part	16.77%	14.18%	9.07%	2.88%	**10.73%**
	Repeat Chords	2.16%	1.06%	0.73%	0.68%	**1.16%**
	Repeat Trill	0.00%	1.03%	0.00%	0.03%	**0.27%**
	SFB-As a part/section	0.74%	2.68%	2.84%	1.94%	**2.05%**
Strategies for the Conduct of Practice	Use of Metronome	0.00%	5.09%	13.02%	11.31%	**7.36%**
	Say the notes while playing	0.00%	0.04%	0.00%	0.00%	**0.01%**
Strategies to master difficult parts	Right Hand Only	0.59%	5.63%	1.68%	2.67%	**2.64%**
	Left Hand Only	0.59%	0.13%	0.00%	2.65%	**0.84%**
	Slow	71.47%	65.52%	52.34%	48.32%	**59.41%**
	Regular Tempo	0.00%	12.03%	20.15%	21.04%	**13.31%**
	Fast	14.22%	10.47%	13.79%	16.99%	**13.87%**
	Break down chords	0.20%	0.00%	0.00%	0.00%	**0.05%**
Focus on difficult parts	Focus on Bar	0.00%	0.4%	0.00%	0.00%	**0.10%**
	Focus on Part	16.63%	19.86%	14.40%	5.93%	**14.21%**
	Focus on Trill	0.00%	1.03%	0.00%	0.00%	**0.26%**
Strategies for Scales	Play Key Signature as a chord	0.00%	0.00%	0.43%	0.21%	**0.16%**
	Repeat Scale	5.51%	3.10%	9.84%	10.99%	**7.36%**
	Focus on one scale	10.82%	9.10%	18.18%	21.62%	**14.93%**
	Play tonic chord	0.00%	0.00%	0.00%	0.91%	**0.23%**

Appendix XII: Supporting tables for SA8 (Chapter 7)

XII.1 Summary of the material used in the four lessons by SA8

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	98%	96%	82%	98%
Scales	0%	0%	15%	0%
Sight Reading	0%	0%	0%	0%
Aural Tests	0%	0%	0%	0%
Other	2%	4%	2%	2%

XII.2. Structure of the four lessons for SA8

	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
1.	Duet Piece	Duet Piece	Exam Piece	Exam Piece
2.	Exam Piece	Exam Piece	New Piece	-
3.	-	-	Scales	-

XII.3. Advisory comments and Non-verbal advice to use a specific strategy for SA8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Advisory comments	8.52%	100	11.14%	54	8.34%	117	11.38%	89
Non-verbal advice	0.97%	23	0.85%	8	0.72%	15	0.86%	9

XII.4. Reference to previous practice for SA8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.00%	0	0.00%	0
What the student practiced	0.66%	2	0.70%	2	0.75%	3	0.75%	1
How the student practiced	0.00%	0	0.70%	3	0.10%	1	0.00%	0
Demonstration	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Totals	**0.66%**	**2**	**1.4%**	**5**	**0.85%**	**4**	**0.75%**	**1**
	Total Instances = 12 **Average = 0.92%**							

XII.5 Reference to future practice for SA8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.00%	0	0.48%	2	0.00%	0
What to practise for the next week	0.17%	2	0.00%	0	2.09%	4	0.00%	0
How to practise for the next week	1.10%	4	2.47%	3	0.27%	1	0.34%	2
Why the student has to practise this way	0.03%	1	0.00%	0	0.00%	0	0.23%	1
Totals	**1.3%**	**7**	**2.47%**	**3**	**2.84%**	**7**	**0.57%**	**3**
	Total Instances = 20 **Average = 1.80%**							

XII.6. Percentages and Instances for written notes for SA8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Notebook- Lesson	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notebook-Home practice (totals of weeks)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notes on score: What to practise	0.00%	0	0.00%	0	1.13%	3	0.00%	0
Notes on score: How to practise	0.00%	0	1.24%	2	0.00%	0	0.00%	0

XII.7. Number of weekly practice sessions recorded on video by SA8

First Week	Second Week	Third Week	Fourth Week
1	1	1	2

XII.8. Length of practice sessions (MM:SS) for SA8

	First Session	Second Session
First Week	10:20	-
Second Week	07:44	-
Third Week	07:57	-
Fourth Week	07:14	03:22

XII.9 Distractions whilst practising at home for SA8

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	%	**Reps**	**%**	**Reps**	**%**	**Reps**	**%**	**Reps**	**%**	**Reps**
Talking with Others	0.0%	0.0%	0.65%	2.35%	0.0%	0.0%	0.0%	0.0%	**0.16%**	**0.59%**
Moving in the Room	13.23%	1.27%	3.88%	1.18%	6.08%	0.59%	0.81%	0.01%	**6.00%**	**0.76%**
Other	13.23%	1.27%	3.88%	1.18%	8.18%	1.18%	0.81%	0.01%	**6.53%**	**0.91%**

XII.10. Total percentages and average of strategies used in SA8's home practice

Sub-categories	Strategies	Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average of all Weeks
Playing	Student playing scales	9.35%	7.97%	80.92%	0.00%	**24.56%**
	Playing with the use of strategies	67.10%	79.31%	0.00%	85.59%	**58.00%**
	Both Hands	76.45%	87.28%	72.96%	36.18%	**68.22%**
Error Correction	Repeat Note(s)	13.71%	11.42%	5.87%	10.10%	**10.28%**
	Repeat Bar	30.65%	0.00%	0.00%	0.00%	**7.66%**
	Repeat Part	3.87%	32.97%	0.00%	59.66%	**24.13%**
	Repeat Chords(s)	5.16%	5.39%	0.00%	0.51%	**2.77%**
	SFB - As a part/section	1.77%	23.49%	14.68%	6.89%	**11.71%**
Strategies to master difficult parts	Right Hand Only	0.00%	0.00%	9.01%	15.01%	**6.01%**
	Left Hand Only	0.00%	0.00%	1.05%	34.66%	**8.93%**
	Slow	72.74%	79.96%	45.70%	85.59%	**71.00%**
	Regular Tempo	3.87%	7.54%	22.01%	0.00%	**8.36%**
	Fast	0.00%	0.00%	4.61%	0.00%	**1.15%**
Focus on difficult parts	Focus on Group of Notes	0.00%	0.00%	2.94%	0.00%	**0.74%**
	Focus on Bar	30.65%	0.00%	0.00%	0.00%	**7.66%**
	Focus on Part	13.71%	32.97%	0.00%	71.22%	**29.48%**
Strategies for Scales	Play Key sign. as a chord	0.48%	0.00%	0.00%	0.00%	**0.12%**
	Repeat Scale	0.00%	0.00%	16.56%	0.00%	**4.14%**
	Focus on one scale	0.00%	0.00%	59.12%	0.00%	**14.78%**
	Play Tonic Chord	0.00%	0.00%	2.94%	0.00%	**0.74%**
Body Movements	Tapping Foot	3.71%	6.90%	0.00%	22.92%	**8.38%**

Appendix XIII: Supporting tables for SB8 (Chapter 7)

XIII.1. Summary of the material used in the four lessons by SB8

Material	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
Pieces	44%	48%	98%	54%
Scales	53%	47%	0%	33%
Sight Reading	0%	0%	0%	0%
Aural Tests	0%	0%	0%	0%
Other	3%	5%	2%	13%

XIII.2. Structure of the four lessons for SB8

	First Lesson	Second Lesson	Third Lesson	Fourth Lesson
1.	Scales	Scales	Exams Piece	Scales
2.	Exams Piece	Exams Piece	-	Exams Piece

XIII.3. Advisory comments and Non-verbal advice to use a specific strategy for SB8

	First Week		Second Week		Third Week		Fourth Week	
Percentages and Instances	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Advisory comments	15.12%	129	18.07%	142	19.36%	119	11.59%	147
Non-talking advice	0.46%	13	0.52%	16	0.69%	17	0.72%	20

XIII.4. Reference to previous practice for SB8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.00%	0	0.31%	1	0.60%	1	0.00%	0
What the student practised	1.06%	4	1.69%	6	0.84%	3	0.89%	2
How the student practised	0.11%	1	0.68%	4	0.33%	2	0.19%	1
Demonstration	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Totals	**1.17%**	**5**	**2.68%**	**11**	**1.77%**	**6**	**1.08%**	**3**
	Total Instances = 25							
	Average = 1.68%							

XIII.5. Reference to future practice for SB8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps.	%	Reps.	%	Reps.	%	Reps.
Practice time	0.11%	1	0.15%	1	0.00%	0	0.00%	0
What to practise for the next week	3.26%	10	4.70%	21	2.55%	4	1.89%	8
How to practise for the next week	3.60%	9	4.15%	15	3.30%	6	0.75%	3
Why the student has to practise this way	0.37%	3	1.35%	3	0.09%	1	0.00%	0
Totals	**7.34%**	**23**	**10.35%**	**40**	**5.94%**	**11**	**2.64%**	**11**
	Total Instances = 85							
	Average = 6.57%							

XIII.6. Percentages and Instances for written notes for SB8

Percentages and Instances	First Week		Second Week		Third Week		Fourth Week	
	%	Reps	%	Reps	%	Reps	%	Reps
Notebook-Lesson	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notebook-Home practice (totals of weeks)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Notes on score: What to practise	1.37%	5	0.15%	3	0.00%	0	0.19%	1
Notes on score: How to practise	0.11%	1	0.86%	4	0.84%	4	0.00%	0

XIII.7. Number of weekly practice sessions recorded on video by SB8

First Week	Second Week	Third Week	Fourth Week
1	5	1	3

XIII.8. Length of practice sessions (MM:SS) for SB8

	First Session	Second Session	Third Session	Fourth Session	Fifth Session
First Week	26:15	-	-	-	-
Second Week	03:54	17:37	11:54	16:39	14:16
Third Week	17:01	-	-	-	-
Fourth Week	28:59	05:20	17:13	-	-

XIII.9. Distractions whilst practising at home for SB8

	First Week		Second Week		Third Week		Fourth Week		Totals of all Weeks	
	%	Reps	%	Reps	%	Reps	%	Reps	%	Reps
Talking with Others	0.00%	0.00%	0.00%	0.00%	0.10%	0.27%	0.00%	0.00%	**0.14%**	**0.11%**
Moving in the Room	1.40%	0.85%	0.27%	0.12%	0.00%	0.00%	0.65%	0.24%	**0.58%**	**0.30%**
Other	0.00%	0.00%	1.98%	0.29%	5.81%	0.53%	0.00%	0.00%	**1.95%**	**0.20%**

XIII.10. Total percentages and average of strategies used in SB8's home practice

Sub-categories	Strategies	Totals First Week	Totals Second Week	Totals Third Week	Totals Fourth Week	Average of all Weeks
Playing	Playing the scales	45.32%	46.82%	75.10%	20.53%	**46.94%**
	Playing with the use of strategies	34.23%	33.00%	0.00%	68.77%	**34.00%**
	Both Hands	67.88%	73.67%	66.34%	83.37%	**72.82%**
Error Correction	Repeat Note(s)	15.62%	7.83%	4.53%	10.01%	**9.50%**
	Repeat Bar	1.40%	1.50%	0.00%	4.17%	**1.77%**
	Repeat Part	10.26%	10.87%	0.00%	30.05%	**12.80%**
	Repeat Chord(s)	2.55%	1.09%	0.00%	2.29%	**1.48%**
	SFB - As a part/section	15.36%	11.08%	27.95%	4.27%	**14.67%**
Strategies for the Conduct of Practice	Count Aloud	0.00%	0.74%	0.00%	1.02%	**0.44%**
	Use of Metronome	0.00%	1.06%	0.00%	0.00%	**0.27%**
Strategies to master difficult parts	Right Hand Only	5.23%	2.67%	3.35%	2.19%	**3.36%**
	Left Hand Only	7.01%	3.18%	5.41%	3.96%	**4.83%**
	Slow	80.31%	79.12%	71.56%	88.66%	**79.91%**
	Regular Tempo	2.36%	0.20%	2.95%	0.50%	**1.50%**
	Fast	0.00%	0.15%	0.20%	0.08%	**0.11%**
Focus on difficult parts	Focus on Group of Notes	0.00%	1.30%	0.00%	0.00%	**0.33%**
	Focus on Bar	0.00%	0.28%	0.00%	0.00%	**0.07%**
	Focus on Part	3.89%	16.66%	0.00%	11.37%	**7.98%**
Strategies for Scales	Semitone-Semitone	0.00%	14.48%	0.00%	0.00%	**3.62%**
	Repeat Scale	15.04%	8.93%	4.53%	4.58%	**8.27%**
	Focus on one Scale	35.69%	34.76%	67.13%	10.64%	**37.06%**

Appendix XIV: Average time of strategies used by students at home practice across the four weeks

XIV-Table: Part A

Sub-categories	Strategies	SA1	SB1	SA5	SB5	SA8	SB8
Music Foci	Playing scales	7.45%	13.73%	18.60%	19.20%	24.56%	46.94%
	Playing an exercise(s)	2.18%	0.00%	0.00%	0.00%	0.00%	0.00%
	Play the whole piece	49.73%	48.38%	9.35%	53.40%	0.00%	34.00%
	Playing with the use of strategies	16.78%	6.80%	58.63%	15.52%	58.00%	0.00%
	Both Hands	62.02%	51.67%	51.40%	84.88%	68.22%	72.82%
Error Correction	Repeat Notes	5.08%	1.65%	12.86%	2.80%	10.28%	9.50%
	Repeat Bar	2.46%	0.03%	2.48%	0.19%	7.66%	1.77%
	Repeat Part	2.91%	1.72%	32.90%	10.73%	24.13%	12.80%
	Repeat Chords	1.65%	0.71%	1.47%	1.16%	2.77%	1.48%
	Repeat Trill	0.00%	0.00%	0.00%	0.27%	0.00%	0.00%
	SFB-As a part/section	3.37%	0.40%	4.17%	2.05%	11.71%	14.67%
Strategies for the conduct of practice	Count Off	0.10%	1.23%	0.00%	0.00%	0.00%	0.00%
	Count Aloud	0.63%	30.70%	0.00%	0.00%	0.00%	0.44%
	Singing Along	1.12%	30.25%	0.00%	0.00%	0.00%	0.00%
	Use of Metronome	12.04%	18.78%	8.81%	7.36%	0.00%	0.27%
	Increase gradually the tempo	0.18%	1.41%	0.00%	0.00%	0.00%	0.00%
	Say the notes while playing	0.65%	0.00%	0.14%	0.01%	0.00%	0.00%

Sub-categories	Strategies	SA1	SB1	SA5	SB5	SA8	B8
Strategies to master difficult parts	Right Hand Only	12.22%	9.51%	19.30%	2.64%	6.01%	3.36%
	Left Hand Only	1.70%	6.65%	15.39%	0.84%	8.93%	4.83%
	Link two parts together	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%
	Slow	29.62%	37.95%	77.89%	59.41%	71.00%	79.91%
	Regular Tempo	27.81%	16.93%	8.57%	13.31%	8.36%	1.50%
	Fast	17.74%	14.35%	0.23%	13.87%	1.15%	0.11%
	Break down the chords	0.00%	0.00%	0.93%	0.05%	0.00%	0.00%
Focus on difficult parts	Focus on Bar	1.05%	0.00%	0.00%	0.10%	7.66%	0.07%
	Focus on Part	4.85%	6.02%	47.37%	14.21%	29.48%	7.98%
	Focus on Trill- Group of Notes	0.00%	0.00%	0.00%	0.26%	0.74%	0.33%
Strategies for Scales	Repeat Scale	2.33%	0.19%	8.48%	7.36%	4.14%	8.27%
	Focus on one scale	4.50%	12.06%	18.60%	14.93%	14.78%	37.06%
	Semitone-semitone	0.00%	0.00%	0.00%	0.00%	0.00%	3.62%
	Reference to the key signature	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%
	Play tonic chord	0.00%	0.00%	0.00%	0.23%	0.74%	0.00%
Physical Movements	Tapping foot	0.40%	0.35%	0.00%	0.00%	8.38%	0.00%
	Head Movement for counting	0.82%	0.00%	0.00%	0.00%	0.00%	0.00%
	Clicking tongue	1.95%	0.00%	0.00%	0.00%	0.00%	0.00%
	Walk to find the tempo	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%
	Clapping	0.00%	0.14%	0.00%	0.00%	0.00%	0.00%
	Closed Eyes	0.38%	0.00%	0.00%	0.00%	0.00%	0.00%