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Agents of Change: A Multi-Layered Approach to Violin Learning and Teaching

Leslie-Gail Ellis

Submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy

Technological University Dublin
Conservatory of Music and Drama

Supervisor: Dr. Mary Lennon

September 2018

ABSTRACT

This enquiry is an action research project that investigates how changes to learning environments might assist young violinists in developing greater awareness and understanding of their participatory role in instrumental learning. It is also an enquiry aimed at improving teaching practice through encouraging a heightened pupil-centred approach that places the teacher in a more facilitatory role. Positioned during the four months prior to their end of year performance assessments in a school of music, the study involved ten young violinists between the ages of 9-13 who were presented with weekly opportunities to engage in a multi-layered approach to learning that emphasised critical reflection. Informed by approaches that draw attention to the importance of engaging with the development of learning processes, five interventions were used in order to provide pupils with opportunities for: making and analysing weekly performance films; collaborating with a peer in the film analysis process; performing for the entire group of participants and engaging in group discussions; designing, implementing, and documenting the effectiveness of weekly practice strategies; and performing in a public celebratory concert. This multi-layered approach encouraged pupils to direct and explore their instrumental learning in each context by rotating between six ‘musical chairs’ from the perspectives of *listener*, *observer*, *analyst*, *designer*, *advisor*, and *performer*. There is evidence to suggest that incorporating this reflective model is advantageous to both pupil learning and teacher practice. Pupils acknowledged experiencing a growth in their level of confidence and ability to perform, in how they used critical reflection generally, but also specifically when self-regulating their practice. The frequency with which pupils performed, analysed performance films, and observed their peers perform was put forward by pupils as the most influential factor that promoted a change in the way they engaged with learning. From the teacher-researcher’s perspective, the study also highlights the impact of action research on teacher thinking and practice, and explores implications for instrumental teachers.

DECLARATION

I certify that this thesis which I now submit for examination for the award of PhD, is entirely my own work and has not been taken from the work of others, save and to the extent that such work has been cited and acknowledged within the text of my work.

This thesis was prepared according to the regulations for postgraduate study by research of the Technological University Dublin and has not been submitted in whole or in part for another award in any other third level institution.

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Signature _____ Date _____

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INTRODUCTION

Much real-world learning involves not the acquisition of new information so much as the intelligent use of the rich impressions and information one already has. (Claxton 2006a: 360)

As an action-research based enquiry this thesis depicts a journey of exploration and investigation of my beginner and intermediate violin pupils' perspectives of learning in order to find ways of improving teaching practice. Changes to learning environments are introduced that provide pupils with opportunities to investigate performance preparation through weekly interventions that keep performing, practising, and reflecting at the core. By stepping into a more facilitatory role I encourage pupils to engage with different reflective roles in order to explore and expose what is most important to them in their learning. In doing so, it is hoped that their practical and reflective engagement will help them become more skilled in the process of learning, which could potentially make them more self-reliant and autonomous.

Motivation for Enquiry

Across all educational sectors process versus product has been a longstanding topic of discussion. Placing too much emphasis on product may discourage broader self-agency as pupils try to conform to a fairly narrow rubric. Pupils may merely learn to follow instructions rather than to think for themselves. It is particularly relevant in the context of instrumental/vocal learning and teaching where graded assessments are used as a comprehensive and comparative means to assess musical ability. Instrumental examination boards seek to promote and establish a positive approach to music learning, claiming that the assessment results reveal an inclusive view of achievement both in musical understanding and skill acquisition. As an instrumental teacher I am all too aware that while some pupils excel on the day of their performance assessment, others do not, and this is not necessarily a reflection of commitment, work, or even of their understanding. It is merely a moment in time.

The municipal music school in which I work offers a variety of programmes that require pupils to demonstrate and sustain a high standard of musicianship and

instrumental proficiency in order to progress from one year to the next. The internal assessment system is similar in format to that offered by a number of recognised national/international assessment boards, and includes elements such as repertoire, studies, scales, and sight-reading. With performance as a basic component of instrumental study, a performance calendar for younger pupils includes performance opportunities within ensembles (orchestra, choir, band, and chamber) or participation in solo recital and concerto competitions. However, it is only a small number of pupils who commit themselves to entering competitions, leaving many pupils to rely on the class concerts organised by individual teachers in order to gain solo performing experience. When pupils do not participate in these concerts it is the end of year performance assessment that may be their only formal solo performance experienced within a given year.

If the end of year assessment is seen as the main priority, the teacher-pupil relationship may be swayed towards more teacher directedness and pupil passivity rather than encouraging pupil autonomy. A constant dilemma for instrumental teachers and their pupils is, what is the best use of time? The 30-45 minute weekly lesson offered to the beginner and intermediate pupils in the music school where I teach is only a brief window of opportunity that places many demands on the teacher to address technical and musical matters, while also helping these pupils to develop their own practice strategies. My main priority is to help pupils to connect with learning processes personal to their needs and ability, positioning long-term sustainability as the focal point of the educational equation. Aware that some pupils thrive on a concert platform and some others view performing as an uncomfortable experience, this thesis explores new ways to help pupils experience performing as an empowering celebration of their learning.

Working with children for over three decades has shown me the multitudinous ways in which they approach learning the violin, and it is evident that much hinges on their perceived level of competence and ability to understand and navigate a variety of complex roles. I have noticed that some younger violin pupils, regardless of their level of expertise, are often critically unaware of how they actually sound and look, nor do they reflect constructively. It would be interesting to know if younger pupils listen critically as they play, to explore what it is that they do pay attention to when they

perform, and to ascertain what kinds of observation they would make if they viewed digital recordings of their own performances or those of their peers. Questions then arise as to what steps teachers can take to carefully nurture and guide learning processes so that education holds personal meaning and value for each pupil. How would pupils respond to changes in the teacher's role? Would assisting younger pupils to critique performances regularly alter their perception of learning? What would be the impact of changing the lesson environment to incorporate interventions that stimulate critical reflection or involve peer collaboration?

Time will always be in short supply, but perhaps more time is not necessary for investigating answers to such questions. In this study, my pupils and I explore simple changes to how we use our time in a variety of learning environments, ones that keep performance learning at the core and that incorporate collaborative and reflective work within a performance learning culture. By encouraging them to explore and expose their perceptions of learning it is my hope that they might also become aware that progress is not only dependent on their commitment, but also on their willingness to explore and embrace change. Such realisations could be immensely valuable in the long term and also empowering in the present, to me in becoming a more effective teacher, and to the pupils in learning how to learn.

On Learning: A Perennial Enquiry

It is universally accepted that learning is personal, that for both adults and children certain skills are needed for particular tasks and that many of these skill sets, or know how, can influence or transfer from one domain to another. Being fundamentally social in nature we start learning from birth, and the ways in which we continue to learn throughout life, whether formally or informally, will be influenced by our contextualised histories; in essence, what and how we learn is often influenced by what we ourselves bring to learning. Regardless of the task, what and how anyone is learning at any given moment is probably only ever known by the learner herself, and this single idea stretches educators to consider fundamental questions about education. Who determines curriculum and content? How should learning environments be created? What determines pedagogical strategy and assessment? Answers to such questions will continually challenge educators because societies are ever changing.

Although educators understand that there is no one way to learn or to engage with learning, I have encountered those who argue that adherence to traditional approaches are best, and others who resist trying new approaches because they fear negative results. These conservative approaches are no doubt based on experience and/or observation, but from Plato to the present day changes in the philosophy of education have continually demanded we endeavour to better understand learning and ways to nurture it. What learners actually do, mentally and/or physically, has been the connecting thread between the various educational philosophies (idealism, realism, essentialism, progressivism, constructivism etc.), and if society is always changing then surely both the educators and learners within it should continue the quest of challenging and experimenting with new approaches.

To be successful at learning an instrument, pupils need to develop a degree of autonomy in relation to processes that assist their mental and physical engagement. With regards to individual instrumental music lessons, I have worried over the balance between process and product, and particularly in music schools where participation is determined by an assessment. Although I have observed pupils more concerned with the process of learning rather than the product itself, it is the product of their endeavours that are easiest for others to identify, label and measure. Ideally, the process yields tangible results and the product speaks volumes about the process, but education that weighs and acknowledges only products, whilst giving little credit or recognition to the process of achieving, seems to be unnecessarily partial. The categorisation of the pupils in an assessment is an obvious example of this. To me this suggests a need to construct in our thinking another definition or understanding of product which can include process, a much broader expression than simply assessing fixed outcomes, one that encompasses those harder to measure components of learning that should be encouraged in all learners. At the heart of this enquiry is a view that education is a non-linear path that should remain open to the unexpected, and one that emphasises a balance between product value and process significance. Rather than suggesting a dichotomy between process and product, this enquiry is a multi-layered approach affirming that education by its definition should be concerned with the multitude of processes that make up learning, some of which may be impossible to measure in an assessment context.

On Learning: A Different Direction

Learning a musical instrument through private tuition or within a music school is an extracurricular activity for many children. Unlike many academic subjects it involves a large amount of independent learning (Ericsson, Krampe & Tesch-Romer, 1993). While an interest in the younger musician's perspective of instrumental learning is beginning to feature within music research, the processes by which pupils choose to engage is still relatively neglected.

This enquiry is informed by ideas extracted from a broad range of literature that focuses on nurturing and facilitating learner autonomy. Forming cornerstones of support are Jean Bamberger (1991) and Eleanor Duckworth (2006) with their contributions on the impact of understanding how children make sense of things and the importance of critical reflection, but a particular emphasis is given to Guy Claxton and his approach to developing *learning power* (2018, 2008, 2006a, 2006b, 2004, 2002). In an attempt to capitalise on and nurture pupils' instinctual sense of 'curiosity and necessity', Claxton's approach is one that encourages pupils to engage with learning processes in order to transform their educational journey to one of great personal value and empowerment (Claxton, 2018: 19-25). In understanding that learners do need to actively build capacities that support learning how to learn, assistance should consider, nurture, and stretch the processes pupils naturally choose to engage in order that they might be the ones to ignite new possibilities. Also central to this study is the reiterated questioning of what is sound teaching practice, and a determination to acknowledge, support and work with the emergent signs of the pupils' innate and developing strategies for learning. Claxton (2008: 122-132) highlights that successful learners exhibit qualities such as curiosity and courage, an exploratory experimental and investigative willingness, imagination, reason and discipline, alongside social and reflective abilities. While these are all advantageous to pupil learning, it is the pupil's engagement with reflection that is at the centre of my enquiry.

If an overarching aim of education is 'to grow the habits of mind that will make them natural good learners wherever they find themselves' (Claxton, 2008: 107) then education in any domain should avoid using one-size-fits-all approaches. An essential element of this study is to acknowledge pupils' learning capacities and provide

supportive learning conditions within which they might develop habits of mind (Claxton, 2018; Claxton, Lucas & Webster, 2010b, 2010a; Costa & Kallick, 2008). I explore learning environments that recognise and expand core educational elements in instrumental teaching and learning, while integrating collaborative and/or group activities in finding ways to deliberately develop dispositions that aid in successful learning (Claxton, 2008, 2006b, 2006a, 2004, 2002). The fundamental underpinnings of my approach is that education should nurture natural and active participation by creating environments which stimulate learners to: examine their performances; identify their competencies; observe and collaborate with others; explore and glean ideas from others for their own adaptation; ask questions and follow self-formulated hunches; and connect themselves to the bigger picture (Claxton, 2008: 93). Learning to learn in this way promotes diversity and learning as a lived experience (Claxton, 2006b).

I have always compared these learning environments to the way that children engage on community *playgrounds*, and found many similarities. This comparison can be elaborated as follows.

Arriving at any community playground many children run to their favourite type of apparatus and begin practising familiar stunts and manipulating them into new adaptations before venturing out to explore different equipment. I have noticed that some children play quite happily on their own, while others silently observe and copy those around them. Individuals run between different groups of children and equipment, while one may try to help a group explore a new twist to a game. I have observed pairs of children spending long periods of time collaborating in a game they have obviously played before, and also those willing to drop everything in order to lend a helping hand before running off to explore something new that grabbed their attention. It is not hard to imagine that these same children might even take familiar games and ways of doing things from one playground to another, creating adaptations to suit the equipment and layout of the new playground, or the age and number of children present. The cycle of exploring, testing, inventing and reinventing things resumes once again.

Researching the implications of only one type of learning environment within my teaching practice would be the equivalent of only observing children who choose to go down the slide on one particular playground. I would certainly learn things about how children engage with that particular slide, but not whether they would treat a different slide on a neighbouring playground in the same way, or whether having a friend along would make any difference to their sliding, or if their sliding technique influences the way that they act on other equipment. Thus, the interventions undertaken in this action research project explore five different learning environments (playgrounds) that I will refer to across this thesis as *Layers*, in order to create a broader perspective of how my pupils engage with reflective learning.

Overview of Thesis

This introduction has sought to convey the intent of this enquiry while giving a contextualised background. It was also intended to communicate my thinking about the relative significance of learning processes and product, how these might be viewed within the educational system, as well as depicting a brief overview of Claxton's educational ideas underpinning this enquiry.

The first chapter presents a review of literature specifically devoted to the violin, and a portrait of the teacher and learner roles that frame this enquiry. A contrast is then made between what the violin literature contributes on practising to that of findings from within the music education literature. The second chapter focuses on how learning is viewed within the educational theories of constructivism and experiential learning, the importance of reflection, and the building of knowledge generally and musical knowledge specifically. The latter half of Chapter 2 discusses the emergence of new thinking in education regarding the liberation of the learning environment, the teacher's role, as well as teaching and learning strategies that support my proposed frame for pupil engagement with reflection.

Chapter 3 discusses the action research methodology and the research methods employed. It describes the interventions used in this enquiry, outlines the approach to collecting and analysing the data, and provides detailed profiles of each participant. The next three chapters present and examine data emerging from the interventions

made to learning environments, focusing on both pupil and teacher perspectives, and explore data emerging from interviews undertaken with pupils at various stages of the project. The final chapter discusses the overall outcomes of the study, and explores implications for instrumental/vocal teaching and learning.

CHAPTER 1

CONTRIBUTIONS FROM THE VIOLIN LITERATURE: WORDS OF WISDOM

1.1 Introduction

The richness of the violin literature has greatly influenced who I am as a violinist, violin teacher and researcher, and as such needs to be accounted for and connected to this enquiry. It is a body of literature that is more conceptual than prescriptively instructional, but that does set consequential considerations for teaching through its precise descriptions of what it means to be a good violinist. Based on empirical wisdom rather than scientific evidence, this literature continues to provide researchers with many valuable concepts to consider. The teacher-pupil dynamic holds the potential to influence how pupils engage with instrumental learning in the absence of the violin teacher, and is an important component of this enquiry. Therefore, this body of literature is explored with a focus on teacher and pupil engagement, with a particular emphasis on practising.

Part One

1.2 An Overview of the Violin Literature

The long-standing literature dedicated to learning and teaching the violin dates back at least as far as 1751 to Francesco Geminiani's treatise, *The Art of Playing the Violin*. This particular body of literature has grown to encompass a wide variety of technical and musical issues for the violinist's consideration while establishing a commonality of ideas on the machinery needed (strategic mechanisms or tools) to achieve technical and musical excellence (Gatward, 1984; Gerle, 1983; Whone, 1972; Galamian, 1964; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921; Melsa, 1901). These books form a body of wisdom and a source of reference with regard to developing an instrumentalist's excellence that continually expands (Levine, 2016; Kempter, 2003).

Though a minority of authors have chosen to devote entire publications to a specific technical topic (Fischer, 2004; Gerle, 1991, 1983; Pomer, 1988; Leviste, 1953; Flesch, 1934; Eberhardt, 1911) the majority of all treatises cover core subjects such as:

- Physiology for basic stance and posture
- How both the violin and bow are held
- Techniques unique to each hand:
 - Left hand: intonation, shifting, vibrato, trills, double stops
 - Right hand: bow usage, articulation and the various bow strokes
- Technique involving the interplay between hands (tone production, expression)
- Practice techniques
- Sight-reading
- Interpretation
- Performance anxiety
- Technical exercises for finger and/or arm flexibility and dexterity
- General physical fitness

It is perhaps Yehudi Menuhin (1986) who is most esteemed for his contributions urging a complete life style approach to instrumental study. His is a holistic view that considers diet, exercise, and mental health to be of equal importance.

Both older and more recent literature are expansive in regards to what pupils must actually do in order to reach a level of expertise, but the older publications are less inclusive of identifying and addressing stages of development. Though there have always been tutor books with favourite or popular melodies of the time, some violin pedagogues have deliberately designed approaches to violin learning that support pupil development through sets of structured and sequential stages, such as the Suzuki Method or Paul Rolland's *Young Strings in Action* series. Regardless of publication date, a key aim of all publications is to ensure that a solid foundation is secured during the early stages of learning.¹

Traditionally, one-to-one instrumental music lessons tended to be teacher directed: an expert was hired to pass on knowledge, and was responsible for developing pupil's skills and instrumental musicianship. This highly respected 'master apprentice' model is still widely practised today, but there has been a discernible shift towards adopting more teacher-pupil collaborative approaches. Nevertheless, there is no doubt that the basic mission remains unchanged. Both the old and newer literature richly connotes the importance of the interplay between teacher and pupil, and how it may influence the pupil's home study. In this enquiry the teacher's role, together with the pupil's responsibility and engagement, will be examined in both sets of literature.

1.2.1 A road to autonomy

While the violin literature does not directly address teaching strategies, it does imply the nurturing of pupil autonomy, so that over time they feel empowered to become their own best teacher outside of teacher supervision (Gatward, 1984; Gerle, 1983; Whone, 1972; Galamian, 1964; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921). As such, the teacher's role is depicted as a significant force, attending to the pupil's musical development both generally and instrumentally, and to the nurturing of attitudes towards violin learning and practice. No matter the duration of a pupil's lesson, the literature advocates that the actions of the teacher must be such that the lesson prepares the pupil for the practice they must do between lessons.

The physical and mental uniqueness that each pupil brings into the teaching studio poses challenges, which may need to be worked on separately. However, it is widely agreed that 'external change must go hand in hand with gentle education from the inside' (Whone, 1972: 87). While the teacher's role is seen as uniquely positioned to assist pupils in developing personal and effective strategies catering for their specific needs and commitment level, the efficiency of these strategies is viewed as being reliant on the willingness of each pupil to 'cultivate the habit of close self-observation' and 'accustom himself to direct and control his efforts' (Auer, 1921: 14).

Herein lies the importance of what the teacher does and advises during lessons in relation to how pupils develop practice strategies. This not only impacts on their

instrumental progress, but also nurtures pupil autonomy. Galamian states it very clearly:

There is nothing more precious to an instrumentalist than the ability to work effectively – to know how to accomplish the maximum in beneficial results while using the minimum of time to do so. One of the most important things that a teacher ought to teach his student is, therefore, the technique of good practice... (Galamian, 1964: 93)

The literature concedes that although a teacher's actions and words can produce dramatic and immediate effect, unless the pupil is willing to recognise and acknowledge that there are problems to be solved and commit to finding possible solutions (externally as well as internally), these may be nothing more than momentary effects, running the risk of being forgotten (Whone, 1972). Since most of a pupil's learning time is spent in isolation at home, lessons should help them develop problem-solving skills so that their home practice becomes a continuation of the lesson itself.

The importance of assisting pupils to recognise, understand, accept, and work with conflicts during the instrumental lesson is positioned within the violin literature as something of primary concern; precedence should be given towards assisting the pupil to understand how internal forces can greatly impact external physical results at any age (Whone, 1972; Havas, 1961). The entire body of violin literature suggests that while developing problem-solving skills is key in learning to practise effectively, it is not a quick journey.

Learning to practise comes about through years of teacher nurturing in conjunction with a pupil's own persistence at observing, reflecting, and experimenting; it is a crucial cumulative investment, equipping the more advanced pupil with a bank of effective practice strategies ready at their fingers tips. However, it is widely accepted that in the early stages, the teacher's role is to responsibly and carefully outline what is to be practised at home, and how. Left completely unaided, younger pupils can develop bad practice habits simply through lack of knowledge and understanding of the useful tools needed to identify and confront problems as they arise: possessing these tools for prevention should be given priority over merely offering solutions (Whone, 1972; Kinsey, 1954).

The implication of assisting pupils to develop their own practice strategies is that it empowers autonomy. Implicit in the literature is that pupils are given the freedom to experiment and explore, and while the literature does not clearly define the stage at which pupils should be completely independent from teacher guidance, it is widely agreed that a gradual untethering is advantageous as pupils develop and gain expertise in designing their own learning strategies.

Central to this enquiry is finding ways that the teacher can encourage the pupils to independently and autonomously explore areas of strategy design and implementation during their daily practice in order to become more self-reliant in designing or redesigning, testing, and exploring personalised practice strategies. Although it is difficult to completely separate the influential role of the teacher and the pupil's emerging autonomy, a shift in approach by the teacher may well impact how pupils engage when practising.

1.2.2 Pupil engagement

It is hard to argue with Auer's (1921) words, 'I believe when they practise without observing and criticising themselves they merely develop and perfect their faults' (p. 14). Armed with appropriate freedom and know-how, the literature gives quite clear indications as to the type of personal engagement a violinist needs when practising. Authors often refer to the pupil's level of mental effort (attention) being a priority if her practice is to be effective. Practising without focused or sustained attention runs the risk of pupils developing mere habits that are by nature mechanical (attention-less) and that may allow mistakes to go unnoticed, thus allowing their ears to become 'impervious to faulty sounds' (Galamian, 1964: 94), and thereby jeopardising the skills already learned. By definition, sustained concentration means that the pupils give their full attention to continuously sifting through and juggling an immense amount of incoming information, controlling how it relates to external forces before deciphering its usefulness. A course of action can only be forthcoming after the pupil recognises and acknowledges that a problem[s] actually exists, and then prioritises what is most urgent to address. However, throughout the literature many authors allude to the fact that if a pupil is highly attentive while practising, often 'a problem ceases to be a problem' (Whone, 1972: 99). There is reference also to:

...once the mind learns to give the right orders to the right places, your body will have no option but to obey...to assure rapid progress and good playing ...is [to know] how to work your mind. (Havas, 1961: 17)

These texts frequently link mental alertness and attention to listening, asserting that it is by the ear and mind working together in conjunction with sustained concentration that practice becomes purpose-full (Gerle, 1983; Whone, 1972; Galamian, 1964; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921). Listening attentively, rather than simply hearing, is a form of engagement frequently reiterated throughout the violin literature as an action of great consequence. Galamian (1964) reminds the violinist that:

...the mental preparation and control has to be supplemented by the sharpest and most constant supervision by the critical ear...the ability for honest, objective hearing, is the most essential prerequisite for effective practice. (Galamian, 1964: 101-2)

Attention combined with deliberate and investigative listening confronts pupils with challenges they may not otherwise have been aware of, and this in turn invites them to become their own teachers. Through continual ‘thoughtful application and conscientious attention to detail’ (Kinsey, 1954: 37), pupils learn that effort and constant persistence is the key; that listening with integrity² is the most honest form of practice (Galamian, 1964). Whilst integrity and mental engagement are essential for successful practising, the actual structure of practice also needs careful consideration. Although the scope of my enquiry does not allow for the monitoring of each participant’s actual practice time, the content, structure, and design of their practice is a factor being investigated.

Menuhin (1986) suggests that while practising should not be portrayed to the pupil as a joyless exercise, it does necessitate a high degree of personal commitment coupled with strategic planning.³ However, an underlying theme across the literature is that of time, and while it is an important factor for consideration, no exact amount of time for practising is prescribed.⁴ Galamian (1964) in particular notes that pupils must understand the differences between the time it takes to build technical excellence, musical interpretation and the ability to give a public performance, and then address their practice time accordingly. However, it is generally agreed that beginner and intermediate pupils’ practice benefits from short and frequent sessions, with time incrementally increasing as progress is made and the demands of the repertoire increase.

The notion that rest periods should hold equal importance appears frequently in the literature; down time allows the pupil to reflect and mentally digest, creating a frame for future reference when work resumes. It is thought that over an extended period of time productive rest periods assist higher productivity (Flesch, 1962) by helping the pupil to acquire embodied control of their instrument (Whone, 1972; Galamian, 1964; Flesch, 1962; Auer, 1921).

Time spent working to secure technical accuracy is stressed across the literature as a primary concern, regardless of the pupil's age or level. Strategies such as slow, sequential and repetitive practice (Gerle, 1983; Kinsey, 1954) are suggested as the most favoured and beneficial conventions. Practising slowly suggests that there is no such thing as a 'quick fix', or rather paradoxically, that slow practice equates with fast progress because it allows for critical listening and assimilation (Gerle, 1983; Kinsey, 1954). Kinsey (1954) comments that time is often wasted by correcting difficult passages at speed, that while it may give the pupil quick satisfaction, the significance of what has been learnt is usually minimal; and again, only when the pupil 'has gone through it slowly...to see what has to be done and why, to understand the nature of the difficulty to be overcome' (p. 36), does learning hold value. Authors repeatedly state that no error should go uncorrected, that determining the cause of errors allows the pupil freedom to concentrate on technical and musical accuracy (Gerle, 1983; Kinsey, 1954; Auer, 1921).

Repetition is the most discussed practice strategy denoting a developed level of physical and mental control and stamina. Pupils need to understand that, if thoughtfully done, repetition increases technical security, but that if done carelessly it can further ingrain existing mistakes or solidify insecurities (Galamian, 1964; Kinsey, 1952). Although an exact number of repetitions are not mentioned, it is hinted that repetition of small passages should continue until a degree of comfort and fluency occurs. Also, although it is advised to follow this work with repetitions of larger sections that contain the recently mastered passage in order to decipher its true level of security, this is only one suggestion for the effective use of repetitive work, since there are as many variations as there are musicians. Examples could include the incorporation of various rhythmic work, using alternative bowings⁵, transposing sections into several different keys, or practising short sections at a variety of different tempi, though the pupils need to consider that

mastery through repetition at a slow tempo does not necessarily equate to mastery at a fast tempo (Gerle, 1983).

Violin treatises by pedagogues such as Herbert Kinsey (1954), Kato Havas (1961) and Robert Gerle (1983) give clear, detailed steps of practice models, but perhaps the clearest guide is that of Gerle who outlines ten very simple practice rules that can be used by pupils of any age or level.

- Always Know Exactly What You Need to Practice - and Why
 - Organise Practice Time to Suit Circumstances
 - Repetition is the Mother of Knowledge Only if the Perfected Passage is Repeated More Often than the Faulty One
 - Practise Fast as Well as Slowly
 - Give Equal Attention to the Bow Arm: Don't Practise Only the Left Hand
 - Separate the Problems and Solve Them One by One
 - Practise Difficult Passages in Context
 - Practise Performing: Don't Only Practise Practising
 - Practise Also Without the Instrument
 - Do Not Neglect the "Easy" Sections: They Tend to Take Revenge on You.
- (Gerle, 1983: 13-23)

Most of Gerle's rules have been touched on in some form during this discussion, but there are perhaps two needing further comment as they are particularly relevant to this enquiry. The first of these is practising to perform. The notion of actually practising performing is not always obvious to the younger pupil, and therefore strong guidance is needed from the teacher. Why? Simply put, there are 'entirely different conditions of mind and muscles in the playing of a passage as an exercise and in playing it as part of a musical composition' (Galamian, 1964: 101). Whether performing in the teaching studio, at home (with or without an audience) or in an actual concert venue, it is often during these performances that understanding or realisations of security and success of interpretation come to light. The second valuable form of practice that warrants a further note is the type that occurs away from the instrument. During rest periods between practice sessions, or at other times of the day, imaginary, silent or mental

practice serves musicians of all instruments. Not only is silent practice, a reflective mode, useful in understanding a more accurate map of the internal structure of the piece and its elements, it grounds memory and exercises the mind, the ‘control centre’ where ‘every action of playing originates’ (Gerle, 1983: 22).

Part Two

1.3 Research on Instrumental Learning and Practising

Many of the issues previously discussed within the violin literature can be linked to findings from a growing body of music research devoted to exploring pupils’ learning and practising. As the majority of instrumental learning takes place between lessons, research has tended to look at practice and learning away from the teacher’s presence. Research findings have complemented and supported the ideas expressed within the body of violin literature by examining issues such as time and quality (Lehmann, Sloboda & Woody, 2007; Hallam, 1998, 2001a; Williamon & Valentine, 2000; Sloboda, Davison, Howe, & Moore, 1996; Ericsson *et al.*, 1993; Sloboda & Howe, 1991; Bloom, 1985; Sosniak, 1985); strategy and commitment (Hallam, Rinta Tettey, Varvarigou, Creech, Papageorgi, Gomes & Lanipekun, 2012; Burwell & Shipton, 2011; Leo-Guerro, 2008; McPherson & Davidson, 2006; Barry & Hallam, 2002; McPherson & McCormick, 2000; Gruson, 1998; Hallam, 1997, 1998; Flavell, Beach, & Chinsky, 1966); setting goals and self-regulation (Schatt, 2011; Leo-Guerro, 2008; Nielsen, 2008; Zimmerman, 1994; Barry & McArthur, 1994), and the influence of support systems on attitudes towards practice (Creech, 2010; Hallam, 2001a; Pitts, Davidson & McPherson, 2000b, 2000a).

1.3.1 Time and quality

During the development of instrumental skill, the teacher and parents delight when pupils engage in practising with curiosity and persistent effort. Sadly, experienced teachers know all too well that this is not always the case. Research has shown that reaching a high level of expertise on a classical instrument is directly related to the accumulated hours of study, most of which are in isolation (Lehmann, Sloboda & Woody, 2007; Hallam, 2001a; Ericsson *et al.*, 1993; Bloom, 1985). Ericsson, Krampe

and Tesch-Romer (1993) interviewed violinists studying in a German conservatoire whose teachers had categorised them as either ‘good’ or ‘best’ violin students (p. 373). Prior to entering third level at the age of 18 the good pupils had accumulated 5,300 hours of practice, and the best pupils 7,400 hours. Young pupils are more likely to make a long standing commitment to dedicated practice when musical training is started early in life and emphasises enjoyment (Sloboda & Howe, 1991; Sosniak, 1990, 1985; Bloom, 1985). While sustained progress and achievement have been directly linked to cumulative hours and the degree of pupil commitment, they are also seen to influence the decision to enter third level study or music as a vocation (Bloom, 1985). Further investigation into the effects of pupil practice time found that students at all levels needed the same amount of time for progress to occur, but that pupils who had achieved a higher level had put in more hours, even in the earlier stage (Sloboda *et al.*, 1996).

Research discusses the relationship between cumulative time spent and concentrated work, or quality of practice (Chaffin & Lemieux, 2004; Jorgensen, 2002; Hallam, 2001a, 1998; Sloboda, 1994). Labelled as deliberate practice (Ericsson *et al.*, 1993) and defined as work conducted with heightened and focused attention to achieve goals beyond the current level of ability (Lehmann *et al.*, 2007), this focused practice is regarded as the largest contributor to the instrumentalist’s progress and successful achievement (Williamon & Valentine, 2000; Howe, Davidson & Sloboda, 1998). McPherson and McCormick (2000) investigated levels of pupil effort in preparation for music exams and found that pupils who felt they had put in a substantial amount of effort were happy with their results, while pupils receiving less favourable results owed their lower scores to applying less effort during preparation. Simply spending time with an instrument is not necessarily viewed as productive practice (Lehmann *et al.*, 2007; Hallam, 1998) or indicative of future performance quality (Hallam, 1998). Ericsson, *et al.* (1993) found pupils did not actually practise as much as they claimed, although 92% of intermediate to advanced pupils showed an understanding of the importance of preparation by increasing the amount of practice prior to performance (Hallam, 2001a).

Participants in this current enquiry are relatively independent and receive little or no parental support beyond verbal encouragement and acknowledgement that practice has been done. My adopted approach endeavours to capitalise on research findings, thereby

assisting the development of deliberate practice, and nurture a sense of enjoyment and pride in the quality of learning.

1.3.2 Strategy and commitment

There can be very few indicators more critical or indicative of how many years a young person will study the violin than their mental attitude or degree of enthusiasm. All pupil-parent-teacher relationships are unique and complex, with potential to influence learning outcomes (Creech, 2009, 2006; Creech & Hallam, 2009). The development of effective practice strategies and a healthy attitude in the younger pupil can be greatly enhanced by both teacher and parent directing clearly defined ‘goals that are attainable and finite’ (Pitts *et al.*, 2000a: 53). Research has shown that accompanying any attainable goal is the need for the pupil to have credible working strategies, or schemata, that support their efforts (Hallam 2001b). This demands careful consideration of the wider implications when directing goal choice. Hallam’s study (2001a) found that while the majority of younger pupils regarded practising as enjoyable, a small percentage found it boring or uninteresting. External forces outside of the pupil’s control (such as school breaks or a general change in routine) have also been found to influence a pupil’s attitude toward practising. These can inadvertently transform prior enthusiasm to a negative perception of learning (Pitts *et al.*, 2000a). Pitts, Davidson and McPherson found that when practising is viewed as compulsory, the pupil might begin to dissociate from enjoyment or the desire to improve (Pitts *et al.*, 2000a). Supported in a later study by Creech (2010), Pitts *et al.* suggest that parental support in the early stages should provide an encouraging environment. Pitts *et al.* also add that parental support is best when it provides clear instruction and advice, but as the pupil becomes more capable, their involvement should give way to supportive and simple forms of ‘recognition and praise’ (Pitts *et al.*, 2000a: 53). Pitts and colleagues, as well as Creech, found that motivation, self-efficacy, self-esteem, personal satisfaction and enjoyment have been further linked to the home environment and types of parental support (Creech, 2010; Pitts *et al.*, 2000b). Creech found that these areas are more likely to be amplified when parents:

- elicit their children's views regarding appropriate parental involvement
- negotiate with their children over practising issues, within parameters set by the teacher
- provide a structured home environment for practice
- take an interest in promoting good teacher-pupil rapport
- communicate with the teacher in relation to the child's progress and
- remain as a supremely interested audience.

(Creech, 2010: 29)

However, what is less covered in research is the successful child who receives little or no parental support or practice supervision.⁶ These findings demonstrate the need for teachers to carefully consider what influences the development of practice strategies.

1.3.3 Self-regulation: towards empowerment

There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis on the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process... (Dewey, 1938: 67)

The time devoted to instrumental learning at home between lessons demands that the role of pupil transforms to one of self-teacher. Research has shown that the ability to self-regulate learning requires the pupil to carefully navigate through cycles of thinking, adjustments in behaviour, and to take account of environmental factors when encountering each new challenge (Zimmerman, 1994). McPherson and Zimmerman (2002) developed this further postulating that self-regulation is affected by motive, method, time management, behaviour, physical and social influences. This is still accepted as 'a viable theoretical framework for exploring how instrumental musicians become self-sufficient learners' (Miksza, 2012: 334). Motive is described as being derived from the pupil's self-belief in her own ability to learn, thus influencing her level of participation and her methods, the devising of learning strategies, both mental and physical, that support her intentions. Behaviours that support the willingness to reflect and think about learning through the observation and self-evaluation of progress are highly important to self-regulation, as is the ability to manage time effectively. Staying

focused in the immediate moment can be affected by physical and social factors that are not always within the pupil's control.

Through examining pupils' reflections on their practice sessions, Leon-Guerrero's (2008) investigation indicates that adolescents do use self-regulated thought when identifying problem areas, selecting strategies, and evaluating their work. Further questions may need to be asked in relation to the teacher's responsibility for assisting pupils to develop practice strategies and self-regulating measures owing to Jorgensen's (2000: 73) finding that 40% of pupils entering third level study claimed they had previously received minimal or no guidance in these areas. However, Jorgensen (2004: 99) points out that in another study by Barry and McArthur (1994) findings revealed that 84% of teachers claimed they do include practice instruction as a regular feature of instrumental lessons (2004: 99).

What actually unfolds during practice sessions is not always predictable, but an individual's ability to effectively self-regulate practice has been linked to their level of motivation and the longevity of study (Pitts *et al.*, 2000a, 2000b). One of Pitts, Davidson and McPherson's studies (2000a) viewed practice strategies of three 10 year olds over the first year of learning the trumpet, flute and saxophone. The pupils were given total freedom to control their practice and goals, and an investigation was made into the relationship between environment, general ability and motivation levels. Results showed that most pupils displayed a limited ability to self-correct, and tended to play through pieces as their main strategy. Self-evaluation was seldom used and when progress did occur it was primarily the result of using a strategy taught by the teacher (Pitts *et al.*, 2000a: 53-54).

These authors claim their findings support the suggestion (Hallam, 1998) that modelling during lesson time is needed to build and develop a range of practice methods and behaviours to be used during home practice sessions. A subsequent longitudinal study by McPherson and Renwick (2001) echoed these insights, finding that how young pupils self-regulated their practising (over a three year period) was not adequate to support effective practice. The majority were easily distracted, playing straight through material while failing to detect errors. This also supports an earlier claim that, for the majority of young pupils, 'awareness of desirable practice strategies is not always

carried through into their own work' (Hallam, 1997: 46), known as production deficit (Bugos & High, 2009; Flavell *et al.*, 1966). McPherson and Davidson (2006) reiterate that if there is a solution to this deficit, it is in its prevention. They argue that, while children develop effective strategies through being 'influenced by socialising processes that support and instil attitudes, knowledge, and skills' (p. 342) in how to practise, it is this guiding process that aids pupils to develop a 'personal awareness in the form of active self-regulation' (p. 342). Therefore, teacher knowledge and acknowledgement of these issues, together with creative responses such as those indicated in this enquiry's multi-layered approach should help the teacher in encouraging the pupil to grasp personalised practice strategies and appropriate levels of autonomy.

1.3.4 Goals, attitudes, and beliefs

Self-regulation, motivation and goal setting all influence practice, and are strong active components of autonomous learning as children 'gravitate towards activities in which they believe they can achieve and be successful' (McPherson & Davidson, 2006: 335). The process of self-regulation impacts the level of personal value derived from daily practice. Learning to self-regulate effectively develops over time, and it is perhaps the setting of short-term goals that holds the most relevance and significance for younger pupils. Even if the goal is not achieved, the work towards it has value. Pupils' choice and setting of goals has been linked to their meta-cognitive skills (learning how to learn). Although Hallam (1997) found that age was more of a factor than actual expertise in effective practice, Hallam and Barry (2002) later revealed that for the majority of pupils, practice strategies tend to be less developed and more related to the pupil's level of musical understanding, awareness of and ability to identify errors.

Research into the attitudes and beliefs held by adolescents about practising, show that the majority regard practice as 'a growth activity' (Schatt, 2011: 29). Although personal belief in ability and effort seem to be deemed more important than task demands or luck, it is recognised that the will to improve is more influential than external factors (Schatt, 2011). For third level students, evaluating and monitoring of achievement goals during practice has been found to correspond with the current stage of learning, and is governed by the individual student's personal criteria (Nielsen, 2008). In a hierarchal fashion, personal short-term goals progress along a path towards the long-term goals

(Nielsen, 2008). Wigfield and Eccles (2000) suggest that when setting goals, there is a relationship between how valuable the goal is and what the pupil thinks is achievable. However, they also argue that when students set goals, they also consider other important factors such as interest, importance, usefulness, difficulty, competence, and confidence. The personal value derived from the successful use of achievement goals seems to be greater than success derived from external pressure or avoidance goals (Schatt, 2011; Eccles, Alder, Futterman, Goff, Kaczala, Meece & Midgley, 1983).

It is still unclear if the same can be said of the young beginner pupil or how goal setting is linked to their strategic development, but it can be assumed that the ability to set goals and personal criteria for self-evaluation will differ in younger pupils due to underdeveloped self-regulatory measures, expertise and understanding of personal responsibility. It can also be assumed that if teachers of younger or less advanced pupils take the primary responsibility in setting short or long term goals, pupils may develop heavy teacher-dependence, experience undeveloped tools for self-regulation, and closed ways of thinking (Dweck & Elliot, 1983).

This discussion has shown that acquiring the necessary skills for learning and practice relies on ‘continuous, creative problem solving, self-evaluation and striving’ (Chaffin & Lemieux, 2004: 24), and that personal value and progress come from being able to successfully choose and apply strategies to achieve short and/or long term personal goals (Lehmann *et al.*, 2007; Dweck, 2000).

Research has shown that certain age levels do self-regulate their practice to varying degrees, but that practice does need to be practised. Further research is needed to establish disparities between the beginner and intermediate pupil’s practice and that of the advanced student’s, to give greater clarity into what pupils and students see as important in their practice, to reveal the attitudes they hold towards practice, and also explore how they set their goals. The adoption of more conceptual based approaches to nurture pupil autonomy is suggested as a progressive aid in building problem solving tools in instrumental practice that could carry forward to other areas of study, with the result that it also redefines the teacher pupil relationship (Sheldon, Brittin, Buonviri, Williamson, Choi, Erika, Carrillo & Zachary, 2008).

1.4 Conclusion

This chapter underscored and positioned areas in teaching and learning relevant to this enquiry within the canon of violin literature, giving specific attention to the topic of practising. These were substantiated with findings from the research literature. Research has shown that many of the issues featuring throughout the violin literature are in fact correct, such as that progress and success is achieved over time by committing to practise with attentive, deliberate, and self-regulating strategies. While research suggests that it might be advantageous to start instrumental study earlier in life, longevity of study is often the result of a positive mental attitude, successful goal setting, and an empowering sense of enjoyment. Although both literatures stress the importance of teacher guidance and advocate for pupil emancipation as autonomy strengthens, only the research literature provides evidence to support that there is often a disconnect between what teachers and pupils think is actually occurring during practice sessions. In this light, further research might provide ideas on how to improve teaching, and of course the art of practising.

To extend the rationale for framing this enquiry, the next chapter examines educational theories, including those on reflection, learning environments, and strategies for teaching and learning from within the educational literature generally, and from music education specifically.

¹ Currently teaching and learning type manuals continue to appear in music stores, and on line, that provide progressive activities with prescribed daily and/or weekly goals and that are adaptable for individual or group lesson contexts.

² Integrity is defined as, a condition of being whole, unbroken and without conflict.

³ Speaking about his lessons with Dorothy DeLay, Prof. Kurt Sassmannshaus commented that she impressed upon him the importance of strategic planning when practising.

<http://www.youtube.com/watch?v=BttYGfwPERI>.

⁴ The exception being both Galamian and DeLay who advocate practicing no more than fifty minutes with a ten-minute break.

⁵ Ivan Galamian and Frederick Neumann's book, *Contemporary Violin Technique, Volume I*, poses various rhythm and bowing exercises to be used in conjunction with scales and arpeggios to challenge pupils mentally and physically in securing technical excellence.

⁶ A well-known anecdote relates that Niccolò Paganini's father was aggressive in his direction of his young son's practice, often withholding food. In later years Paganini progressed by degrees of magnitude without any teacher, clearly a highly developed autonomous learner.

CHAPTER 2

ENVIRONMENT FOR LEARNING

2.1 Introduction

The first part of this chapter presents the overarching educational concepts that frame this enquiry. Rooted in constructivism, experiential learning, knowledge creation and reflection are unpicked in order to establish grounds for examining pupil engagement. The importance of motivation, autonomy and self-efficacy is also addressed. Teacher enquiry, modelling, feedback, and the use of audio-visual technology are teaching strategies that underpin the reflective activities undertaken in this project, and are considered in the second part of the chapter. Together, these support the various interventions, or what I term as *Layers*, and frame a number of reflective roles that this enquiry strategically encourages pupils to engage.

Drawing this chapter to a close is a description of my frame of reflective roles that I encourage pupils to engage in each learning environment. It is a frame supported and influenced by the literature in both this chapter and Chapter 1.

Part One

2.2 Underpinning Theory

The whole movement of life is learning. There is never a time in which there is no learning. Every action is a movement of learning and every relationship is learning...Knowledge is measurable, more or less, but in learning there is no measure. (Krishnamurti, 1981: 22)

Many philosophers and educationalists have made substantial contributions to build constructivist theories (Piaget, Dewey, Vygotsky, Bruner, Weiner, Kolb, Rogers and others). The development of learner autonomy is central to all constructivist theories, and this lies at the heart of my enquiry. Constructivism is pupil-centred, the focus being pupils' needs rather than the curriculum objectives; these latter assist to guide and complement. While supporting pupils' tacit or explicit aspirations, freedom from teacher dominance allows for the conceptualisation and exploration of curiosities, the

identification and deciphering of steps needed to create and find solutions, and for the reasonable alignment of instructions with pupils' intentions.

Many theorists have added to this overarching theory, which continues to influence education, including John Dewey (1859-1952) and Lev Vygotsky (1896-1934). They both understood that knowledge and behaviours imprint on children socially and contextually from birth, through informal ways of learning, such as osmosis, observing, and participating (Vygotsky, 1978). These two theorists also pointed out that understanding and making use of scaffolding processes were also advantageous to formal education contexts.

Dewey posited that formal educational settings should adopt measures that allow learning to form from a continual and natural progression of accumulated and combined observations and interactive experiences (Dewey, 1938). For Dewey, if formal educational experiences were well designed and progressive, experiences should give pupils the opportunity to question and explore information in order to create knowledge that is relevant and personal. According to Dewey, the essence of learning is in the process. Put another way, what happens inside the experience is more pertinent to learning than the experience itself. Vygotsky (1978) did not disagree with Dewey, but labelled this space within the learning experience as the *zone of proximal development*, a space that 'defines those functions that have not yet matured but are in the process of maturation' (Vygotsky, 1978: 86). It is the area between inability and ability, the actual development process that takes place when assisted by a more knowledgeable person; 'what a child can do with assistance today, she will be able to do by herself tomorrow' (p. 87).

Both Dewey and Vygotsky's ideas helped to develop approaches that aimed to nurture pupils' own intuition, imagination and curiosity¹, thereby encouraging a natural propensity to propel them towards creative problem solving and new understanding.

2.3 Ways of Knowing

Learning is more than the acquisition of the ability to think; it is the acquisition of many specialised abilities for thinking about a variety of things. Learning does

not alter our overall ability to focus attention but rather develops various abilities to focus attention on a variety of things. (Vygotsky, 1978: 83)

Ways of thinking and knowing are inter-related. Either in isolation or in combination, they allow us to function easily in society on a daily basis and in our chosen activities of interest. In the context of this enquiry, it is widely agreed that various types of musical knowledge can be distinct in nature, and used in isolation or selectively within an interweaving process, either consciously or subconsciously (Williams, 2001; Elliot, 1995; Swanwick, 1994; Bamberger, 1991). For example, when performing vocally or instrumentally, musicians use ‘knowledge in-action’ (Elliot, 1995: 55) where actions are ‘nonverbal forms of thinking and knowing in and of themselves’. Across disciplines, this is referred to as a form of embodied knowing (Claxton, 2006a). Both Swanwick (1994) and Elliot (1995) insist that ‘doing’ or ‘experiencing’ music making is the best way to develop such knowledge.

The manner in which musical knowledge is needed, acquired and developed can be distinctively personal and context dependent. This is evident when one considers, for example, that violinists learn about things specific to violin playing during a one-to-one lesson, but that they only develop the skills needed to be a chamber musician from participating in chamber music groups. In any context, instrumental playing demands multiple, instantaneous and simultaneous decisions that are informed by different types of knowledge, often referred to as *practical* (know-how) and *declarative* (know-about). Practical knowledge can often be difficult to verbalise, but it is that which allows the musician to physically perform mastered skills (Elliot, 1995: 53). Declarative knowledge is usually more formal in nature; it lends itself to the spoken word in defining and describing objects and concepts (Parncutt & Troup, 2002; Swanwick, 1994).

David Elliott’s theory (1995) has been particularly influential and useful in this enquiry. He distinguishes between different types of musical knowledge that combine physical actions and intellectual understanding to form what he calls ‘musicianship’ or ‘procedural’ knowledge (Elliot, 1995: 53). Broken down, procedural knowledge (Elliot, 1995: 60-68) is comprised of formal knowledge (knowing-that), informal (experience-gained knowledge), impressionistic (felt-knowledge), and supervisory (manage-in-action knowledge). Formal knowledge is ‘inert and unmusical’ in isolation (Elliott,

1995), but, used in conjunction with action, verbal concepts hold the possibility to ‘influence, guide, shape, and refine a learner’s musical thinking-in-action’ (p. 61). Informal knowledge is gained through experience, is context specific, and informed by critical reflection. It is the knowing why and about how to perform a skill or bring about a desired outcome. Similar to informal knowledge, impressionistic and supervisory knowledge are context dependent. Being intrinsic in nature, impressionistic knowledge is often nebulous (Elliot, 1995: 64) as it emerges from emotions, or what the musician intuitively feels is right in the moment. Supervisory knowledge develops from the active thinking about, managing and overseeing one’s own musical education through direct experiences in music making, or interaction, observation and conversations with others (Elliot, 1995: 66).

Claxton (2018, 2008, 2002), Duckworth (2006), and Bamberger (1991) agree with Elliot in many ways, but draw specific attention to the importance of encouraging pupils to verbalise their thoughts and understanding (declarative knowledge), and collaborate with others to develop knowledge. Duckworth speaks for them all when she states that, for the pupil, ‘much of the learning is in the explaining’ (Duckworth, 2006: 182). The impact of expressing one’s knowledge, as an individual or in a collaborative discourse with others, is that pupils are more likely to:

- achieve greater clarity
- determine what it is they want to understand
- come to depend on themselves
- recognise the powerful experience of having their ideas taken seriously
- learn an enormous amount from each other
- recognise knowledge as a human construction

(Duckworth, 2006: 182-183)

The categories of knowledge that Elliot describes are implied across Duckworth’s list, but also in the writings of others. Whatever approaches these authors take to discuss ‘ways of knowing’, the fundamental and perhaps obvious concept that connects their ideas is that knowledge building is *learning*. It is highly probable that during this enquiry many of the knowledge types described by Elliott will be observed as each

pupil engages with the various activities, but also implicit is that these take time to develop. Regardless of whether one builds physical or cognitive skills by independent, collaborative or discursive means, this literature seems to indicate that knowledge building requires, and also nurtures, a reflective disposition.

2.4 The Role of Reflection

Experiential learning is depicted as repeating spirals of concrete experiences, observing and reflecting, thinking and formulating abstract concepts, and then acting to test those ideas (Kolb, 1984). As indicated at the start of this thesis in the Introduction, activities that encourage such cycles of engagement form the bedrock of this enquiry during and outside of pupils' instrumental lessons, where reflection is the binding thread for creating knowledge. Since most of the data collected is a direct consequence of some form of reflection, defining reflection for the context of this enquiry is essential.

Described as a form of thought, reflection is 'the discernment of the relation between what we try to do and what happens in consequence' (Dewey, 1916: 110). Creating meaningful experiences often unfolds in two ways. Firstly, a type of trial and error process is provoked; a continual testing that eventually yields results. This process can be fruitful, but, without deliberate reflection and scrutiny of the actions taken, the connection and relation between actions and outcomes may not be recognised or utilised. Secondly, if there is the presence of willing and unimpeded observation, the ground is laid for a cause and effect scenario, whereby the 'extension of ... insight makes foresight more accurate and comprehensive' (Dewey, 1916: 111).

Although violin pupils of all ages would be fairly familiar with these two types of experiences, their willingness to effectively engage with reflection will impact the quality of observation and thus their progress. This enquiry promotes different types of pupil reflection at various points in the learning process: reflection-in-action, reflection-on-action, and reflection-before-action.

2.4.1 Reflection-in-action

Although reflection can be action based, it is not always referring to past events; it is found in situ, within action itself (Claxton, 2002; Bamberger, 1991; Schön, 1983). Schön (1987: 31) coined the term and defined reflection-in-action as ‘a process we can deliver without being able to say what we are doing’. It is continuous, active, intuitive and an embodied way of reacting to situations, testing and accumulating answers to new ideas, where the ‘knowing is in our actions’ (Schön, 1983: 49). It is a tacit way of knowing, heavily relied upon in everyday life, but which often goes un-noticed. Bamberger (1991: 9) discusses this as an ‘instant perceptual problem solving’ process that combines elicited and tacit knowledge in an interweaving relationship that produces value and meaning. Sustaining reflective action over a period of time develops a bank of knowledge in which attention can instantaneously and freely shift to create new ideas (Duckworth, 2006). Selectively choosing what best suits the context ‘depend[s] on what he wants to do and on the task at hand’ (Bamberger, 1991: 15).

2.4.2 Reflection-on-action

Knowing and reflecting-in-action are, by necessity, real time events, in many cases taking place within split seconds, but the time taken to stand still and actively explore and observe the connection between actions and outcomes lies within a more elastic period of both physical and psychological time. This is an element of learning Schön calls reflection-on-action (1987). It allows a transformation to occur from what was originally spontaneous and implicit to a more concrete and explicit understanding. It facilitates the instrumental pupil and teacher to build incrementally and consistently between moments of embodied inspiration (Bamberger, 1991; Schön, 1987; Kolb, 1984; Mezirow, 1978; Dewey, 1916). Reflecting on past events is a conscious action of perceiving, thinking about, and monitoring change (Schön, 1983). It is a process that allows the individual to question and make judgements through exploration and scrutiny of action when deciding what is valuable to know, what is important to pursue, and what they should continue doing (Claxton, 2008). Repeated over time, reflection-on-action helps build a conscious archive of questions and ideas about one’s perspective (about how one does things and how one reacts). A comparison formulated from these insights establishes a basis for more accurate foresight when deciding new courses of action (Duckworth, 2006; Mezirow, 2000; Schön, 1983).

2.4.3 Reflection-before-action

Jorgensen (2008: 244) describes reflection-before-action as the ‘necessary pre-thinking’ that a musician engages prior to performing. Rather than pondering or examining past events to validate, test and explore ideas or design new action, this form of reflection is a momentary pause in which to collect and remind one of important considerations in relation to the actions about to be performed. For the young performer it could simply be refreshing the memory of the intended character and shape of the piece, mentally reciting the opening tempo, or remembering the teacher’s advice on stage positioning and poise, stand height or engaging eye contact with the accompanist. Though hardly mentioned in the literature, this equally valuable form of reflection allows the performer to focus and create the silent welcoming of the audience into the performer’s world.

2.5 Reflecting on the Refractive Lens: Subjective Value

Bamberger (1991) and Duckworth (2006) both argue that there is a reciprocal relationship between reflection and knowledge building. In considering the different types of knowledge and the role of reflection, it is important to consider what types of understanding are useful to the pupil. Reflection is a process that allows the learner to actively organise and ‘choose amongst the various aspects through selective attention, to coordinate them, and to know when and why to choose one over the other’ (Bamberger, 1991: 14). Bamberger suggests that processing and accumulating knowledge creates a personal music lens, or perspective. This refractive² lens is used when constructing new meaning and when communicating musical knowledge. But what of the music teacher's discernment and understanding of a pupil’s learning lens? This is a key question in this thesis. Bamberger (1991: 279) stresses that, in the construction or development of a pupil’s musical knowledge, it may well be useful to consider what influences or constrains the pupil’s refractive lens. Making such observations could induce a conceptual change for both the teacher and pupil, because, while there may be many different ways of knowing-in-action as musical knowledge is constructed, there may also be many potential lenses through which to view it (Bamberger, 1991).

No relative value judgement is given here on the various ways of knowing, although it is important to reiterate that knowing about something is very different to just knowing

how to do it (Elliot, 1995; Swanwick, 1994; Bamberger, 1991). The important point is that the teacher must observe closely. To give an example, a young violin pupil may know that it is possible to make different tone qualities on the violin, but not know how to do it, because domain specific knowledge is needed. Conversely, a pupil may know how to do something, but not know about it. Formal music instruction can have a daunting array of specialised musical terminology, and, if the pupil has not assimilated this, they may not be able to articulate their know-how. Although harmony between knowing how and about is not always imperative, the teacher's understanding of the pupil's lens may be potentially obscured by a persistent or momentary conflict.

Bamberger (1991: 269) points out that, when reflecting, a pupil's verbal ability may 'reveal' as well as 'conceal'. Instrumental teachers know that their pupils possess a large amount of tacit knowledge, but occasions occur when the only option is to make assumptions in regards to what actually constitutes that body of knowledge. Informed by Bamberger (1991: 271), this enquiry attempts to look at what lens the pupil uses, and to illustrate a clearer understanding of what the pupil 'intends us to see' by increasing reflective opportunities during and outside of the instrumental lesson. I argue that a better understanding of the pupil's perspective (lens) by the teacher, would better enable the design of interventions that aid the pupil to confront and make explicit for themselves the knowledge needed to assist their learning.

2.5.1 Towards autonomy

The discussion thus far has drawn attention to the concepts of knowledge and reflection as they are used in the context of this enquiry, and it is noted that there is a symbiotic relationship between them. Further, it seems intuitively correct to point out that how pupils engage with reflection during this study might be indicative of both their sense of self and the force of the motivational drivers which impact learner autonomy. This was only touched upon briefly in Chapter 1. While this enquiry draws on the concepts of motivation, self-efficacy and autonomy, it is beyond its scope to actually measure these in any way. However, it does recognise that, by participating in this study, pupils may experience change in these areas as a result of the constant engagement with reflection.

Pupils choose, initiate, regulate, set goals, sustain effort and involve themselves in activities for a variety of reasons, and while past experiences or innate curiosity are

probable influences, the literature suggests that it is even more complex (Zimmerman & Bandura, 1994; Zimmerman, Bandura & Martinez-Pons, 1992; Bandura & Schunk, 1981). Referring to how children make decisions and solve problems, writers such as Maslow (1962), Bandura (1997, 1977), Zimmerman (1995), Ryan, Deci, and Grolnick, (1995), Schunk and Parajes, (2002), and Dweck (2006, 2000) call attention to terms such as self-concept, self-agency, self-determination, self-esteem, and self-efficacy, all of which intertwine with motivation and the development of autonomy.

Motivation is described as being the ‘activation and persistence of behaviour’ (Bandura, 1977: 193) influenced by a desired outcome. Recognition of a desired outcome provides an impetus to work, but success comes from goal setting, self-evaluation, persistence, time and effort (Schunk, 1991, 1989). So, it is argued that being motivated is not as simple as merely possessing a simple desire; it is derived from active thought and actions directed towards an end goal. What actually motivates pupils to study the violin may not necessarily become apparent during this enquiry, but it is highly probably that their level of motivation will be influenced in some way by what they believe they are capable of (self-efficacy), and how they feel about those capabilities (self-esteem). This triangle is not a fixed state, but rather something that individuals endeavour to build and maintain (Maslow, 1962). It is an important triad for instrumental teachers to consider because together these impact not only how pupils perform generally across domains (Bandura, 1991), but also how they specifically make decisions, choose strategies, and apply effort (Schunk & Pajares, 2002; Bandura, 1997, 1991; Pajares, 1996; Schunk, 1991, 1989).

Although it has been established that what pupils believe they are capable of impacts their musical learning and performing generally, regardless of their age (Richie & Williamon, 2011, 2010), this belief has also been seen to be a substantial predictor of musical achievement (McPherson & McCormick, 2006, 2003). However, there is also a direct link to the level of expertise: self-belief in one’s ability to succeed must be comparable to one’s capability (level of skill) in order to support the desired result (Bandura, 1986). For example, it is no good for my violin pupils to believe they can play Fritz Kreisler’s *Schön Rosmarin* if they lack any capability to execute spiccato bowing. Promoting and maintaining a healthy sense of self-efficacy is an integral component of this enquiry, and is addressed by giving pupils total control of their

repertoire choice for performing and reflecting upon. The assumption is that they are likely to choose repertoire that they have the competency to master. This simple step is also an attempt to nurture pupil autonomy.

Learner autonomy has been defined as ‘being self-initiating, and feeling a sense of freedom or volition’ (Ryan *et al.*, 1995: 626), and is noted as being vital for social development and well-being (Ryan & Deci, 2000). Being a primary goal of education, the topic of learner autonomy is fast becoming an area of interest for research in relation to: how the instrumental teacher facilitates learner autonomy (McPhail, 2013; Gaunt, 2008; Reeve & Jang, 2006); how conservatoire instrumental and vocal students perceive autonomy (Gaunt, 2010); how autonomy can be conceptualised for both teacher and pupil within their working relationship (Kupers, Dijk & Geert, 2015). Though there are differences in findings as to what type of support positively impacts on learner autonomy during instrumental lessons, the importance of both teacher and pupil reflection is implied. By combining motivation, self-belief and different forms of knowledge with pupil’s willingness to reflect, a scaffold forms which empowers ownership of the learning process. Pupils with an elevated sense of judgement, organisation and strategic ingenuity often work autonomously. They know how to successfully negotiate challenges and progress to higher levels of study (Lehmann *et al.*, 2007; Bandura, 1991, 1986; Pintrich & De Groot, 1990). Such individuals have built in patterns of success from which they confidently predict future progress (Pajares, 1996), and tend to ‘approach difficult tasks as challenges to be mastered rather than as threats to be avoided’ (Bandura, 1997: 39). As the proverb says, ‘nothing succeeds like success’.

2.6 Developing a Frame of Reference

Given the prominence of reflection in this study, the work of Guy Claxton is particularly important. Though rooted in general education, his ideas about reflection (Claxton, 2002) equally pertain to instrumental study, and provide the frame for pupil reflective engagement over the course of this enquiry. While cognisant of the discussion on reflection earlier in the chapter, this frame draws specifically on Claxton’s four reflective processes:

- Planning – working out learning in advance
- Revising – monitoring and adapting along the way
- Distilling – drawing out the lessons from experience
- Meta-learning – understanding learning, and yourself as a learner

(Claxton, 2002: 30)

For the instrumental pupil, taking charge and responsibly planning their learning time between lessons is no different than working in other disciplines. Claxton (2002: 31) points out that in order to plan and use time effectively, pupils should carefully reflect-before-action: in order to strategically identify areas needing attention; when designing steps for progressive improvement; and when determining what ‘resources’ best assist their strategies. Revision involves engaging with reflection-in-action and reflection-on-action. Encountering the unexpected is inevitable. These situations challenge pupils to make immediate decisions by revising actions and strategies in order to improve their effectiveness. Claxton (2002) states these immediate encounters are positively affected by the pupils’ ability to be ‘flexible’, and whether they can ‘think on their feet’ (p. 31), or reflect in-action. He also draws a distinction between these immediate responses, and being able to monitor and review (on action). This requires pupils to reflect with integrity and a ‘critical eye’ (Claxton, 2002: 31) in order to establish an honest and personal view of overall progress, and what, if any, modifications are needed. Reflection that takes place well after the event, what Claxton (2002) describes as distilling, happens slowly over a period of time. This reflexive process allows for revisiting, contemplating and comparing experiences, ‘deliberately looking’ (Claxton, 2002: 33) for new, more concrete ideas to explore and employ. Distilling is a driving force behind what fuels an individual’s meta-learning, a personal awareness of the learning experience, an understanding of what it means to be an active learner, and her role and responsibility in the learning process (Claxton, 2002: 35).

These active forms of reflecting, before, on, and in, are readily accessible and possibly essential tools for learning and expanding instrumental pupils’ self-knowledge. While reflecting is a natural response, it should not be assumed that a pupil’s reflective disposition would develop as a supportive and beneficial tool without careful guidance. Like Bamberger, Claxton (2018, 2008, 2002) discusses just how influential the

teacher's role can be in nurturing their pupils' many learning dispositions, including reflection. Claxton (2002: 68) suggests careful consideration be given to: the way teachers orchestrate learning experiences; the way in which teachers engage and explain material; the use of varied forms of commenting on pupils' learning; and how teachers themselves model learning. This list of ideas illustrates that nurturing dispositions such as reflection come about through the reciprocal engagement of the teacher and pupil with the learning process itself. In this regard, perhaps the one-to-one instrumental lesson is privileged over classroom teaching because it allows the teacher to focus entirely on one individual and their needs. These simple suggestions, outlined by Claxton, have the potential to be powerful in the one-to-one instrumental lesson, since they influence the individual pupil's developing reflexivity.

Part Two

2.7 Empowering the Learner

Literature discussing the development of the musician includes a diverse range of topics such as musical literacy, composition, improvisation, skill acquisition, performance anxiety, fitness, support systems, practice strategies and more (Lehmann *et al.*, 2007; McPherson, 2006; Williamon, 2004; Parncutt & McPherson, 2002; Swanwick, 1999, 1988; Elliott, 1995; Bamberger, 1991; Sloboda, 1985). While each implies the need for pupils to be dedicated and committed, this body of music research pays less attention to what influences instrumental learners' engagement with learning than research in general education (Costa & Kallick 2008; Claxton, 2008, 2002; Dweck, 2006, 2000).

Educational institutes usually take great care to devise an ethos and a mission statement indicating commitment towards nurturing pupil development. Regardless of the subject, context, or motivation level of pupils, how children learn should be at the core. Claxton (2008: 88) argues that 'learning is the gateway to everything' and that by its very nature, learning is indeed learnable. In designing and creating educational experiences, it should be remembered that children's orientations towards learning are pliable, and affected by the demands of the curriculum, the environments provided (Dweck, 2006), the pupil's cultural lens (Maddock, 2006; Delpit, 1995), and by how learning material is

presented and treated (Schunk & Pajares, 2002). These are critical factors that influence how pupils move ‘towards or away from developing the attributes of effective learning’ (Claxton & Carr, 2004: 88).

Since human curiosity is ubiquitous, educational environments should capitalise on and nurture this innate trait (Claxton 2018, 2008; Claxton, Chambers, Powell & Lucas, 2011). Instead of schools being places for young pupils to explore and satisfy instinctive inquisitiveness and curiosity, teachers exclusively following a formalised curriculum often dictate what the children should be curious about, and how pupils should go about learning in order to meet measurable outcomes (Claxton, 2008: 127-133). In order to counter this potentially stifling approach, Claxton challenges educators to create learning environments ‘... where young people go to develop the minds and temperaments of explorers...to be adventurous and pioneering, to relish challenge and assess risk...[and] enjoy struggling with genuinely hard stuff’ (Claxton, 2008: 133). These environments encourage pupils to investigate for themselves that which attracts their attention. When learning environments engage pupils to find out actually how to do things, rather than just learning about things (from a distance), learning becomes a personal journey of discovery (Claxton, 2008). In fact, the learning is in the doing.

In this enquiry I attempt to make my teaching studio one such environment, and give careful consideration to promoting changes that enable pupils to explore through performance and reflective opportunities.

2.8 Alternative Environments

I know that I cannot teach anyone anything: I can only provide the environment in which they can learn. (Rogers, 1965: 389)

The educational arena nurtures and helps form pupils’ learning values, attitudes and ways of thinking (Claxton & Carr, 2004) through the learning environments in which the pupils are immersed and the experiences therein. Bruner (1986) once expressed that education should,

...create in the young an appreciation of the fact that many worlds are possible, that meaning and reality are created and not discovered, that negotiation is the art of constructing new meanings by which individuals can regulate their relations with each other. (p. 149)

Aspiring towards a natural expansion of qualities that develop sustained learning and learner responsibility, the learning environment should set a scene that enables the teacher to assist the pupil in becoming 'ready, willing and able to engage profitably with learning' (Claxton & Carr, 2004: 87). Flexibility within educational settings allows the pupil to be responsive to context, individual preference and competence (Claxton *et al.*, 2011).

Which environments entice pupils to become more actively engaged in learning? Claxton and Carr (2004: 91) put forward four learning environments commonly found in education. *Prohibiting* environments normally provide activities that involve little more than completing short tasks in quick succession. These environments make it easier for teachers to offer correction, but dilute the possibility for deeper exploration and diminish opportunities for pupils to voice or discuss their opinions. *Affording* environments are not entirely void of value, but often just involve a set of predetermined general instructions to follow. While these may seem to provide opportunities for engaging a wider variety of learning elements, they often demand more effort than the individual deems worthy, thus they might not attract pupils' full participation. Carr and Claxton (2004) refer to an *inviting* environment, one that encourages, provokes and stresses the value of questioning and collaborating with others; this is more conducive to expanding learning capacities and encourages exploration. Lastly, Claxton and Carr hold the view that it is the *potentiating* environment that is the most empowering of learning environments: 'those that not only invite the expression of certain dispositions, but 'actively 'stretch' them, and thus develop them' (p. 92). These environments allow pupils freedom to direct their own involvement in activities while remaining free to collaborate with the teacher at any time. There is a sharing of 'power,' thus a change in 'the learning trajectory' (p. 92), towards one that supports the foundations of learner autonomy.

Inviting and potentiating environments are student-centred. They allow the teacher to step into a more facilitatory role in order to provide freedom for the learner to select, frame, and investigate ideas for themselves. As such, each learning environment of this enquiry is based on the principles of student-centred learning. Brandes & Ginnis (1986) have described the characteristics of student-centred environments as follows:

- the learner has full responsibility for her own learning
- the subject matter has relevance and meaning for the learner
- involvement and participation are necessary for learning
- the relationship between learners [is one of quality]
- the teacher becomes a facilitator and resource person
- the learner sees himself different as a result of the learning experience
- the learner experiences confluence in his education (pp. 12-17).

Claxton conceptualises these principles as an ‘Exploratorium’ (pp. 132-136) and ‘gymnasium’ (Claxton, 2008: 127-132) for learning. In a gymnasium style environment learners have the option to build new skill sets, alongside stretching or increasing the endurance of their existing skills. He suggests that frequent visits to this gym confront pupils with different learning pathways, ones that ignite and develop virtues that successful learners use repeatedly, such as ‘curiosity, courage, exploration, experimentation, imagination, reasoning, sociability and reflection’ (Claxton, 2008: 128). The intention of this environment is to develop dispositions specific to learning how to learn by equipping the learner with a variety of learning tools for immediate and/or future use. The ‘Exploratorium’, is similar to the gymnasium in terms of the attributes it nurtures, but in this student-centred environment the pupils are allowed to choose more freely what to learn, having been exposed to a variety of topics. Such environments increase general levels of engagement and encourage each pupil to be aware that they alone are responsible ‘for creating their own explorations’ (Claxton, 2008: 133). Such environments encourage pupils to investigate all responses, both positive and negative, in an atmosphere that is free from fear. In environments free of negativity, errors can be defined, scrutinised and explored from different standpoints, confirming or revealing new meaning that may excite further exploration (Claxton, 2004: 3-4).

Claxton’s concepts of the ‘gymnasium’ and the ‘Exploratorium’ have inspired me to investigate changes to both the teaching studio and the home practice environment, since they instigate increasing ‘reflectiveness, resilience, resourcefulness, and reciprocity’ (Claxton, 2002: 17). The one-to-one instrumental lesson is a privileged and ideal environment for the young musician to explore these four attributes. Though the

rationale behind positioning reflection as the primary focus has been thoroughly discussed, *resilience*, *reciprocity*, and *resourcefulness* are also attributes that pupils will have the opportunity to engage during this enquiry. I attempt to nurture all four of these attributes as an embodied way of being, a concept crucial to this study, but more importantly as they are perhaps necessary for functioning successfully in a continually changing society (Claxton, 2008, 2006b, 2002,). While not elaborating here on resilience, resourcefulness, and reciprocity to the same degree as reflection, the reader will see that these three attributes inherently thread themselves throughout the remaining topics discussed in this chapter. Once again, Claxton describes these learning attributes as:

Resilience – being ready, willing and able to lock on to learning

- Absorption – Flow: the pleasure of being rapt in learning
- Managing distractions – recognising and reducing interruptions
- Noticing –really sensing what is out there
- Perseverance –stickability; tolerating the feelings of learning

Resourcefulness – being ready, willing and able to learn in different ways

- Questioning – getting below the surface; playing with situations
- Making links – seeking coherence, relevance and meaning
- Imaging – using the mind’s eye as a learning theatre
- Reasoning – thinking rigorously and methodically
- Capitalising – making good use of resources

Reciprocity – being ready, willing and able to learn alone and with others

- Interdependence – balancing self-reliance and sociability
- Collaboration – the skills of learning with others
- Empathy and listening – getting inside other’s minds
- Imitation- picking up others’ habits and values

Reflectiveness – being ready, willing and able to become more strategic about learning

- Planning – working learning out in advance
- Revising – monitoring and adapting along the way
- Distilling – drawing out the lessons from experience
- Meta-learning – understanding learning, and yourself as a learner (Claxton, 2002: 17)

2.9 Strategies for Teaching and Learning: A Place for Collaboration

Teaching does not make learning happen. Good teaching is the effective facilitation of learning. (Claxton, Webster & Lucas, 2010:15)

Teaching strategies have captured the interest of some researchers in music education, and this has produced a broad range of topics that cross over between classroom and one-to-one instrumental teaching. Such research considers issues such as ensuring there is an environment for open communication, teacher and pupil interaction, verbal and non-verbal teacher communication, modelling, metaphor, questioning, and aural development (Meissner, 2017; Guadalupe & Pozo, 2016; Kupers *et al.*, 2015; Hendricke, Smith & Stauch, 2014; Zhukov, 2013; Prichard, 2013; McPhail, 2013; Gaunt, 2009, 2008; Dunn, 2006; Daniel, 2006; Young, Burwell, Pickup, 2003; Wang, 2001; Duke, 1999; Bruhn, 1990; Gholson, 1998; Mackworth-Young, 1990; Hepler, 1986; Rosenthal, 1984). However, as mentioned in the previous chapter, one-to-one instrumental music lessons do have a tendency to be teacher directed (Daniel, 2006; Young, Burwell & Pickup, 2003), with research showing that teachers often build approaches from the familiar ways that they themselves were taught (Nerland, 2007). Regardless of the approach employed, the teacher's actions will either complement or hinder pupils' progress (Meissner, 2017; Steel, 2010; Kennell, 2002). As strategies for instrumental teaching and learning have become increasingly innovative and creative over recent decades, new perspectives of the teacher's role have also evolved. Regelski (1975) positioned the teacher as the very symbol of action, whose duty it is to provide suitable musical challenges, which expand pupils' knowledge. More current interpretations of the teacher's role informing this enquiry describe a slightly broader and more holistic (democratic) function of the music teacher: that of a trusted guide (Jorgensen, 2011) whose support leans towards pupil-centredness (Macworth-Young, 1990). Not only are teachers responsible for directing purposeful courses of action, keeping pupils focused on the task at hand, they also help to remedy problems as they occur and consult with pupils during attempts to initiate new thinking (Jorgensen, 2011: 213).

There are other elements on a more human level that should not be ignored. At times pupils need help maintaining enthusiasm, engagement, security and confidence to achieve their goals. Guided by a teacher with an abundance of patience, openness,

willingness to give advice, and to share in the delight of discovery (Jorgensen, 2011: 213-214), it is assumed that all aspects of pupils' learning experiences would greatly benefit. Similarly, in the role as coach, the teacher assists pupils to build mental fitness through 'gentle persistence and slowly pushing the limits of stamina and strength' (Claxton, 2008: 130) by carefully designed activities, continually 'remind[ing] students of the value and purpose of stretching their learning power' (p. 131). Moreover, a deep and meaningful collaboration between pupil and teacher, where there is careful consideration of pupils' broader needs, creates learning experiences of greater relevance for all involved (Claxton, 2008; Noddings, 2005; Schön, 1987; Dewey, 1938). For the pupil, this demonstrates the value of what Vygotsky (1978) meant by the *zone of proximal development*, as mentioned earlier in this chapter.

2.9.1 Balancing needs and objectives

School failed me, and I failed the school. It bored me...I wanted to learn what I wanted to know, but they wanted me to learn for the exam. What I hated most was the competitive system there...I felt that my thirst for knowledge was being strangled; grades were their only measurement. How can a teacher understand youth with such a system? (Albert Einstein - in conversation with William Hermanns, March 3, 1930)

When creating and maintaining pupil-centred environments, this enquiry keeps the pupils' 'experience of the lesson... emotions and interests' as primary considerations above all other matters (Mackworth-Young, 1990: 75). As such, balancing the needs expressed by the pupil, including those observed or inferred by the teacher, against the curriculum objectives represents a significant ambition of this enquiry. Noddings (2005) points out that more research is needed on how teachers across educational sectors balance needs, and argues that by neglecting the needs expressed by pupils, a diminishing of 'intrinsic motivation, creativity, initiative and desire for continued learning' (p. 152) could result. Such observations give teachers much to question in regards to:

...the way conformity is valued over curiosity and enforced with rewards and punishments, the way children are compelled to compete against one another, the way curriculum so often privileges skills over meaning, the way students are prevented from designing their own learning... (Kohn, 2004 cited in Noddings, 2005: 153)

As Kohn's quote implies, how teachers address a balance between pupils' needs and the objectives of the curriculum, and whether or not they foster holistic and democratic environments for learning, will surely impact the roles they assume and the decisions they make. However, it has been pointed out that, regardless of topic or task, pupils will engage with activities and material at a higher level when they are seen to be of current relevance, when they feel that what they are doing has purpose, and if they feel the teacher is honest, trustworthy, genuinely interested, and respectful of pupils' views (Varvarigou, Creech & Hallam, 2014; Claxton, 2008, 2004; Noddings, 2005; Dewey, 1938). Through collaborating with the pupils, a shared social intelligence forms, and assists the creation of purpose (Dewey, 1938); surely one of the enhanced privileges of individual instrumental tuition.

2.9.2 Audio-visual technology and journaling

It is noteworthy that studies have pointed to the fact that, due to evolutionary pressures, the majority of the human brain's data collection and subsequent organisation into meaningful patterns enters through the eye (Kurzweil, 2012). Musicians' brains, on the other hand, would reasonably have a greater bias towards aural data collection than the general public, at least in pursuit of their art. While it is taken for granted that aural perception is of primary importance with regards to the study of music, the use of audio-visual technology in this study facilitates an exploration of the significance of the visual experience while learning music.

Aural only recordings have been useful for various forms of musical assessment (Hewitt, 2011; Burrack, 2002; Welch, 1994; Anderson, 1981), and for helping pupils develop expressive playing (Meissner, 2017). As technology and practices have advanced, so has their use. Indeed, it is now common practice for researchers to collect data via audio-visual technology, especially for research endeavouring to better understand and improve instrumental teaching practice and the learning environment (Meissner, 2017; Mitchell & Benedict, 2017; McPherson *et al.*, 2013; Hallam, 2012; Daniel, 2006; Young, Burwell & Pickup, 2003; Lennon, 1996; Yarbrough, Wapnick & Kelly 1979).

There is growing research into the use of audio-visual technology as a tool for performance assessment in a range of contexts from competitions, mock auditions, self-

evaluation and peer assessment (Mitchell & Benedict, 2017; Boucher, Dube & Creech, 2017; Hatfield & Lemyre, 2016; Tsay, 2013; Davidson, 2012, 2007; Davidson, 2012, 2007; Hewitt, 2011, 2002; Ryan, Wapnick, Lacaille & Darrow, 2006; Blom & Poole, 2004; Ryan, 2004; Bergee, 2002; Burrack, 2002; Daniel, 2001; Hunter, 1999; Hunter & Russ, 1996). In particular, a study by Daniel (2001) shows the benefits of using audio-visual recordings for self-assessment (critical reflection). In this case 57% of the participants found that assessing an audio-visual recording of their own performance was 'highly valuable', whereas 26% stated that the process was 'moderately valuable'. While 11% found that it was 'somewhat valuable', 3% found that it was 'not overly valuable', and 3% found that it was 'not at all valuable' (p. 224). The advantage of an audio-visual tool for learning is that students are able to 'see and hear more problems on viewing the video' (p. 223) than their memory of the event facilitates. Overall, findings from Daniel's study strongly suggest that critically reflecting on an audio-visual recording is beneficial for developing a 'greater level of student independence' (p. 225). However, Daniel (2001: 224) does caution that some students claimed the experience negatively impacted on their level of self-esteem.

Daniel's findings are somewhat supported by a more recent study by Hatfield & Lemyre (2016). In this study, two third-level students were asked to explore use of an iPad to record and reflect on their daily practice sessions, followed by the documentation of those reflections in a music journal application. Though a small-scale study, both students found these interventions advantageous for 'planning, keeping track of individual practice and repertoire, and time management' (p.7). By viewing her practice recordings one student noticed personal behaviours that she was unaware of. Both students 'attributed sources of success and failure' to the reflecting and journaling process, but found that commitment to keeping a daily entry took effort. Although there was a marked difference in the number of participants in this study and the one by Daniel (2001), it is interesting to note that neither of the participants in Hatfield and Lemyre's study happened to experience a negative impact on their level of self-esteem by reflecting upon their own recordings. In fact, both stated that 'the extra time spent on after-practice reflection and evaluation was useful and necessary' (p. 7).

It might be expected that, as audio-visual technology has simplified and become more readily available, teachers will adopt such technologies as regular tools for teaching and

learning. However, research into this area is still somewhat scarce, particularly regarding younger instrumentalists; something this study begins to address.

2.9.3 Modelling

From birth, children imitate what they see and hear. Claxton suggests that, by modelling ‘how to talk like the grown-ups around them’, children are ‘unwittingly and without conscious effort, absorbing the values, habits, beliefs and understanding of their cultural world’ (Claxton, 2008: 102). Children carry this natural way of learning into formal learning situations, and instrumental music teachers capitalise heavily on this natural instinct. As a useful instrumental teaching strategy, modelling is characterised in two ways. Firstly, it is a means of simply providing pupils with an aural and/or visual physical demonstration of instrumental competence in order to nurture an embodied understanding of instrumental performance (Elliot, 1995: 58). Secondly, and perhaps more importantly, it is a means of modelling the act of learning itself, in other words, the approach to problem solving (Claxton, 2008: 110).

2.9.3.1 Learning to notice

In considering the various factors that spur pupil success, imitation and modelling (demonstration) have been explored during group learning, and studies show that pupils respond in a variety of ways (Sang, 1987; Duerksen, 1972). Whilst no conclusive evidence supports a theory that superior modelling results in technical and general performance improvement, it has been established that using various forms of modelling does impact positively (Meissner, 2017; McPhail, 2013; Burwell, 2005; Anderson, 1981; Sang, 1987; Zucher, 1972; Duerksen, 1972). Whether modelling comes from the teacher, peers, or digital recordings, the important factor is that it provides an opportunity to create new reference points. Although receiving verbal commands (Duerksen, 1972) and observing demonstrations are beneficial (Badets, Blandin & Shea, 2006), Badets, Blandin and Shea (2006) have shown that the utility of observation increases when pupils are given additional opportunities to explore, imitate and practise what they have observed. Even though little communication may occur, complex musical skills can be learned better through the use of observation and imitation because images assist the silent process of transferring and applying observed knowledge during attempts to correct and improve (Wulf & Shea, 2002).

Since both sports and playing an instrument are physical pursuits, many interesting parallels can be drawn, but will not be discussed in detail here. The reader could refer to Timothy Gallwey's (1979) book, *The Inner Game of Tennis*, and view his advice analogously to the study of an instrument; in particular his advice on modelling to help improve skills.³ Much of the modelling discussed by Gallwey relates to imitating the world-class players. However, research investigating the motor skill development of the athlete has found that, when the learner uses a model, the skill level of the model is not necessarily the most important factor for some level of learning to occur (McCullagh & Meyer, 1997; Lee & White, 1990). Practice at detecting and correcting errors using models of a lesser level of expertise (Lee & White, 1990) was still advantageous to learning, even if those errors were easily detectable (Black & Wright, 2000). Despite the undisputed importance of modelling the top exponents, the research just mentioned implies that the instrumental teacher could easily and profitably broaden their strategy to include peer collaboration and audio-visual technology. These additional approaches allow pupils to rotate between the roles of model and the reflective observer, thus increasing the potential opportunities for learning.

2.9.3.2 Teacher-pupil dialogue

Having just discussed the type of modelling that simply provides a skill demonstration for the pupil to imitate, this study stresses the importance of modelling how to learn. The relationship between the instrumental teacher and the pupil during the one-to-one instrumental lesson is filled with both verbal and non-verbal communication, and this establishes a type of social intelligence between them which influences the way they each think and act (Juchniewicz, 2010; Hamann, Lineburgh & Pauls, 1998; Hamann, 1995). Establishing and maintaining a healthy working relationship is something I treat with great sensitivity throughout the enquiry because it is understood that rich and reflective dialogue is more likely to materialise from a healthy teacher-pupil relationship. Discussing the importance of communication, Claxton (2008) postulates that dialogue stimulates pupils to look and think from different perspectives. This engagement induces actions that develop the ability to verbalise the processes being used when learning and thinking (Claxton, 2008: 107). This enquiry supports and draws on Flusser's (2000: 43) argument, that if teachers recognise, cultivate, and interact with their pupils' 'aesthetic choices and opinions as well as their commitment' in synergistic type dialogues, pupils become active participants in creating and projecting their own

identity, and teachers are no longer mere ‘information depositors’ (p. 49). In this enquiry I seek to establish a teaching and learning environment rich in dialogue, where both the teacher and pupil feel safe to share and discuss their opinions and feelings. Working relationships, that are genuine and supportive of both the teacher and pupil identity, suggest an empowering atmosphere of freedom to actively learn together in deep, meaningful and creative ways (Flusser, 2000).

2.9.3.3 Questioning, curiosity and the critical mind

Put questions within [the child’s] reach and let him solve them himself. Let him know nothing because you have told him, but because he has learned it for himself. (Rousseau, 1762:142)

Since the Socratic dialogues, enquiry has been accepted as an effective pedagogical strategy. Asking pupils questions is a means to elicit responses that provide insight into their perspective and way of thinking, and can be an important aid in developing critical thinking (Claxton & Carr, 2004; Goolsby, 1996). Questioning invites the pupil to respond and think in generalities or specifically about themselves, including how they might fit into the environment of learning (Claxton *et al.*, 2011). While music teachers who integrate methods that develop critical thinking are more likely to have and use these skills themselves (Amdur, 1990), the use of questioning during music lessons has been found to elevate pupils’ ability to participate and think critically (Burwell, 2005; Sheldon & DeNardo, 2005; Goolsby, 1997). Therefore, while allowing time to discuss pupils’ responses about musical elements was found to directly benefit their ‘understanding of how to perform expressively’ (Meissner, 2017: 125), it is also assumed that questioning will improve their understanding generally. Enquiry is a tool for developing the ‘language of learning’ to become a dominant discourse (Claxton, 2008: 107). It encourages the pupils to think critically and share ideas. This study assumes that this language of learning is not age dependent, and examines whether it is possible to enhance this skill in the young violin pupil through enquiry. Burwell suggests that the pupil-teacher dialogue may develop and increase over time as a direct result of how skilful a teacher is at selecting and sequencing different types of questions (Burwell, 2005).

Bandura (1993) showed that although younger children do possess the ability to verbalise their thinking when listening to music, older children ‘were more willing to

express judgments’ (Bandura, 1993 cited in Younker, 2002: 167). Others support this view, finding that children are commonly able to predict, specify, compare, evaluate, reflect, recognise, and indicate their preferences (Younker, 2002), but also verbally express their critical thinking during musical interactions (Paul, 1993). Encouraging pupils to vocalise their opinions, feelings and ideas can create meaning for their participation, and motivate a learning rich dialogue (Claxton, 2018, 2008; Duckworth, 2006; Bamberger, 1991). As Claxton (2008) simply iterates, ‘if young people do not know how to talk about the process, the feelings and the trials of learning, it is hard to interest them in how they might get better at it’ (p. 107).

Burwell (2005) found that some third level instrumental teachers direct pupil engagement through ‘instructions...disguised as questions’ (p. 204) as a means to gently control a sequence of events. An example such as, ‘could you play a D major scale now?’ only instructs rather than triggers deep thinking. Teachers were found to also use a large number of rhetorical questions such as, ‘that sounded good didn’t it?’ If students responded at all, it was normally with a simple yes or no response. While perhaps useful as a checking mechanism, answers to these questions limit avenues for going forward. On the other hand, interrogative and exploratory questions are ones that ‘check’ what a pupil knows, and gives them the opportunity to share the reasoning (Burwell, 2005: 206). These open a path for discussion that increases the possibility for pupils to feel valued (Burwell, 2005: 208). Initiating dialogue through such open-ended questions is educationally supportive by generating deeper thinking and articulation of thought. Although Burwell has conducted research into how instrumental teachers use questioning to enrich the independence of third level students, further investigation is needed regarding the impact of enquiry on the younger instrumentalist.

Claxton suggests looking for appropriate opportunities to use simple but open questions when working with younger pupils as a way of modelling enquiry. The types of questions he suggests are appropriate for the young violinists in my study:

- How are you going to go about that?
- How else could you do that?
- What could you do to help yourself if you get stuck?
- How could you help someone else learn that?

- What are the tricky parts?
(Claxton, 2008: 107)

These are the types of questions used throughout my enquiry to motivate personal reflection and ignite rich dialogue between pupil, teacher, and peers, and while answers to simple questions may be predictable, there will no doubt be times when responses are unexpected. It is possible that during this enquiry some pupils might find responding to questions challenging or frustrating, especially if they believe learning should be free of mistakes. However, Claxton (2008: 139) asserts that questioning and dialogue assists pupils to find more positive and investigative approaches. It could happen that obscured thinking is clarified during this process, or conversely that the search causes further confusion, but it is likely to be a process that ignites new and critical thinking about alternative solutions or paths to explore.

2.9.4 Mistakes and risk

In the context of this study, the adoption of a teacher enquiry strategy aims not only to model an inquisitive approach to learning, but also to demonstrate how asking simple questions can often create a new chain of subsequent questions, all of them potentially pertinent. It also explores the possibility that, by reflecting before answering questions, the pupil's own curiosity to question might be stimulated. Educators know that avoiding errors and being successful seems to be the main objective for some pupils, but, given that at some point failure may occur, one might ask if striving for the absence of error is the most effective approach. Some pupils take a safe path when challenges present, whilst others test the boundaries; these are the risk takers. Clifford (1988) found that in situations where pupils felt safe to take risks they were not adversely affected by failure, and that when a successful result finally emerged they took further risks. It can thus be argued that mistakes are possibilities for pupils to gain insight about themselves, their decisions and actions, and offer pupils valuable and profitable information to apply to future situations. Pupils who hold this view of failure, and are not opposed to risk, have the disposition to be what is described as 'mastery' orientated as opposed to 'helpless' orientated (Lehmann *et al.*, 2007: 59). Even in situations with no known solution, pupils with a mastery disposition often apply greater effort in attempts to find some feasible or alternative solution (Dweck & Leggett, 1988). Rather than giving up, they enjoy a challenge, and this effort has been found to correspond with elevated performance

levels (O'Neill & Sloboda, 1997). Some children actually thrive on risk taking (Clifford, 1991), so education that encourages error-free thinking, technically accurate performance, and 'playing it safe' may act as a disincentive to autonomous learning or to any highly creative endeavour.

One aim of this study is to guide pupils towards being comfortable with posing their own questions, exploring and taking risks, and in so doing help them to construct a new definition of what it means to make a mistake. By recalibrating mistakes to hold learning value, rather than being merely negative, (Claxton, 2008, 2006b, 2002) a new paradigm develops, one of infinite opportunity to explore concepts, ideas and skills, one that allows the freedom to be curious and observe things from different angles, and one that builds the confidence so necessary to take risks and ask questions. This is a point worth reiterating because:

One of the most fundamental habits of mind of the powerful learner is curiosity. People become more effective learners as they grow more ready, more willing and more able to ask good questions. (Claxton, 2008: 109)

Claxton's powerful words strongly inspired, motivated and underpinned the design and approach to this enquiry. A safe place for dialogue nurtures autonomy, and therefore there is less need for external support (Claxton, 2008, 2002). With an emphatic shift towards developing more autonomous learners, education is brought to a different level; the shift changes the perception of what it means to make an error to become merely another avenue for enquiry, and enables questions 'to become richer, more flexible, more sophisticated' (Claxton, 2008: 110).

2.9.5 Peer interaction: learning together

Claxton's model emphasises individual learning and rightly so, but it also stresses the benefits of reciprocity and how this interface offers the opportunity to recruit, assimilate, generate and expand elements of one's repertoire of learning, simply from observing and working with and alongside others. In considering the value of peer interaction as a pedagogical tool, it is worth remembering that the largest group pupils interact and collaborate with throughout the day, whether in or out of the classroom, are their peers. From observing and interacting with others a wealth of feedback is received, and

moreover, a level of empathy develops from listening to the views and opinions of others.

There is growing research documenting the positive advantages of peer collaboration in various educational contexts from primary through third level studies. Within formal educational contexts, the adoption of peer collaboration has been shown to be a successful learning strategy for improving how pupils interact with each other generally (Jones & King, 2009), but also as a tool for improving their performance across subjects (Collens & Creech, 2013; Oddo, Barnett, Hawkins & Shobana, 2010; Dufrene, Reisener, Oimi, Zoder-Martell, McNutt & Horn, 2010; Lebler, 2008; Blom & Poole, 2004; Daniels, 2004; Bergee & Cecconi-Roberts, 2002; Greenwood, Delquardi, Hou, Terry, Aurreaga-Meyer & Abbott, 2001; Falchikov, 2001, 1996; Hunter, 1999; Searby & Ewers, 1997; Hunter & Russ, 1996).

Peer tutoring models for learning have been explored in music programs at secondary schools (Hallam, Creech & McQueen, 2016; Green, 2008a), and at third level (Lebler, 2008) with similar results. Findings established that while pupils placed a high value on the information and comments that they received from their peers, their engagement with the subject content also increased. It was seen that an individual's level of motivation and love of music were often the dominant influences for sustaining participation (Sichivitsa, 2007), but that a pupil's attitude towards learning music (Neill, 1998) was greatly influenced by their peers' opinion. Through conversing with their peers, students not only gained new insight and understanding into the meaning of tolerance and acceptance 'by accommodating the views expressed by each other' (Barleet & Hultgren, 2008: 194), but also the reciprocal nature of that peer learning was found to be a 'powerful stimulus to learning' (p. 97).

With this in mind, it would appear that those teaching one-to-one instrumental lessons could profitably incorporate creative forms of peer interaction. While this may be challenging for teachers with small private practices, it could also be equally difficult for teachers within a large institution due to time restrictions and pupils' busy schedules. It is granted that instrumental pupils often collaborate within orchestral or small chamber ensemble sessions, but this interaction is not the same as a context focusing solely on solo performance development. Although many teachers of classical

instruments regularly conduct technique and performances classes for the benefit of their pupils (of all ages), there is little data indicating either the frequency with which instrumental teachers hold such classes for young beginner and intermediate violin pupils, or the focal points for such classes, if peer discussion is included, or whether the feedback from the discussion influences thinking. Therefore, through providing opportunities for learning alongside peers in a collaborative setting, this enquiry positions itself to contribute to the body of research on peer collaboration.

2.9.6 Feedback

The importance and value of an instructor, peer collaboration and self-evaluation (Boud, 1995) are not disputed. All forms of feedback provide learners with the opportunity to create new meaning and understanding, and also to explore new ways of investigating their own strengths and weaknesses (Claxton, 2008). Brinko (1993) posits that ‘givers and receivers of feedback have very different attitudes toward the feedback process’ (p. 576). Supporting research shows that how students respond to feedback is related to their level of sensitivity (Atlas, Taggart & Goodell, 2004), how the feedback is delivered (Rucker, & Thomson, 2003; Anderson, Benson & Lynch, 2001; Brinko, 1993), the timing of delivery (Wulf & Mornell, 2008; Golec, 2004) and the environment in which the feedback is delivered and received (Wulf & Mornell, 2008; Atlas *et al.*, 2004; Golec, 2004; Brinko, 1993). Atlas and colleagues (2004) make a reasonable argument that such factors ‘may have an impact on the learning experience’ (p. 85) adversely affecting motivation, and can ‘lead to performance decrements or withdrawal from the activity’ (p.85). Such findings clearly indicate why it was imperative for this enquiry to be conducted in a positive and encouraging manner.

For feedback to be an advantageous learning tool, pupils need to embrace it in all forms. In the past, it was thought that immediate feedback was the best learning support (Renner, 1964), but research in developmental psychology reveals that students perform better from delayed (Schooler & Anderson, 1990; Kulhavy & Anderson, 1972), or delayed and reasoned feedback from the instructor (Lipnevich & Smith, 2009). While research has shown that direct and immediate feedback amplifies a student’s level of motivation and performance (Larson, 1984), students in higher education were less likely to design and explore the use of new problem solving strategies in environments

that stressed accuracy and that gave immediate feedback (Golec, 2004). By delaying feedback, students were more likely to process information, and evaluate their actions and goals (Golec, 2004; Schooler & Anderson, 1990). When accompanied by additional rationale and instruction, delayed feedback has the potential to increase the learner's feeling of competence, or know-how (Sansone, 1986). Although these studies are not related to instrumental learning, there might be interesting parallels because, during an instrumental lesson, it is normal for teachers to immediately respond to errors by offering analysis and suggestions for improvement.

The need for new thinking in instrumental pedagogy is further implied by Wulf and Mornell's (2008) study, which found direct correlations between how pupils perform and the timing, frequency and quality of instructor feedback. Although correct motor responses resulted from immediate and direct instructional feedback, it was deemed only momentarily useful and quickly forgotten, 'a short-term performance effect, and not a sign of learning' (p. 4). Immediate feedback was found to be less effective than slightly delayed responses, because delaying comments afforded performers the opportunity to reflect on the effectiveness of their efforts before receiving supplemental instruction. Wulf & Mornell also suggest that if feedback is given too frequently, pupils can neglect the 'processing of their own intrinsic feedback' and 'fail to develop their own error-detection-and-correction mechanisms that would allow them to perform effectively when the augmented feedback is withdrawn' (p. 4). These findings support this enquiry in relation to how pupils are allowed time to reflect and formulate their own feedback prior to any form of supplemental guidance.

Accepting that feedback from instructors enables improvement (Rucker & Thomson, 2003), studies have also examined the impact of peer feedback within a performance class context, establishing that it was valuable to third level students (Napoles, 2008; Falchikov, 1996). Interestingly, Napoles' (2008) study reported that after a one-week period, students recalled their peers' and instructor's comments more readily than their own self-evaluations. However, while these same students reported that peer comments were mostly self-evident, and included little realistic advice for improvement (less than 20% of peer feedback was depicted as supportive or informative), it was receiving feedback from multiple sources that they valued most, especially when peer feedback affirmed the more comprehensive comments given by the instructor. The overarching

outcome of Napoles' study was that students valued peer feedback because it provided a wider view from which to reflect, and allowed students to see themselves through the eyes of others (Napoles, 2008). Although no similar study investigating how the younger pupil might respond has been sourced, this enquiry hopes to make contributions in this area.

2.9.6.1 Learning to critique

Many instrumental teachers would agree with Daniel's (2004) statement that, students 'gain and continue to develop a number of skills by simply engaging in the process of critically assessing performance' (p. 108), but some third level music programmes have viewed critiquing performances as a skill to be actively nurtured. At the University of Ulster, programs were designed that trained and included students in formal performance assessment procedures over the duration of their degree (Hunter, 1999; Hunter & Russ, 1996) with a variety of outcomes. Hunter and Russ (1996) showed that firstly, students 'prepare much more thoroughly for performances which are being assessed by their peers than they do for performances assessed solely by staff' (p. 77). Secondly, students in their final year of their degree expressed a greater appreciation and understanding of the assessment process from having been included. Thirdly, and perhaps most advantageously, Hunter and Russ (1996) found that students developed the tendency 'to listen more critically to their own playing as well as the performances of others' (p. 77). Blom and Poole (2004) support the findings of Hunter and Russ with two further additions. Inclusion in the assessment process gave students a new perspective of the 'visual side of performance, and new ways of learning about performance' (p. 117), but it also signalled to students that staff recognise they 'do have the capacity, and can be trusted, to evaluate' learning (p. 124). By observing and assessing their peers, the students in Blom and Poole's study admitted to gaining a 'deeper insight and understanding of the performing process' (p.120).

Third level programs have also increasingly adopted the use of self-evaluation activities (Hewitt, 2011, 2002; Mills, 2009; Napoles, 2008; Hunter, 2006; Falchikov, 2004, 2003; Daniel, 2004; Burrack, 2002), ones that imply reflecting with integrity. To gain a clearer picture of the student's perspective of self-evaluation, Bergee and Cecconi-Roberts (2002) studied the self-evaluations of 29 undergraduate music performance majors studying a range of instruments. Self-evaluations for four sessions over a two-week

period were examined in relation to peer and faculty evaluations of those same performances. Findings revealed that peer evaluations were slightly more favourable but similar to the instructors, while students own 'self-evaluation[s] correlated poorly with both peer and faculty' (p. 257). Moreover, peer comments did not seem to have an 'influence on self-evaluation skills' (p. 263). Had this study been conducted over a longer period and factored in the rate of progress, it might have revealed interesting disparities between staff, peer and self-comments. However, these authors feel that their findings on self-evaluation confirm earlier work by Colwell (1995) and Rosenthal (1985), that undergraduates do not necessarily possess the ability to realistically self-evaluate, and that perhaps more instruction should be given on how to accurately do so, as in the protocol adopted by Hunter & Russ (1996) and Blom & Poole (2004). However, a more recent quantitative study by Hewitt (2011) found that the ability of middle school music pupils to self-evaluate did not increase with instruction, and suggested that qualitative research may identify the missing link.

Self-evaluation involves the various forms of reflection-in-action and reflection-on-action, and is a research topic only beginning to feature in relation to the younger instrumentalist. Hewitt (2002: 229) found that junior-high school musicians 'were unable to effectively self-evaluate individual music performances', and that introducing instruction in how to evaluate had 'little impact on music performance or self-evaluation accuracy' (p. 13). While this finding clearly points to the need for further research into how and what best assists this younger age group in becoming 'discriminatingly self-critical' (Hewitt, 2002: 229), research by Burrack (2002) produced opposing findings. Burrack (2002) concluded that even younger musicians in primary school could learn how to self-evaluate and assess group performance with substantial benefits by using portfolios under the guidance of an instructor. By encouraging pupils to identify and solve their own problems, the same study found that self and group assessment practices enhanced 'musical understanding, aesthetic sensitivity, and critical-listening skills' (p. 28). Results also indicated raised levels of motivation and the ability to listen critically, but interestingly, these younger pupils also recognised 'a relationship between the assessments and their progress' (p. 30). Burrack suggested that self and group assessment can 'enhance student ownership' (p. 32), and give 'opportunity to construct meaning' (p. 31) directly related to the activities pupils pursue. Encouraged by the findings of Burrack, this current enquiry examines if peer

collaboration and participation in the feedback process is both effective and advantageous in terms of the young individual's solo performances.

2.10 Conclusion: Towards a New Frame for Teaching and Learning

This review has shown that teaching and learning a classical instrument is multi-faceted and complex. In ascertaining how to better assist my younger pupils to become more autonomous, the literature supports a change in environments as a way of developing a new refractive lens through which to expand their musical knowledge. The literature indicates that a potentiating environment, more heavily pupil-centred than normally experienced in the one-to-one violin lesson, can encourage the development and expansion of learning dispositions, which are at the crux of successful learning: 'learning dispositions enable children (and adults) to go beyond what they have been taught, to improvise in new contexts, to re-cognise the past, to learn in the present, and to imagine the future' (Carr, Lee, Jones, Smith, Marshall & Duncan, 2010). In attempting to nurture processes that are more student-centred and boost pupil engagement and autonomy, this study makes a paradigm shift in my pedagogical approach drawing from various aspects of Claxton's work, especially his ideas on reflection, but also from his thoughts on reciprocity, resilience and resourcefulness (Claxton, 2002).

While the literature discussed in both Chapters 1 and 2 implies that how a teacher reacts and responds in lessons might impact pupils' learning, conversely, it also indicates that learning ultimately depends on how actively the pupils engage. How the teacher and pupil interact is also critical because pupils often 'look to them for guidance' (Jorgensen, 2011: 217). A good working relationship between pupil and teacher should empower learning not only in the lesson, but also in the pupil's home practice. Peer collaboration has been shown to further expand the learning forum to include observation, feedback and the dialogue that it contributes. Engaging with the teacher and peers in a changed environment is not only posited to influence purpose, goals, listening, critical thinking, reflection and learning strategies, but helps develop new-found confidence, motivation and self-belief to create a new understanding of what it means to learn and work towards a performance.

2.10.1 Musical chairs of reflection

As a violinist and teacher, I recognise that musicians continuously multi-task, switching from roles such as critic to experimentalist, fix-it-man, explorer, performer, or creator. The list is as individual as there are players, with each role requiring a high degree of personal reflection. Over many years of teaching I have witnessed that the more advanced violin pupil is often aware of moving between different reflective roles. Some obviously favour certain roles over others, but it seems to me that younger pupils need a great deal of assistance in developing awareness and an appreciation of how reflection benefits their learning, or what it really means to be their own best critic and mentor.

In this thesis I have decided to use three metaphors that work well in combination to convey the nuanced meaning of function: roles; chairs; and lens. These ‘*musical chairs*’ function as lenses through which a new perspective is gained within the different learning environments (*Layers*) that pupils have the opportunity to navigate during this enquiry. The literature chosen for this review supports six reflective roles that I feel are fundamentally important for any young instrumentalist to engage (see Figure 1), and that are used as an analytical frame for this enquiry. However, it is not necessarily easy to discuss each of these roles in isolation with out some overlapping.

Musical Chairs of reflection		
The Listener:	The role of listener is one of listening with a purpose, intently paying attention to what one is hearing - in all contexts.	Claxton 2018, 2008, 2002; Hewitt, 2011; Blom & Poole, 2004; Burrack, 2002; Hallam, 2001a; Hunter & Russ, 1996; Bamberger, 1991; Elliot, 1995; Galamian, 1964; Auer, 1921
The Observer:	The role of observer is one that gives attention to visual components separately, or may be influenced by aural issues.	Claxton 2018, 2008, 2002; Meissner, 2017; Hatfield & Lemyre, 2016; McPhail, 2013; Tsay, 2013; Burwell, 2005; Daniel, 2001.
The Analyst:	The role of analyst demands deliberate critical and reflective thinking in relation to specific and/or general issues (current or past) generated from listening and observing; to form an opinion regarding what is at stake, what needs improving, or what has improved, or simply why it is so.	Claxton, 2018, 2008, 2002; Leon-Guerrero, 2008; Hunter 2006; Burrack, 2002; Daniel, 2004; Hunter & Russ, 1996; Elliot, 1995; Bergee & Cecconi-Roberts, 2002; Bamberger, 1991; Galamian, 1964; Havas, 1961; Auer, 1921.

The Designer:	The role of the designer is one derived from listening, observing, and analysing; it calls for independent reflecting, planning and formulating strategies for improvement or to find an alternative solution.	Claxton, 2018, 2008; 2002; Leon-Guerrero, 2008; Lehmann <i>et al.</i> , 2007; Duckworth, 2006; Hallam & Barry, 2002; Schunk & Pajares, 2002; Pitts <i>et al.</i> , 2000a; Hallam, 1997; McPherson & Davidson, 2006; Menuhin, 1986; Galamian, 1964; Gerle, 1983; Havas, 1961.
The Advisor:	The role of the advisor is to give honest feedback with integrity to oneself or others, in an encouraging and thoughtful manner grounded in one's own musical knowledge.	Claxton 2018, 2008, 2002; Napoles, 2008; Hewitt, 2002, 2011; Lebler, 2008; Barleet & Hultgren, 2008; Duckworth, 2006; Blom & Poole, 2004; Daniels, 2004; Bergee & Cecconi-Roberts, 2002; Burrack, 2002; Hunter & Russ, 1996; Galamian, 1964; Auer, 1921.
The Performer:	The role of performer is primarily communication of musical ideas and embodies the processes of listener, observer, analyst, designer, and advisor. However, when performing, these roles may not be obvious. Indeed, they should not be so: performing is after all, the art that conceals art.	Claxton 2018, 2008, 2002; Richie & Williamon, 2011; Duckworth, 2006; Bamberger, 1991; Menuhin, 1986; Whone, 1972; Galamian, 1964.

Figure 1: Musical Chairs defined

As the different literatures in both Chapters 1 and 2 have indicated, either explicitly or implicitly, learning involves developing the ability to critically reflect in different ways. While the violin literature links this specifically to the instrumentalist's ability to *listen* critically during all aspects of violin learning, the research on how students practise, self-evaluate or evaluate the performances of others draws on the assumption that the participants in those studies were using their critical listening skills. The literature devoted to general education also stresses the importance of learning by listening critically to what others have to say, but also by *observing* visually to what it is that others are doing. Although visual *observation* (reflection by using video for instance) is a fairly new area in music research, the growing body of evidence showing how we are influenced by our visual perception in instrumental learning supports my inclusion of *observer* in my analytical frame.

A distinction is made between the reflective roles of *analyst*, *designer*, and *advisor* in this enquiry. I put forward that it is necessary for the instrumentalist to reflect aurally, and probably helpful to reflect visually at times, before formulating any analysis, design

for work or advice for going forward. While the role of *analyst* is supported by the literature addressing the act of formulating an opinion, the role of *advisor* is supported by literature that encourages the act of verbally communicating those ideas. These roles are apparent across the literature and research addressing the outcomes of self and peer evaluation, and the advantages of peer-learning and different avenues of feedback. Strong support for featuring these two roles in my analytical frame was also found throughout the violin literature as its entire foundation is built on the assumption that pupils continually assume these roles. The same can be said for the role of *designer* and the repeated emphasises of this role being activated to create and enact deliberate and self-regulated forms of practice.

While the role of *performer* is represented in the literature from the perspective of the more advanced student and professional musician, less literature or research exists on the beginner and intermediate pupils' perspective and experience as *performer*. Because it is assumed that pupils come to their violin lessons in order to improve their performing capabilities, performing has been an overarching concept throughout this literature review rather than a concept examined in isolation. The role of performer is at the apex of my analytical frame because it is a role of constant reflection, and one that encompasses all of the other roles.

While musicians acknowledge that many of these six roles (musical chairs) may be undertaken in isolation, and probably are so for the very young and inexperienced musician, they are not necessarily discrete, nor should they be. These roles contain the potential to interweave and function simultaneously even for the young musician, promoting pupil reflexivity and awareness as pupils are practising, performing, or observing and engaging with other musicians. Although other roles may exist than those mentioned here, these six 'musical chairs' were chosen to create a general teaching and learning frame for my young pupils' investigation into violin performance, but they were also used as an over arching analytical framework for this project in order to explore answers to the following questions:

How might learning and teaching environments change to assist younger violin pupils develop a greater awareness of their roles in violin learning, performing and practising?

What are the outcomes and implications for teaching and learning when the opportunities for pupils to critically reflect, collaborate, and perform are increased?

Supported by the literature discussed throughout Chapters 1 and 2, a detailed description of how this enquiry was conducted will be given in Chapter 3. This chapter will also detail how the musical chairs were used as tools for data analysis.

¹ See Jerome Bruner's discovery-learning model in the 1960's, or, <http://www.infed.org/thinkers/bruner.htm>

² As distinct from reflection, refraction is the way in which the path of light is changed by a lens. Part of this study tries to see what the pupils see from their perspective.

³ It is well known that Dorothy Delay recommended this book to violin students

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology for this enquiry, situating it within the action research paradigm. Issues addressed include the qualitative approach adopted, pupil selection and participation, ethical concerns, teacher interventions, data collection and analysis.

3.2 Action Research

The methodological approach used in this enquiry is primarily qualitative and in the form of action research in order to explore pedagogical changes that might improve my teaching practice.

Qualitative research attempts to understand phenomena by using enquiry (Creswell, 1998; Carr & Kemmis, 1986) and is more ‘concerned with words rather than numbers’ (Bryman, 2008: 366), although at times qualitative research can successfully combine both (Bryman, 2008, 2006). Common to all qualitative research methods, such as biography, phenomenology, grounded theory, ethnography, action research, and case study, is that the ‘systematic inquiry ... occurs in a natural setting’ (Marshall & Rossman, 2001: 30). Often similar in design and the data collection processes, the various approaches are differentiated by their research perspective.

When investigating social interaction and living experiences it is not possible to examine the entire picture. It is believed that researchers generate valid and useful theories from within the experience itself (rather than observing as an outsider), since ‘action and doing research happen together...the theory is in the action’ (McNiff & Whitehead, 2009: 17). As its name indicates, action research is about action within a research context. Kurt Lewin (1946) is probably most noted for forging the term, but its educational roots are believed to stem from the earlier work of psychologist and educational reformer John Dewey (O’Brien, 2001). Although it was not originally designed or intended for educational purposes, action research slowly gained

recognition for its potential and value within the community of educational research (Stenhouse, 1975). In a sense, action research went through a democratising process and, as its popularity increased, so did the agreement that rather than outside sources designing and conducting research within a workplace, the practitioner can undertake meaningful research (Carr & Kemmis, 1986; Watts, 1985; Corey, 1953). Practitioners are in the best position to observe and influence change from working ‘on problems they have identified’ (Watts, 1985: 118). Whether the researcher’s intention is to make a broad impact, such as augment current policy, or instigate localised change within a single classroom for example, action research leads educators to become reflective practitioners (Schön, 1987) who investigate personal concerns within familiar contexts (Cochran-Smith & Lytle, 1993). The underlying intention is to seek out knowledge that brings about improvement to their immediate environment, capability, and subsequent practices (Frost, 2002; Bassey, 1998; Elliot, 1994, 1991; Cochran-Smith & Lytle, 1993), ‘rather than general knowledge in the field of education’ (Borg, 1965: 313).

Thus, action research is predominantly seen as an active enquiry that brings about change. This change involves processes that are characterised by cycles of problem identification and planning, acting, evaluating and reflecting on results. The intention is that iterations of these lead to feasible solutions.

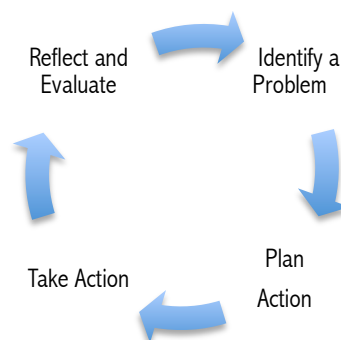


Figure 2: Action Research Cycle

Carr and Kemmis (1986) describe this form of research as a ‘self-reflecting enquiry’ with which teachers engage ‘in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out’ (p. 118).

Attempting to further define and differentiate action research methodologies from other forms of research, Hart and Bond (1995) outline seven distinctive criteria suggesting that action research:

- is educative;
- deals with individuals and members of social groups;
- is problem focused, context specific and future-orientated;
- involves a change intervention;
- aims at improvement and involvement;
- involves a cyclic process in which research, action and evaluation are interlinked;
- is founded on a research relationship in which those involved are participants in the change process. (Hart & Bond, 1995: 37-38)

While most of Hart and Bond's criteria describe this enquiry (exceptions being the cyclic process and addressing social groups), it is equally aligned with five of Somekh's principles guiding action research, in that it:

- integrates research and action
- involves the development of knowledge and understanding of a unique kind
- involves a high level of reflexivity
- involves exploratory engagement with a wide range of existing knowledge
- engenders powerful learning for participants (Somekh, 2006: 6-8)

These lists are representative of a wide range of action research projects across disciplines. Many educational action research projects are undertaken as collaborative projects with colleagues sharing mutual concerns to create knowledge from a broad spectrum of reflection (Kemmis & McTaggart, 1988; Gilmore, Krantz & Ramirez, 1986) that can be 'fed back into educational systems in a more substantial and critical way' (Burns, 1999: 13). It has become increasingly popular for action research to be conducted as a 'form of continuing professional development' by a single individual and through only one cycle (Cain, 2010: 161). Such studies have led to an increasing

variety of action research projects (Cain, 2008), and the acceptance of action research as an important and valuable contributor within the qualitative research community (Cain, 2010, 2008).

Designating this enquiry as a one-cycle action research project is apt since as it is positioned within an individual teacher-researcher's studio during a single term of the academic year. However, the one-cycle label may be too simplistic in this instance because of the numerous individual, intertwining, and overlapping reflective cycles iterated across the various interventions.

3.2.1 Research context

The enquiry was undertaken at my workplace, a music school located in Cork city. Cognisant of ethical guidelines, such as those put forward by the American Sociological Association (ASA) and Social Research Association (SRA), permission from my employer to undertake the enquiry was granted provided that participants were my own registered pupils, and that involvement did not disrupt their progress (SRA, 2003, 4.1), commitment to courses of study within the school (ASA, 2008, 12.03; SRA, 2003, 4.4), or my contracted duties (ASA, 2008, 9.0; SRA, 2003, 4.0).

The school requires all instrumental pupils to undergo a performance assessment by an internal panel of three departmental staff members in May of each year. The result is a determining factor for further enrolment in violin studies. This enquiry was designed to complement working towards this assessment.

Although it is acknowledged that parents are supportive of their children's musical pursuits in a variety of ways, they were not required, nor expected to assist their children with any activity undertaken as part of this enquiry.

3.2.2 Ethical concerns

Since this study is undertaken as a postgraduate student at Technological University Dublin, ethical procedures regarding research with children were adhered to in accordance with the Institute's research guidelines, and permission to carry out the enquiry was granted by the institute's Ethics Committee.

Pupils preparing for Primary to Grade 5 assessments were invited to participate in the study. Parents/guardians of the potential participants were provided with a letter (see Appendix A) outlining the research aims, pupil involvement, confidentiality of data, and participant anonymity (Bryman, 2008).

A week after this letter was issued a meeting was held for all parents/guardians to voice and discuss concerns, or to seek further clarification regarding the study and their children's participation. It was made clear to parents/guardians that they could refuse permission for their children to participate, and it was also stressed that, for the wellbeing of the participants and integrity of data, no child should feel 'required to participate' (SRA, 2003, 4.2), and that the decision was entirely the child's own (Marshall & Rossman, 2011).

Pupils were given the choice to have details explained to them by me on an individual basis, in groups, or accompanied by a parent/guardian. After each pupil received careful explanation of the design and involvement required (Bryman, 2008: 200), several weeks were given for them to make their decisions. After agreeing to participate, all parties were reminded that I would be available to answer questions at any stage of the enquiry, and that they also had the right to depart from the project at any time, without disclosure.

Social research guidelines demand that researchers 'take appropriate measures to prevent their data from being published or otherwise released in a form that would allow any subject's identity to be disclosed or inferred' (SRA, 2003, 4.7). Pupil anonymity was secured by assigning each participant a letter of the alphabet that did not correspond with their true initials, followed by a corresponding number linked to their current grade level (Marshall & Rossman, 2011; Bryman, 2008). When giving consent, parents/guardians and participants understood that facial recognition would occur because of large portions of the data being collected with audio-visual technology. Participating pupils would be encouraged to refrain from using names, but if accidentally mentioned these would be edited from the file (Bryman, 2008).

Informed consent forms (see Appendix B) signed by parents/guardians were received on behalf of all willing participants prior to the commencement of data collection (ASA, 2008, 12.04.b).

3.2.3 Pupil participants

The intended grade level for this enquiry was Beginner to Intermediate. On my register at the time of the study were eleven such pupils, all of whom were invited, and of these, ten willingly chose to participate (ASA, 2008, 12.04.a). All were female, ranging in age from 9 – 13 years, and were preparing for performance assessments (Primary to Grade 5). Only Grade 1 was not represented.

Participants			
ID	Age	Years of Violin study	Institute Grade level
Qp	9yr	1.5	Primary
R2	10yr	4.5	Grade 2
S2	10yr	4.5	Grade 2
T2	10yr	6.5	Grade 2
U3	11yr	5.5	Grade 3
V3	11yr	5.5	Grade 3
W3	11yr	5.5	Grade 3
X4	12yr	5.5	Grade 4
Y5	13yr	8.5	Grade 5
Z5	13yr	6.5	Grade 5

Figure 3: Participants

Pupils attend one individual lesson per week. The Primary to Grade 4 pupils receive a thirty-minute lesson, and Grade 5 pupils receive a forty-five minute lesson. When instruction begins within the school's programme, a pupil normally undertakes a Primary grade assessment in the second year of study, Grade 1 in the third year of study, and so on. Generally, the instrumental string programme commences around the age of 6 – 7 years. Although exceptions are made allowing slightly older pupils to enter into the string programme (age 8 – 9), rarely are there any made for those younger than 6 years of age. While most of the pupils would have started in the music school's programme at the age of 6 – 7, one pupil had already started in my private studio, and subsequently proceeded to enter the music school. For all but three of the ten participants, I had been their sole violin teacher. The age range and years of experience of this participant group framed the enquiry around 'the young performer'.

All but Qp, who was preparing for her first assessment, had obtained the successful performance assessment results required by the institute during the previous year.

3.2.4 Pupil participation

The enquiry took place during the entire length of the second term (February 2nd to June 10th, 2011) in the academic calendar. The intention was for pupils to have the majority of the assessment requirements completed by the date of commencement, with their repertoire learned to a standard that they were willing to perform for others. As such, this allowed my role to transition to one of a facilitator who was concerned with nurturing pupils' performance prowess, and also the means to that end.

The enquiry instigated a change to the participants' normal weekly engagement through a series of five layered and intertwining activities. These activities invited pupils to engage and rotate between six *musical chairs* (reflective roles): *listener*, *observer*, *analyst*, *designer*, *advisor*, and *performer*. This process encouraged the following:

- to continually work within a teacher-pupil and pupil-peer relationship focused on enquiry
- to perform, critically reflect, and critique their own performances or those of their peers
- to collaborate with peers in a shared learning context
- to contribute during entire participant group discussions that centred on performance issues
- to explore new approaches to their daily practice
- to perform in a public forum

The goal of the five interventions, called *Layers*, was to help pupils explore learning through their own individual enquiry (Layer 1), in collaboration with a peer (Layer 2), in a group context (Layer 3), and in their home practice (Layer 4). The purpose of these four Layers was to help pupils build a new perspective on practising and performing generally, with a specific goal of participating in a public concert (Layer 5) at the end of the term.

Figure 4 details the dates when each Layer was in operation, and when interviews were held.

Term Two		Layer 1 Individual Enquiry	Layer 2 Peer Collaborative Sessions	Layer 3 Group Sessions	Layer 4 Practice Maps	Layer 5 Celebratory Concert	Interviews
wk	Jan 31 st						A
1	Feb 7 th	X			X		
2	14 th	X			X		
	School Break						
3	28 th	X			X		
4	March 7 th		X		X		
5	14 th	X		X	X		
6	21 st		X		X		
7	28 th	X			X		B
8	April 4 th	X (*)			X		
9	11 th		X	X	X		
10	18 th	X (*)			X		
	School Break						C
11	May 2 nd	-		X	X		
12	9 th	X			X		
13	16 th	X			X		
14	Assessment						
15	29 th Public concert					X	
	June 6 th						D

Figure 4: Timeline of Layers and Interviews – (*) film but no analysis

3.3 Capturing the Data

To create a rich palette for analysis, data were collected through different sources and intersected at various stages of the analysis process. Interviews were held at specific points of the project to gain insight into the pupils' perspectives of their engagement, while I documented my observations of all events each week in a journal. Data were captured by audio-visual means for Layers 1, 2, 3 and 5, and by written documents produced by the participants for Layer 4.

The musical chairs were used as an analytical frame for the data about each Layer. For Layers 1 and 2 the reflective roles of *listener*, *observer*, *analyst*, and *advisor* were examined for each participant individually, while for Layer 3 these roles were used to discern musical issues derived from their collective voice. The roles of *designer* and *analyst* were scrutinised in Layer 4. How the participants felt in the role of *performer* across the all the Layers surfaced throughout the interviews.

Figure 5 itemises the ways in which the data were collected and the total number of potential data points produced for each set. It was understood that variables, such as

lack of attendance or non-submissions, would impact the actual number of data points collected.

Data sets	Potential Totals
<ul style="list-style-type: none"> • Interviews: 1 structured interview; 3 semi-structured interviews 	40
<ul style="list-style-type: none"> • Teacher-Researcher’s weekly reflective journal entries 	14
<ul style="list-style-type: none"> • Audio-visual recordings of pupil performances and their verbal reflections for Layers 1 and 2 (no Layer 1 during assessment or concert weeks) 	120
<ul style="list-style-type: none"> • Audio-visual recordings of the whole participant group’s reflective discussions for Layer 3 	3
<ul style="list-style-type: none"> • Practice Maps: weekly written documents of pupils’ practice strategies for Layer 4 (none collected during assessment or concert weeks) 	130
<ul style="list-style-type: none"> • Audio-visual recording of one public concert for Layer 5 	1

Figure 5: Data collection types

3.3.1 Interviews

Each of the interviews had a different purpose. Interview A gathered personal details about each pupil, but also their thoughts on practising and performing before engaging with any of the interventions. Interview B and C aimed to explore pupils’ perceptions of practising and performing as the study was in progress, whereas interview D probed their experience of participating in each of the five interventions at the close of the enquiry.

The credibility of the data collected during interviews relied heavily on the way pupils interpreted what they were being asked. To ensure that pupils understood questions easily, I formulated questions using age appropriate language. In order to safeguard the quality of the data, I gave careful attention to my tone of voice when posing each question to avoid a situation where, owing to our established rapport, the pupils were not ‘answering questions in a way that is [was] designed to please’ (Bryman, 2008: 201-202). The quantity of questions in any one interview was such that the topic received credible coverage, but did not overburden the participants. Care was taken to ensure that participants exited each interview feeling positive and satisfied with their contributions,

and that they had expressed themselves clearly and accurately, but also that they felt listened to and understood (Bryman, 2008).

3.3.1.1 Structured interview

A profile of each participant was created using a structured interview technique (Bryman, 2008) during the opening moments of the first lesson of the term. Each participant was asked the same set of questions (Bryman, 2008) in an attempt to gather general and specific information about instrumental learning, followed by probing their views on practising and performing. These profiles were intended for quicker referencing of individuals or for basic comparisons between participants, and were used to inform the analysis of emerging themes.

3.3.1.2 Semi-structured interviews

Semi-structured interviews were organised for week seven, four weeks later over a school holiday, and one week after the public concert as the term came to a close. Gathering information by questionnaires would have been useful but problematic for this age group, both in terms of the time it would have taken and the complication of ensuring that pupils answered the questionnaires unassisted. The alternative was to meet with pupils at various points of the project in order to explore their experiences using semi-structured interviews (Bryman, 2008). Although I was guided by a pre-determined list of questions and topics (see Appendix C), the ordering of those depended on how pupils responded and on the issues that they raised. A mixture of closed and open-ended questions was particularly useful in helping this young age group switch between topics, and to have ‘things to think with’ before reflecting in more depth. However, I followed all open-ended questions by probing questions (Bryman, 2008: 437).

3.3.2 Performance archive and pupil-peer-group reflections

Making audio-visual recordings of pupils’ performances was an active part of many individual lessons, all shared peer collaborative lessons, group sessions, and the final public concert. These films created an on-going archive of each pupil’s performance progress, and were used as a tool for pupil reflection during Layers 1 and 2, and in interviews C and D.

In order to allow myself the freedom to engage as facilitator when pupils reflected on their films, their reflections were captured by audio technology and later transcribed into word documents.

3.3.3 Practice Maps

Each week pupils were asked to submit a 'Practice Map' (see Appendix D). These written documents required pupils to identify areas that they thought needed attention, to design strategies for work, and to write their reflections about the effectiveness of those strategies. The maps were child friendly in appearance, and designed for easy use and personal adaptation.

3.3.4 The teacher-researcher's reflective entries

Throughout the enquiry I made a weekly reflective entry in my journal (Ortlipp, 2008) regarding: the nature of engagement observed in these new learning environments; observations of individual pupils; the impact of video use; the working relationship between myself and each pupil, and between pairs of pupils or within the participating group.

3.4 Research Process: Bringing the Layers to Life

This section explains the aims, studio scene, pedagogical process, and the roles of pupil and teacher for each of the five interventions (Layers).

3.4.1 Layer 1: Individual Enquiry

3.4.1.1 Aims

Endeavouring to encourage pupil reflexivity and autonomy, and to establish a more collegial teacher-pupil relationship, this Layer provided a safe and confidential space in which pupils could frequently test, explore or monitor their performance learning by way of independent reflection and/or teacher pupil dialogue.

Changes to the lesson environment were such that a small portion of the lesson time was earmarked for performance, followed by time for critical reflection on an audio-visual recording made of that performance. The purpose was to encourage the pupils to

regularly engage with five of the six reflective roles of *listener*, *observer*, *analyst*, *advisor* and *performer*, with the hope that this would enhance their work towards the end of year performance assessment.

In order to explore approaches by which the lesson environment might better nurture pupil reflection, in this Layer I tried to reveal their learning lens (perspective) by examining the ways in which they engaged with the film analysis process (referred to as FAP).

3.4.1.2 The studio backdrop to Layer 1

Layer 1 was designed to include only nine lessons over the term. This was because of the need to amalgamate some individual lessons in order to create Layer 2, because no lessons were held during the assessment week, and because no FAP activities were planned for week eleven (when pupils returned from a school holiday) in order to approximate authentic performance preparation leading up to the final Group Session in Layer 3.

Lessons were divided into three parts:

1. On-going developmental work
2. Creation of an audio-visual recording (of one piece being prepared for the end of year performance assessment, approximately two to three minutes in length)
3. Pupil analysis of the film

Layer 1: Individual Enquiry	Primary to Grade 4 30 minute lesson	Grade 5 45 minute lesson
Developmental work	18 min	30 min
Performance Filming	2 min	3 min
Film Analysis Process	10 min	12 min

Figure 6: Layer 1 approximate minutes

3.4.1.1 Resources

My teaching studio was a large room with an upright piano. It was adequate space for accommodating all ten participants and me at any one time. The studio also contained a permanently installed desktop computer with software for producing audio-visual documentation, as well as screen recording software to capture pupils analysing their films. The only technological addition needed was a quality microphone and speakers to ensure the films would be worthy of auditory scrutiny.

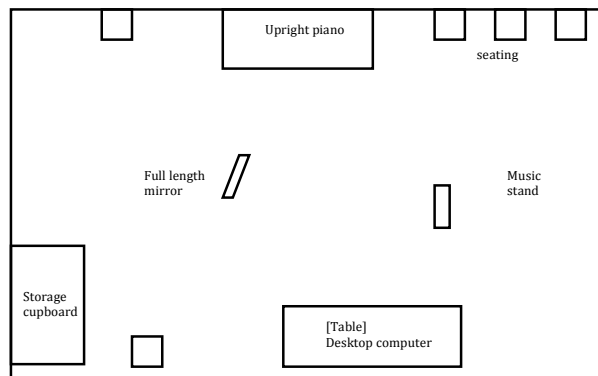


Figure 7: Studio setup

To provide a variety of visual perspectives, filming was varied between full-length body views and waist to head views. A full-length mirror was angled in such a way that the film captured a rear view of the pupil in tandem with a front view. This provided alternative perspectives for postural issues and stance.

3.4.1.2 Pedagogical approach

Upon completing the audio-visual recording, the pupil and I silently viewed the film before any form of analysis or discussion took place. This space was intended to assist the pupils in transitioning from the role performer to a reflective state of mind as *listener, observer, analyst, and advisor*, before being encouraged to verbalise their thoughts. The film was then allowed to play continuously with the volume adjusted to allow the pupil's on-going aural reflection to overlap with her verbal iterations and our pupil-teacher discussion. We both had complete freedom to manoeuvre the film at any time in order to locate particular bars or sections, and to set these to loop continually.

To illuminate both broad and specific issues pupils may have identified while viewing their film, they were encouraged to provide a running commentary or investigative discussion.

For the duration of the enquiry, pupils received Practice Maps at the end of each lesson.

3.4.1.3 Establishing roles

Because the making and evaluating of an audio-visual recorded performance was a significant change to the lesson environment, there was also a change to both our roles and the nature of our interaction and collaboration (Boud, 1995).

3.4.1.3.1 *The pupil's role*

The pupil's role changed at the end of her lesson in order to engage with the film analysis process (FAP). Although still the centre of attention as the performer, the pupil was now positioned as a musical critic as we both viewed the film. This role gave her freedom to act as an independent voice, or in partnership with me, to think deeply, to reason or pose possible solutions and/or new alternative ideas. Engaging with this role gave the pupil's voice an active presence in the learning environment, an opportunity to give honest and considered self-critique, to question her own reflections and to exercise the skill of communicating her critical thinking.

3.4.1.3.2 *The teacher – researcher's role*

Sustaining a holistic and democratic environment in which the pupils felt safe to verbalise their reflections was an aim of the teacher-researcher role. It demanded careful navigation through a variety of multifaceted and complex actions to uphold the spirit of nurturing pupil reflexivity, but for simplicity, these actions are consolidated under the umbrella term of facilitator. Great sensitivity was required in order to engage, prompt, and guide pupil reflection (Jorgensen, 2011; Costa & Kallick, 2008; Hallam, 2001b; Amdur, 1990) in accordance with what was going on in the films, and how pupils were responding. My role provided a cohesive guiding force that encouraged a continual stream of pupil reflection as they wove their way between the various musical chairs.

It was understood that not every issue could or would be addressed by the pupils. My role of facilitator was crucial in guiding each pupil's attention towards important issues that were missed or repeatedly ignored. Such issues were not sidestepped for the sake of this study and its emphasis on pupil reflection, but handled with the integrity that good teaching practice dictated (Daniel, 2006; Claxton, 2004; Dewey, 1938).

3.4.1.3.3 *The manner of questioning*

In order to facilitate pupil reflection during film analysis, I did not keep written notes during these sessions. To initiate reflective responses after the first viewing of the film, pupils were asked the general question, 'How did you think it went?' If a response was not forthcoming, two simple questions followed, 'What do you see?' and 'What do you hear?' Tactically encouraging pupils to make distinctions between aural and visual observations had two intentions. Firstly, it was an attempt to simplify the process for those who were hesitant or who needed a nudge, and secondly, it was assumed that a more balanced and perhaps richer analysis might result by encouraging pupils to use both of these fields in their investigation. When pupils did not reply it was assumed that they: were unsure of how to apply the questions to their film; may have needed a longer period of time to formalise their response; had read more into the question than was actually intended and subsequently froze; or could not put their thoughts into words. If a further attempt to trigger their verbal reflection was needed, the question was transposed to be the simple directive of, 'Tell me what kinds of things you hear/see'.

Pupils' responses established a base from which they could build their analysis. To broaden their answers, I used open-ended and prompting questions (Bryman, 2006) such as:

- What do you mean by...?
- Why was it that...?
- What did you do when/to...?
- You said that...can you explain in what way?
- What advice would you give to the pupil in this film?

While these types of questions aided expansion and clarity of the pupil's response, they also attempted to establish collegiality during the teacher-pupil verbal exchanges.

Aware that the process of asking pupils to verbally evaluate their films might initiate moments where they felt unexpectedly vulnerable, or self-conscious, these questions served the purpose of calming any awkwardness the pupils may have experienced. This action signalled my willingness to listen and remain non-judgemental (Jorgensen, 2011), and suggested that their opinions were viewed as equal or of greater significance. Leading questions, or ones that resulted in simple ‘yes’ or ‘no’ responses, were used sparingly to gain clarity, or to keep the reflective process in motion.

If pupils were softly spoken, I simply repeated what they said in order to ensure that all verbal data were captured on the audio recording device. This approach gave us both an extra moment of poise in which to reflect on the idea[s] just expressed. It also provided a non-judgemental space from which pupils could give additional and unprompted information, retract or completely change their original response.

3.4.2 Layer 2: Peer Collaborative Sessions

3.4.2.1 Aims

The aims and objectives of Layer 2 were similar to Layer 1, and as such involved many of the same activities. Its uniqueness was that it expanded the learning environment for *performance* and reflexivity by including a reciprocating and collaborating peer. Adding the role of a collaborating peer to this Layer aimed to provide an extra dimension from which both pupils could rotate between the six reflective roles of *performer*, *listener*, *observer*, *analyst*, *designer*, and *advisor*, therefore amplifying pupils’ participation and engagement.

While pupils could independently investigate, peer collaboration aimed at revealing both the performer and participating-peer’s perspectives of performance-learning through the process of giving and receiving peer feedback. Observing a fellow peer undergo this process would hopefully have the effect of widening the individual’s own perspective on learning.

3.4.2.2 The studio backdrop to Layer 2

Layer 2 consisted of collaborative engagement sessions taking place during weeks 4, 6, and 9 of the study, and was held in the same teaching studio as that used for Layer 1.

Layer 2 Peer Collaborative Session Pairs
Qp/T2
R2/S2
V3/W3
U3/X4
Y5/Z5

Figure 8: Layer 2 intended pairings

A provision was made for extending the period of time in which to perform, observe, and reflect with a peer by joining the lesson times of two pupils who were of similar age and grade level. Participation required that pupils attend for the full length of this extended period during the weeks that Layer 2 took place.

3.4.2.3 Resources

Apart from one week when building maintenance required a shift to a very similar teaching studio, all sessions in Layer 2 used the same studio and technology resources as in Layer 1.

3.4.2.4 Pedagogical approach

As in Layer 1, no formal guidelines or training in how to assess their own or their peer's performance films occurred. It could be expected that indicators of pupils' ability to evaluate a performance would be exposed to some degree, but, as pupil assessment ability was not a focus of this study, providing them with pre-determined criteria or means of measuring was not undertaken in this or any other layer of data. Although inferences may be made in this regard, the central concern was to capture the pupils' engagement with reflection during the film analysis process (FAP).

During the first and second Peer Collaborative Sessions, the first pupil underwent a lesson in the presence of their peer (see Figure 9), and as it drew to a close an audio-visual recording was made of a short work that the pupil performed for both the participating-peer and me. Both the performer and participating-peer assessed the film, with my assistance if needed, after which they exchanged roles, and the lesson and FAP were then repeated for the second pupil.

Layer 2: Collaborative Peer Sessions	Primary to Grade 4 Two joined 30 minute lesson = 60 min	Grade 5 Two joined 45 minute lesson = 90 min
Developmental work per pupil	Approx. 15 min each pupil (30 min)	Approx. 25 min each pupil (50 min)
Performance Filming work per pupil	Approx. 2 min each pupil (4 min)	Approx. 3 min each pupil (6 min)
Collaborative Film Analysis Process	Approx. 10 min each pupil (20 min)	Approx. 15 min each pupils (30 min)

Figure 9: Layer 2 approximate minutes

In the last session of Layer 2 the sequence of events was reversed, meaning the pair engaged in their collaborative FAP before the performer's lesson commenced. Films used were those made the previous week. Changing the cycle of events was an attempt to provoke a different viewpoint from which the pupil could compare their work going forward during the lesson. Also, by using a past film, additional minutes were added to the pupils' reflection time.

The voice that launched the feedback process varied. In the first session no particular voice was encouraged to start the analysis, but the performer was asked to do so on the second session, and then the participating-peer on the third and final session.

3.4.2.5 The pupil's role

The role of the participating-peer offered pupils the opportunity to observe performances of a peer in real-time, but also to work in partnership with the performing peer during the FAP. Within a non-judgemental environment that promoted peer collaboration, and with the exploration of peer feedback, pupils had the opportunity to practise reflecting on the performance and work of another, and to exercise critical thinking skills. Undertaking the FAP as the participating-peer provided a space within which to express new or alternative ideas, empathise or inform, and agree or disagree as an appreciative peer.

The performer's role also changed. It now required the pupil to stay receptive to the participating-peer's feedback, to evaluate their own performance in the presence of that peer, and to openly discuss issues in collaboration with the participating-peer.¹

Introducing the role of participating-peer to the instrumental lesson occurred at week four. This role was expanded as Layer 3 commenced the following week.

3.4.2.6 The teacher- researcher's role

My facilitatory role and manner of questioning adjusted to encourage peer collaboration and give equal opportunity for both pupils' voices to be represented during the FAP. The questioning tactic was similar to Layer 1. While encouraging the voices of both the performer and participating-peer individually to contribute advice or alternative opinions, questions also encouraged peer collaboration. This role required that I facilitate who was contributing, what was being discussed and in what way, so that all pupils felt comfortable and confident enough to contribute and engage with their peers (Bell, 2005; Brandes & Ginnis, 1986). If participants were uncomfortable or less confident to speak to peers directly, they were encouraged to direct their comments or questions to me in order that I could facilitate the discussion further. Great sensitivity was required so that I did not influence or undermine pupil interaction and feedback.

3.4.3 Layer 3: Group Sessions

3.4.3.1 Aims

Positioned in the middle of the term, the Group Sessions aimed to provoke learning from the context of a more formal performance experience (Claxton, 2008), and for pupils to experience learning about performance within a larger arena.

As part of a larger performance community, pupils had the opportunity to explore and monitor their current personal performance issues as they each took the stage as performer to play for the entire group of participants. As an audience member, it was an opportunity for pupils to survey peer performance, while silently rotating between the roles of *listener*, *observer* and *analyst*.

Supported by group discussions, this Layer aimed to bring into focus their collective voice concerning performance learning, and to encourage the growth of critical thinking by encouraging them to formulate feedback, and share ideas or alternative perspectives.

3.4.3.2 Studio backdrop to Layer 3

To facilitate the time needed for all ten participants to perform and engage in discussion, these three sessions were in addition to weekly lessons and approximately 90 minutes in length. These took place during weeks 5, 9, and 11. The last session was purposefully scheduled for the week after returning from a two-week national school holiday. This allowed pupils one last opportunity to explore performance ideas in front of an audience before the school's end of term performance assessment, as well as the end of year concert.

The first two Group Sessions (sessions A and B) took place in the regular weekly teaching studio familiar to all pupils. This room comfortably accommodated the number of participants.

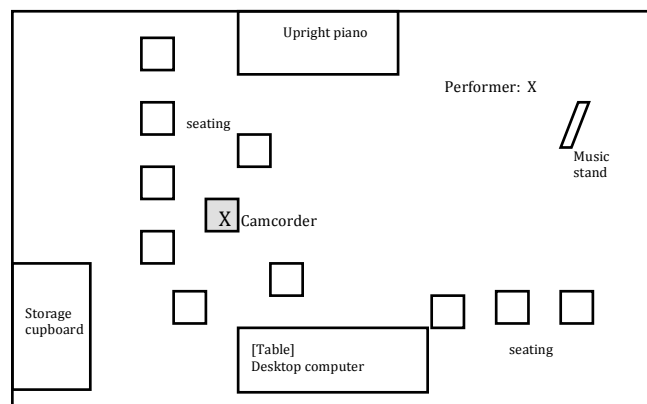


Figure 10: Layer 3 studio setup for Session A

The final Group Session (session C) had a more formal performance atmosphere. The venue selected was the recital room that would be used for the end of year celebratory concert. This large oblong room seats approximately eighty people, and contains a raised platform stage with ample room for a solo performer and grand piano.

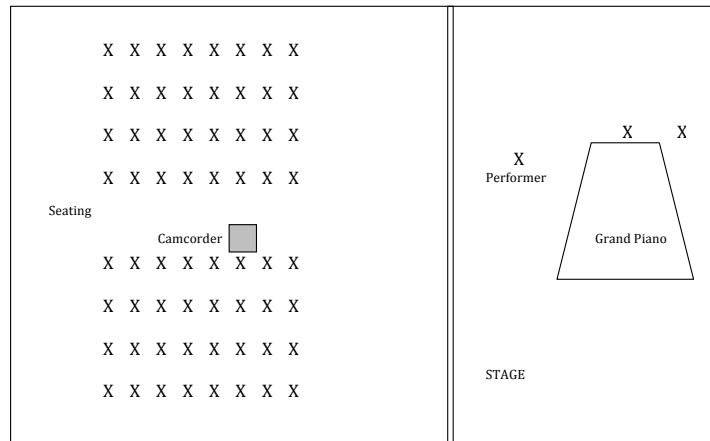


Figure 11: Recital room setup

3.4.3.3 Resources

All performances and the accompanying peer feedback were documented via an audio-visual device, whereas only an audio recording was made of all group discussions.

3.4.3.4 Pedagogical approach

Group Session A commenced by introducing each pupil, even though some pupils had previously been acquainted through the collaborative sessions of Layer 2, musicianship classes, ensemble groups, or previous technique classes. Session A gave each pupil the opportunity to perform twice. Pupils came with a performance goal for the first of their two pieces (round 1). Each performer was given a moment to evaluate whether their performance goal had been met before the group commenced giving feedback. Performers were encouraged to share their impressions with the group if they felt comfortable to do so. Instead of following each performance with peer feedback in the second round, a group discussion about general performance issues took place after all pupils had performed. Session A finished by allowing the pupils to view a video of Midori Goto performing Sarasate's *Zapateado*.²

Group Session B was also held in the regular weekly teaching studio. Formal introductions were repeated for those pupils missing the first session. This session offered pupils the opportunity to perform two pieces consecutively with a guest accompanist. Rather than offering peer feedback after individual performances, a group discussion about general performance issues took place after everyone in the group had performed and the accompanist had departed.

During Group Session C, each pupil had the opportunity to perform two pieces with the same guest accompanist in the larger recital room. The majority of their time was spent observing their peers perform. Time did not allow for either peer feedback or discussion. All performances were filmed so that pupils could independently view and critique their performances at their next and final lesson.

3.4.3.5 The pupil's role

Experiencing the role of performer on a more formal stage in front of the entire group was central to these sessions, but so too was being part of a collective voice when participating in the group discussions.

The number of performances, variety of repertoire and range of ages simply increased the frequency and complexity of the offstage observing roles that the pupils needed to rotate between. Pupils were encouraged to silently and attentively engage with the roles of *listener*, *observer*, and *analyst* as they created a supportive, appreciative, empathetic, and critical audience for their peer who was on stage.

3.4.3.6 The teacher-researcher's role

With performance and group discussion as the predominant focal points of each session, my role in this Layer was to help the younger pupils to tune their violins, to organise the stage setup, and to facilitate peer feedback and the group discussions.

Due to the varied age and grade level of the participants, careful attention was given to establish grounds for a healthy discourse and learning environment: that all pupils should keep an open mind; that alternative views could and should be expressed; and that all comments should be honest and delivered in a sensitive manner.

As in Layers 1 and 2, the facilitatory nature of the teacher-researcher role during these Group Sessions aimed to nurture and maintain a potentiating environment for the possibility of individual and collective critical reflection (Claxton & Carr, 2004). The use of questioning was the primary tool used to maintain a collaborative atmosphere, through which participants were encouraged to pose alternative, new questions, and debate issues (Claxton, 2008; Sheldon *et al.*, 2008; Flusser, 2000). Once again, if pupils experienced any unease in expressing their views, it was suggested that they direct their responses to me in order that I could assist them.

3.4.4 Layer 4: Practice Maps

3.4.4.1 Aims

Weekly Practice Maps aimed to reveal what and how pupils think about practice by encouraging reflective processes from the seat of designer. The maps nurtured the process of deliberate and self-regulated practice, but also revealed the work strategies that pupils chose or created. This type of documenting exposed:

- pupils' thoughts about practice generally
- pupil propensity towards engaging in the weekly task of documenting their reflections on practice
- what pupils chose as focal points
- the types of strategies pupils designed and used
- pupil analysis of practice

3.4.4.2 The pupil's role

The underlying work for this Layer was primarily informed by the practical and reflective learning pupils experienced as part of Layers 1, 2, and 3, or on-going goals and issues they still considered to need attention. Pupils were assigned the responsibility for actively designing and mapping the work done each week for one piece only, or two pieces if they so chose.

Pupils were given a Practice Map at the end of each lesson and asked to identify and record their intended focus for work on their chosen piece(s).

The second section of the map required that the pupil design a practice strategy for each of the issues identified. In the context of this study, the term strategy will be defined as the physical or cognitive methods (Hallam, 2001a) the pupil identified as their designed or chosen form of active engagement when setting out to explore these issues. Pupils were reminded that strategies could develop or be altered as the week progressed, but that any changes must be included on the map.

Section three involved the pupil reflecting and writing on the effectiveness of their strategies, and also any other issues that arose, before returning the map at the start of the next lesson.

3.4.4.3 The teacher-researcher's role

If needed, I assisted pupils to summarise their lessons in order for them to formulate their own practice ideas. As a time saving measure for some pupils, I wrote the focal points down on their maps using each pupil's exact words.

Since this study was intended to promote ways that assist the development of pupil autonomy, reminders to complete the maps were not issued. To encourage fresh approaches to their reflection, pupils were not allowed to retain their maps, but handed them back to me at the start of each weekly lesson.

3.4.5 Layer 5: Celebratory Concert

3.4.5.1 Aims

While performance was the central focus of this Layer, so too was the concept that learning about performing is an on-going process of growth. This Layer consisted of a public concert that was scheduled on the week after the schools' assessments (see Appendix E). Layer 5 was the only Layer in operation during this week before the summer holidays commenced. Layer 5 allowed pupils the opportunity to demonstrate, explore and share performance learning with others as invested members of a performing community.

3.4.5.2 Celebratory Concert

The concert was held in the recital room familiar to the pupils from Group Session C (see Figure 11), and was scheduled to last 90 minutes. As the room could hold approximately 80 people, participants were asked to balance their invitations reasonably between family members and close friends.

In order that I could greet pupils, family and friends, a third level student pre-tuned violins, and also acted as stage manager and page-turner during the concert so that I

could digitally record the concert. For easy stage access, and a full view of their performing peer, all ten young performers occupied the front row.

A formal printed program contained all the performers' names, grade levels and repertoire. The ordering of performers was designed to showcase a mixed and varied concert programme (see Appendix F).

The concert commenced by greeting the audience, and with a special message of congratulations and gratitude to the participant performers. It concluded with a formal expression of appreciation to the audience and by thanking each participant individually.

3.5 Grounds for Analysis

Transcriptions were made of all interviews, group discussions, and of each film analysis process (FAP) undertaken as part of each pupil's individual lessons and the lessons involving peer collaboration. These and all other documents (my reflective entries and images of Practice Maps) were secured in a Google – Drive file and/or Dedoose (www.dedoose.com), a computer-assisted qualitative data analysis software (CAQDAS) program. As an application for mixed methods research, Dedoose simplified managing the data at all stages of analysis.

Data relating to each of the five different interventions (Layers), which included the material emerging from the film analysis process (FAP), the pupil interview data, and my reflective journal entries, posed unique complexities for analysis. Many of these data sets were context specific, necessitating distinctive treatment. As a result, data were initially categorised by Layer. Rigour was illustrated by using forms of deductive, quasi-quantification, thematic and inductive analysis. These methods of analysis attempted to address the research questions in a way that generated both broad and specific outcomes from rich immersion, triangulation, and cross referencing of the numerous data sets (Marshall & Rossman, 2011; Mason, 2002).

With mixed methods more likely to produce 'findings that will have utility' (Bryman, 2008: 621), a small degree of quasi-quantification was applied to look for patterns within or across categories and sub-categories for individual participants, for sets of

peers, and within the entire participant group. Although thematic and inductive analysis might show how my role could have influenced the generation of data in each context (Mason, 2002), the continuous and detailed scrutiny of the nature of our engagement in these changed environments was a focused attempt to determine outcomes that may be influencing pupil autonomy. Ultimately, I address the research questions:

How might learning and teaching environments change to assist younger violin pupils develop a greater awareness of their roles in violin learning, performing and practising?

What are the outcomes and implications for teaching and learning when the opportunities for pupils to critically reflect, collaborate, and perform are increased?

The data relating to each Layer were examined in its entirety to establish familiarity. Due to the simplicity of the pupils' language, I manually colour coded the presence of each of the musical chairs during this initial reading, but used Dedoose when identifying the emerging themes in subsequent cycles of analysis. As explained below, rigour was demonstrated by continually cross-referencing the data for each the Layers with my reflective journal entries and data from the different interviews.

Examining the FAP data of Layers 1 and 2 launched the analysis process. For Layer 1 (Individual Enquiry) I began by coding pupils' comments in terms of the focal points that they identified in their films as either aural (*listener chair*) or visual (*observer chair*), any descriptive reasoning or illustrations (*analyst chair*) that they then offered to back up these points, and the advice or solutions (*advisor chair*) for going forward that pupils may have generated as they reflected. Analysis of these three categories resulted in further subcategories. For the chairs of *listener* and *observer*, this process established an overview of the criterion that pupils used for their own performance analysis. Due to many pupils enquiring as to *how* I wanted them to reflect³ during the first few sessions, I decided to expand the developing picture of how pupils were reflecting by also coding their comments as either *favourable* or *unfavourable*. Issues personal to each participant were identified before establishing the broader themes that encompassed the entire group of participants. Intersecting this data with my journal entries and the interview data validated themes emerging from Layer 1.

For Layer 2 (Peer Collaborative Sessions) I used the same process and set of codes as in Layer 1 to examine pupils' reflections about their own performance films (the *performer*), before repeating this same process for the comments given by their collaborating peers (*participating peer*). The decision to analyse these two roles separately in this data set was taken to ascertain differences or similarities in how individual pupils reflected on their own performance films and those of others. Additional scrutiny was given to this data in terms of the frequency that each pupil spoke in both roles, whether or not the content of their reflections were spoken about in a favourable or unfavourable manner, and the consequence of peer interaction and the peer feedback process. As with Layer 1, themes from Layer 2 were validated by converging findings from this data set with my journal entries and the interview data.

Through a process of constant immersion, themes emerged from the data for Layers 1 and 2 relating to the use of an audio-visual tool, the FAP, and peer collaboration. As mentioned above, this process involved cross-referencing data for all of the FAP sessions together with the interview data and my reflective journal entries. This process is discernable across Chapters 4, 5, and 6 by illustrated samples of a range of themes relating to learning and teaching engagement.

Analysing the data around Layer 3 (Group Sessions) commenced by coding pupils' comments from the chairs of *listener and observer* for only the first round of performances in the first session. This was the one instance that offered pupils the opportunity during Layer 3 to reflect directly from these two chairs in a similar way to how they were participating in Layers 1 and 2. Being primarily interested in the pupils' perspective and experience as *performer*, I examined the data from their collective voice for the remainder of this and the second session. Additional points of interest relating to how pupils engaged and participated during Layer 3 were also documented as a means for comparison with their engagement in other Layers. In conjunction with my reflective journal entries and the interview data, themes relating to the *performer* were intersected with the data from the group discussions that took place during this Layer.

Layer 4 (Practice Maps) was a unique data set comprised of documents written by the ten participants about their weekly violin practice. Framing this analysis were the roles of *designer* and *analyst*. After organising and coding what pupils wrote about practising

each week (focal points) into appropriate categories for this age and level, I examined their practice strategies and coded these designs by the types of actions that they described. The pupils' written analyses about how effective they thought those strategies had been were then scrutinised to gain further insight into the pupils' perception of their roles as *designer*. While these three steps contributed to developing a portrait of each pupil as *designer* and *analyst*, overarching themes for this Layer emerged from the convergence of my interpretations of their Practice Maps with my own reflective entries about pupils' general comments on practising, and, in particular, with how pupils spoke about practising and the mapping process during the various interviews.

The role of *performer* was at the heart of Layer 5 (Celebratory Concert) and formed the analytical frame for this data. My reflective entry about this Layer was a significant resource when presenting the data (see Chapter 5), and was used to cross reference how pupils spoke about the role of performer generally across the project with how pupils reported their perspectives and experiences of Layer 5 during the final interviews.

After examining the data sets associated with each Layer individually as described above, subsequent immersion involved re-examining the entire body of data. This process involved triangulating pupils' recurring types of responses, word choice, and descriptive illustrations across the data sets, followed by intersecting emerging themes with my written observations and the responses that pupils gave to the numerous interview questions. While this method revealed trends for individuals and the entire group of participants, it also identified themes for each Layer and key themes that encompassed the study as a whole. Key themes were then confirmed by the retrospective final interview data.

When presenting and discussing the findings from this analysis process in the remaining chapters, I incorporated various charts depicting concrete issues that pupils identified, and exemplified these with quoted excerpts. Some charts noted the frequency that these issues were mentioned. For further clarity, I flavoured the discussion of my interpretations with pupils' complete or partial quotes from the transcripts, and gave descriptive samples of our engagement. Sometimes only a few of the pupils' comments were needed to support concepts and themes, but at other times I included contributions

from all ten participants in order to reflect the diversity of their responses. By quoting directly from my reflective journal I attempted to provide insight into my perspective of this study as a lived experience.

3.6 Conclusion

This chapter has explained why this enquiry is situated within the paradigm of action research. The research context, timeline, ethical concerns, and participant selection have been detailed. The aims and pedagogical approaches were also described for each of the five interventions, as well as procedures for collecting and analysing the data. Chapters 4, 5, and 6 present the analysis and interpretation of data, while Chapter 7 discusses the findings and explore their implications for instrumental teaching and learning.

¹ Consider these roles in a professional capacity, such as in chamber ensembles.

² <http://www.youtube.com/watch?v=DUUcWKtoALY>

³ These terms are explained in Chapter 4, but it should be noted at this stage that these categories resulted from pupils enquiring if they should identify 'good' or 'bad' things in their films. Their comments however were not always so clear-cut, and often fell into less defined categories.

CHAPTER 4

EXPLORING DIFFERENT ENVIRONMENTS: PLACES FOR INDIVIDUAL AND COLLABORATIVE ENQUIRY

4.1 Introduction

The first part of this chapter introduces the participants by providing personal details collected during Interview A before the Layers commenced. Part two presents and examines the data collected for Layer 1 (Individual Enquiry) and Layer 2 (Peer Collaborative Sessions). These interventions involved the use of video and the film analysis process (FAP) in order to provide pupils with the opportunity to practise performing, exercise their critical thinking skills, express ideas, and to consider the ideas of others. Part three of this chapter examines additional themes exposed as a result of using video and the FAP in Layers 1 and 2.

Part One

4.2 Setting the Scene: Pupil Profiles

To better acquaint the reader with the group of participants, pupils were asked a set of questions at the beginning of the enquiry to create individual profiles covering:

- Personal details and general musical background
- Practice background
- Performance background

These profiles were also deemed important for drawing comparisons at various points in the project.

4.2.1 Personal details and general musical background

Of the Beginner to Intermediate violinists on my register at the time of the enquiry, ten chose to participate, and all were female. The age at which each pupil had commenced studying the violin varied, though the approximate age when starting was seven years or

younger. Four pupils only studied the violin, six were studying a second instrument, and one pupil even managed to study a third.

When asked about listening to music in their free time, five claimed to choose forms of classical music for their casual listening, and five stated that they mainly, or only, listened to popular forms of music.

General Background					
ID	Age	Current Grade level	Instruments other than violin	Listening preference	Concert attendance per year
Qp	9 yr	Primary	none	Mainly Pop. Occasionally Classical	approx. 2
R2	10 yr	Grade 2	piano	Orchestral	approx. 4
S2	10 yr	Grade 2	piano	Chamber Music. Solo violin	approx. 7+
T2	10 yr	Grade 2	piano	Broad range of classical music.	approx. 7+
U3	11 yr	Grade 3	none	Only Popular music.	none
V3	11 yr	Grade 3	none	Only Popular music.	none
W3	11 yr	Grade 3	none	Mainly Popular music.	none
X4	12 yr	Grade 4	Bassoon	Broad range of classical music.	approx. 2
Y5	13 yr	Grade 5	piano	Only Popular music.	none
Z5	13 yr	Grade 5	piano / harpsichord	Broad range of classical music.	approx. 7+

Figure 12: Pupil background

Following on from this, pupils were asked if they attended classical concerts other than their own ensemble productions. Four pupils confessed to never going to classical concerts, two pupils estimated that they attended two concerts per year, while the remaining four stated attending four or more concerts per year. Pupils stated that these concerts were enjoyable owing to the level of performer expertise, the way the performer(s) communicated to the audience, but also because of the repertoire performed.

- R2 – In Ballymaloe I saw Elizabeth Cooney playing. I loved the way she plays the violin.
- S2 – I go to some of Greg’s concerts [The RTE Vanbrugh String Quartet], and its like they are really all moving with the music and they were signalling to each other. They were working together and it’s kind of like they were talking to each other.
- T2 – Uba’s story. They told a story and played, the orchestra. And they really like, showed the story. If you just closed your eyes you could picture the story just happening.

Z5 – I knew the two people who were performing... and then the music and the techniques, the precision, and the program was just brilliant...

4.2.2 Practice background

This group of participants claimed to undergo a regular practice routine ranging from five to seven days of practice per week. Rather than suggesting how many minutes pupils should consider practising each day, as their teacher I regularly encourage them to use ‘intelligent experimenting’ (Galamian, 1964: 94) to find out what will work best during the time they have. Although this enquiry was more concerned with *how* pupils practised, I did intend to ask later in the study if pupils noticed changes in the time they spent practising. Six pupils estimated that they practised thirty minutes per day, two pupils estimated forty-five minutes each day, one pupil averaged sixty minutes, while one averaged practising sixty to ninety minutes per day.

Practice Background					
ID	Days per week	Duration of Daily Practice	Form of Practice Assistance	Feeling about Practice Assistance	Deciding when to Practise
Qp	7	15-30 min	Parental Assisted practice instruction. Passive Listening	Comfort from Parental input	Parent
R2	6	20 min	none	n/a	Pupil
S2	6	20-30 min	none	n/a	Pupil
T2	6	40-45 min	Parental Assisted practice instruction. Passive Listening	Unable to structure practice unaided. Comfort from Parental input	Parent
U3	5-6	does not track time	none regular Occasional family passive listening	n/a	Joint Decision
V3	6	20-30 min	Parental Assisted practice instruction. Give corrective advice	Frustrated	Parent
W3	5	30-35 min	Parental corrective advice and passive Listening	Feels easier. Comfort from Parental input	Parent
X4	7	60 min	Parental corrective advice and passive Listening	Feels easier	Pupil
Y5	6	45 min	none	n/a	Pupil
Z5	6	60-90 min	Receive occasional parental opinion	Increases focus	Joint Decision

Figure 13: Practice background

Each pupil claimed to be happy with the way that they were currently practising. While four claimed to repeatedly use familiar practice routines, six stated that they varied their practice routine from day to day (see Figure 14). Four pupils practised independently

while six received some form of parental assistance that ranged from corrective advice, reading lesson notes out loud, to passive listening (see Figure 13).

- Qp – I play through things and correct them on my own and then my Mom comes up and listens to me.
- T2 – She reads out your notes to me, and she tells me what I should do, what like I should improve on when she hears me.
- V3 – She keeps on saying what I have to improve on....
- W3 – I practise on my own first but then my Mom comes in and she listens to me to see how well I'm doing...then she'll...tell me if there is anything wrong or what I'm missing.
- X4 – He listens to my scales, and then when I am doing my pieces reads a book but like listening as well and lets me know if anything is out of tune.
- Z5 – She sits there and constructively comments or criticises as well if I am completely wrong.

For any future research into practice and parental support, it might be of interest to know that five of the six pupils who received regular assistance claimed that this sort of assistance had a positive impact.

- Qp – Good because she can tell me what I need to correct and what I don't.
- T2 – It makes me feel better, because if I was on my own, then I really wouldn't know what to do or how many times to do it.
- V3 – Sometimes it's a bit frustrating, but then it's ok because I know what to do.
- W3 – It feels kind of easier because you know you might usually skip it if you are on your own, but when someone else is doing it, they help you.
- Z5 – It makes me practise in a more focused manner.

The majority of pupils thought error identification and correction should be the important focus of their practice (see Figure 14), but that the most enjoyable minutes of their practice was the time spent performing.

- X4 – ... I set time to perform every day.
- Z5 – Sometimes I would take out old pieces and just kind of read them. It makes me feel good to play something that I recognise. It draws on that if I feel I have accomplished something then I have a purpose to the practice.

Practice Background continued					
ID	Deciding How to Practise	Practice Routine	Most important part of Practice sessions	How Practice changes with approaching Performance.	Mirror usage
Qp	Pupil and Parent directed practice	Changes everyday -due to Piece demands. Play through. Deliberate correction.	Error Detection Correction	Increased concentration.	sometimes
R2	Pupil directed practice	Set Routine. Warm up exercises. Play through.	Actually practising.	Increased Practice time.	never
S2	Pupil directed practice	Changes everyday-try new things. Some days practise performing. Play through. Section work. Deliberate correction.	Error Detection Correction	Increased Practice time.	sometimes
T2	Parent directed practice	Set Routine. Teacher notes. Section work. Deliberate correction. Practise Performing	All Practice elements equal	Practise only performance pieces.	sometimes
U3	Pupil directed practice	Change due to Piece demands. Teacher notes. Reflect on recent lesson. Practise slowly. Deliberate. Correction. More times right than wrong.	Error Detection Correction.	Increased practice time. Play without stopping. Practise performing	never
V3	Pupil directed practice	Set Routine. Play through sections. Play though piece.	Playing correct notes. Pitch	Increased concentration and time	never
W3	Pupil directed practice	Changes everyday –try new things. Isolate difficult sections. Slow work – revert to correct tempo	Striving for excellence. Maintaining mental concentration.	Continued effort. Increase practice time.	sometimes
X4	Pupil directed practice	Changes everyday-try new things. Warm up exercises. Play through. Section work. Deliberate correction	All Practice elements equal	Extra section work. Increase Practice time	never
Y5	Pupil directed practice	Set Routine. Section work. Play through. Perform pieces.	Error Detection and Correction	Practise Performing	sometimes
Z5	Pupil directed practice	Same order but try new things. Warm up exercises. Performance practice some days. Section work some days.	Obtaining Technical security. Practise Performing if upcoming concert.	Work from Memory. Practise Performing	sometimes

Figure 14: Practice background continued

The way that pupils spoke about practising throughout the interview revealed that they understood its importance. However, when responding to being asked if they liked practising, their comments were mixed and probably ones that many teachers might expect. Some pupils stated that practising was an enjoyable activity, but the dislike of practising voiced by some seemed to stem from time-management issues more than the

act of practising itself. To represent this topic clearly, all ten participants' responses are provided:

- Qp – I don't like having to go from one thing to another, and I do like when it's sounding really good, and I think I've done a good job on it. I don't like it when I'm watching my favourite TV show and I have to miss it to do my violin.
- R2 – Most of the time. If there is something that day that I really want to do, and I have to practise, then I don't want to go upstairs to do it.
- S2 – Well, I like practising. I don't like getting out my violin and all that, but when you are actually doing it, it's nice. Because there's concerts and when I am actually at a concert I am happy about the times that I practised because I worked hard.
- T2 – Yeah, because I enjoy the violin.
- U3 – When I am doing it, I like doing it, but then when I am thinking about it, I don't want to practise but I have to do it. I have to practise.
- V3 – No, I don't know. I just don't like it. I like it after I start.
- W3 – I don't especially like practising because sometimes if you want to go somewhere my Mom always makes me do it first, and you're really excited like, but I like playing the violin in general so it's not too bad.
- X4 – Yes. Its like, well I'm in secondary school and there's lots of homework and its intense, and when I get out my violin its like, easy.
- Y5 – Sometimes. But not really.
- Z5 – Most of the time I do. I like it because once I actually start practising, I enjoy it, and then I can say, 'What did I do today?', 'How did I progress?', 'How did I improve?'. But then I don't like it sometimes when I'm tired or had a long day, or if I have so much to do, so much homework as well after all my practice.

As this study promoted the use of visual tools in some learning environments, the pupils were asked if they ever used a mirror when they practised. Four pupils stated they had never used a mirror, and six claimed that it had indeed been a beneficial tool.

- Qp – Yes. Looking at myself and looking at my hands, because like when they go wrong I can change them because I've seen them in the mirror.
- T2 – I did this week... It helped me like have longer bows and be more relaxed... Very helpful.
- W3 – Yes... because of my flat wrist. I just look in the mirror and straighten it out if it's flat. Quite helpful.

4.2.3 Performance background

All pupils had performance experience with their violin in some context. Since performing is a core activity throughout this enquiry, questions were asked to uncover what pupils thought about it. Many expressed a distinct difference between the ways they felt when performing as part of an ensemble, compared with how they felt when they perform as a soloist.

V3 – It's better when there is an orchestra.

X4 – It's not as terrifying in an orchestra.

Z5 – When you play solo you need to be more careful...like technically...

When the questions focused on performing as a soloist, only four pupils were able to state what they thought were their strengths. These were such things as being able to concentrate under pressure, maintaining good posture, and performing expressively. All ten pupils were able to state areas that they hoped would improve, such as posture, pitch, tone quality, vibrato, notation accuracy, confidence, expression, and dealing with pre-performance anxiety. When asked what they were aware of thinking about when performing many pupils mentioned their perceived weaknesses, or those areas they wished to develop and improve.

R2 – If I am standing in the right position, if I am in tune. I hope the audience like it.

U3 – I've got to get this right, and impress whoever is watching me. The tempo, the solfa, the dynamics, if it's lively, so people listening don't get bored...

W3 – Trying to get everything in tune and just trying to make it enjoyable for everyone listening.

All pupils admitted to having experienced performance anxiety, and while a few attributed their dislike of performing to the discomfort of anxiety, others stated that performing was enjoyable.

Qp – ...I enjoyed that I was just there playing what I could do, and doing it my best and stuff.

R2 – Scared if there is an audience, in case I make a mistake.

S2 – ...It's nice. It feels good. It's like I'm moving with the music, and its flow. I just like it. It's nice for people to listen to you. I usually perform better when I play for people.

- T2 – You can tell your own story about your piece and you can do whatever you want to. There is no right or wrong, and you can do what you want.
- U3 – I feel nervous. I don't really like performing.
- V3 – Not really.
- W3 – Usually nervous, but once I actually get, when I start, it's like kind of fun.
- X4 – At ease.
- Y5 – I kind of enjoy it.
- Z5 – Yeah, I think I do most of the time if I'm prepared and practised enough, and if I am like comfortable with myself...I would be nervous beforehand if it was a proper performance or concert, but once I start and I actually manage to think of it, the music. I try to centre myself.

Since the pupils had committed to a whole term of viewing performance films, each was asked if they had ever seen or heard a recording of themselves performing in any musical context, and if so, about the impact of viewing that recording. Of two pupils that had never seen or heard a recording of themselves, one was interested to view a recording and the other was not. There was a mixture of responses from those who had seen recordings of themselves. A few stated that they remembered feeling self-conscious when viewing the recording, others remembered noticing their accomplishments or new issues, while one remarked on remembering a difference between what the recording sounded like and her memory of the performance.

- S2 – It was nice...seeing how I did it and what I could do better.
- T2 – I felt more like, self-conscious.... I was playing with my quartet. I thought it was good like...[but] I realised I move my shoulders sometimes up... I've never seen it happen.
- U3 – I thought it was really weird looking at myself play. A weird feeling.
- W3 – Self-conscious.
- Y5 – Kind of strange because it sounds different when I hear it in the recording.
- Z5 – In some ways proud... of like what I heard, like I didn't realise I sound like that, and then otherwise it made me aware of silly things I was doing, just rather embarrassed.

Regardless of whether the pupil had ever seen a recording of themselves, or attended concerts, the importance they assigned to visual presentation became apparent when asked what they expected of any performer, themselves included.

- R2 – Looking like you are having fun.

- S2 – To look like they are enjoying it.
- W3 – Looking like you are enjoying yourself...That they don't look bored.
- Y5 – Movement. Enjoying it...

They also expected a performer to be prepared, technically.

- T2 – They will have done practice, and they will be like, ready. Like, they will have prepared for it. They will have put like, their own phrasing into it...
- U3 – That they should have practised and put the effort in... That they play the whole way through if they make a mistake. I expect it to be good.
- X4 – To play it well and not make mistakes.

Pupils were also asked how they knew that their repertoire was ready for the stage. Each spoke about an intrinsic understanding, or self-belief in their ability as performer.

- S2 – If you feel ready. If you know your pieces well and you are happy going up on stage...that like, it'll be your best.
- T2 – When you like know the piece so well that you can put your own things in to it... I don't expect it, like, I make it happen.
- Y5 – ...when you know the piece really well.
- Z5 – If you feel confident but not over confident, and you are like, nervous, but it's not in the case of like, "I can't do this!", it's kind of a case of, "I can do this. I have prepared for it.

All ten pupils stated that they could learn from observing their peers perform, given the opportunity.

- T2 – Well if they are playing the same pieces as me, I could learn that if they did something really nice, I could try that in my piece.
- W3 – If you were playing the same piece, how they played it and how you play it, if they were similar or really different, you could try playing the way they are playing so to see if it works out better for you.
- Z5 – If it's a piece you've learnt you can kind of improve on yourself, or if you like ideas you can put them into your piece.

All ten pupils also claimed that they would find peer feedback helpful, and that they would be able to provide feedback to their peers.

- Qp – Yes because they would help me know what I am sounding like and they would tell me, if I needed to improve on something or something like that.
- X4 – Yes, because if they are younger than me, and doing pieces I did the year before or earlier. They might be stuck on a bit that I was stuck on and I passed it so I might have some ideas on how to help.

Part Two

4.3 Presenting the Data

Now that the participants have been introduced, the data sets for Layers 1 and 2 are presented. To uncover the state of pupils' critical abilities, their verbal comments were categorised within the frame of *listener*, *observer*, *analyst*, *designer* and *advisor*. While the role of *performer* (the sixth chair) was experienced as an active process, it was not possible to produce concrete reflective data directly from this role in the same manner as the others. It is clear, however, that when assuming these reflective roles pupils will draw on their experience as the violinist *performer*. This is the voice that necessitates all other roles.

Before presenting the data, I draw attention to a recurring issue that the reader will undoubtedly notice. Pupils entered this enquiry with variations in musical ability, commitment to study, and performance experience. While a few pupils were almost invariably articulate, many described their thoughts in very few words, responded in incomplete sentences, or used non-descriptive words such as 'stuff', or 'like'. I attributed this phenomenon to their young age and their lack of experience of analysing performances. In such instances I used probing questions to not only gain clarity, but to help develop and lengthen their responses. The pupils' responses are reported verbatim, and although sometimes challenging, I have attempted to add punctuation to their non-grammatical phrases for easier reading.

When presenting the data, pupils are identified by their identification codes while I refer to myself as T.R. (teacher-researcher).

4.4 Framing the Data

To demonstrate the reflective roles in operation, all comments were first viewed and partitioned under the codes of:

- Focal points: violin specific or general musical issues perceived by reflecting as *listener* (aural) and *observer* (visual).
- Illustrations and reasons: the descriptive or diagnostic content of pupils' reflections as *analyst*.
- Possible solutions and advice: ideas and/or actions that pupils designed for correction or improvement of work going forward perceived by reflecting as *advisor*.

Looking at pupils' responses from these three viewpoints established insights not only into the language that pupils were able to use to frame their reflective thinking, but also into the personal and shared narratives, the issues that they were willing to discuss, and the ideas or strategies they were planning to use going forward. Such analysis attempted to construct each pupil's lens (perspective) through which to further investigate the data.

Number and/or percentage representations¹ are given for focal points because reflections from these chairs created the foundation for pupils' descriptive analyses, solutions and advice; in other words, this is what the pupils perceived through their lens. The numerical representations simply provide a general overview of what was discussed or explored, but are not used to form any conclusive claim. A disclaimer is needed here. It would have been pedagogically unethical for me to allow issues to go unaddressed simply for the sake of data collection, so my involvement will probably have influenced these numbers to a small degree.

4.5 Layer 1: Individual Enquiry

All pupils willingly participated in the FAP during their individual lessons of Layer 1. Attendance was near complete, with S2 and Y5 absent only once, and W3 twice.

4.5.1 Focal points

The focal points that emerged need to be considered in the context of the demands of the particular repertoire chosen by the pupils, and in relation to their level of development. It should be noted that while the issues identified were somewhat expected, this list could have varied slightly had it stemmed from an alternative collection of pieces, or had the data been collected over a longer period of time. The focal points outlined below show that the reflective roles of *listener* (aural) and *observer* (visual) were being engaged.

Layer 1 Individual Enquiry Focal Points: issues pupils talked about as Listener [aural] and Observer [visual] (N=448)		
Listener 259 (58%)		
	Aural Focal point description	Sample statements
Dynamics	markings or intentions	S2 – There’s dynamics. X4 – Well, there were good dynamics.
General Impression	overall impression of the performance	V3 –It was good I think. Z5 – I’m quite happy with it overall, I mean.
Harmonics	clear and accurate execution	T2 – The harmonic was better. Z5 – My harmonic didn’t sound.
Note Accuracy	correct, notated pitch	U3 – I missed a note. Z5 – The actual fact that I am playing all the notes.
Phrasing	Interpretation, style or shaping	T2 – It was like two parts of a story. Z5 – I like that bit, you know how you said to slow down? It just kind of adds to it.
Pitch	intonation accuracy	W3 – It was just flat. Z5 – Out of tune notes.
Rhythm	accuracy	T2 – I did the wrong rhythm. Y5 – Some of the rhythm in it.
Shifting	accurate execution	T2 – I didn’t shift in to the right place. X4 – ... it’s ok going up but when I’m shifting back down that’s...
Tempo	desired speed	U3 – I’m going too fast. Y5 – I normally play it faster...
Tone	general sound produced – links to bow control	R2 – It’s a clear sound. T2 – My sound was nice.
Vibrato	execution of and / or functionality	X4 – My vibrato is ok. Z5 – My vibrato is fairly wide...

Observer 189 (42%)		
	Visual Focal point description	Sample statements
Correct Bowing	Notated or pencilled markings	Qp – I didn't do the slur, I did the two and then didn't do the slur on the other notes so I started again. Z5 – I got backwards bowing and then I had to fix them.
Facial Expression	Comments about facial expression rather than overall body language	Qp – That I look grumpy. T2 – I thought my mouth was much more relaxed. Z5 – I did make a face in the beginning.
General Appearance	How pupils felt they looked; confident, ill at ease, communicative with the audience and/or enjoying the act of performing.	W3 – I look very serious like I'm really concentrating. Z5 – I don't think the performer is kind of communicating.
Gesturing	Physical posturing	S2 – I wasn't moving much. X4 – I'm moving with the music.
Left hand issues	Specifics to left hand / finger movements or arm angle issues	Qp – My wrist was back. T2 – Yeah, it's always the 4th finger that I can never stretch.
Right Hand / Arm Control	Bow hold and arm use – linked to bow control generally	T2 – My bow. Sometimes it is bouncing. W3 – My pinkie finger is very straight.
Stance	General posture, body alignment, feet/ leg/ shoulder issues etc.	Qp – I'm not up and looking nice and tall... X4 – My feet are grounded.

Figure 15: Layer 1 Aural/visual focal points

Given the emphasis generally placed on listening in violin performance, teaching and learning, it is perhaps not surprising that, overall, aural issues were generally identified more than visual issues. It is interesting to note, however, that early in the study pupils identified as many visual issues as they did aural ones, with aural issues beginning to dominate in the weeks running up to the performance assessments and public concert. The reason for this is not clear. Given the recent research on the impact of using video for older students' performance analyses (Mitchell & Benedict, 2017; Tsay, 2013), it is interesting that my data suggests this particularly young age group is also capable of including visual reflection as part of the analysis of their own video performance.

While generalities were established by viewing the entire group of participants, personal trends surfaced by looking at the data per pupil. For instance, T2's propensity was to identify and discuss issues that she heard rather than what she saw, while Qp gravitated towards mentioning things that she saw more than what she heard.

T2: Layer 1			Qp: Layer 1		
	Listener	Observer		Listener	Observer
Total	40	30	Total	15	26

Figure 16: Pupil comparison

When reflecting, only a few pupils, such as T2 and X4, ever asked if they were to identify ‘good’ or ‘bad’ ‘things’ in their films. When this occurred, pupils were reassured that there was no correct way to comment, and that how they responded was their own choice. Such questions prompted a further breakdown of the data in terms of the positive or negative manner of pupils’ comments. When pupils spoke about focal points in a complimentary tone, expressed satisfaction or simply stated positive facts, these comments were categorised as favourable. When errors were identified or particular issues were stated as being less than satisfactory, they were depicted as unfavourable. The data for Layer 1 shows that there were more unfavourable than favourable comments.

Layer 1 (N=448)	
Favourable	Unfavourable
213 (48%)	235 (52%)
V3 – It was good I think. X4 – Well, there were good dynamics. Z5 – I am happy with vibrato and stuff.	U3 – I didn’t finish the end properly... W3 – ...shifting, it’s flat. Z5 – I don’t think the performer is kind of communicating.

Figure 17: Layer 1 favourable/unfavourable comments

Untangling this data further shows that when assuming the role of *listener*, students generally spoke about issues more favourably than unfavourably, but spoke about issues more unfavourably than favourably when referring to visual observations. Labelling comments as either favourable or unfavourable was a particularly useful exercise in understanding if pupils were developing a balanced approach to criticism.

Layer 1 (N=448)			
Listener		Observer	
Favourable	Unfavourable	Favourable	Unfavourable
140 (54%)	119 (46%)	73 (39%)	116 (61%)
R2 – It’s a clear sound.	T2 – I did the wrong rhythm.	X4 – My feet are grounded.	Z5 - I got backwards bowing and then I had to fix them.

Figure 18: Layer 1 aural/visual breakdown

4.5.2 Illustrations and reason

By examining the reasons and illustrations that pupils offered in support of their claims, a more contoured narrative was formed.

All pupils experienced instances when they could not immediately articulate their reflections clearly, but the majority were generally able to give reasons for their claims. When giving feedback on the filmed performances, occasions occurred when pupils paused or stopped commenting before either offering a new description, or discontinuing their commentary altogether, as seen with V3 below. However, others such as Z5 were resilient and persevered, even when they found the subject matter difficult to put into words.

V3 – It just looks, [silence] I don't know.

Z5 – At the beginning it strikes me that it seems very sort of, like it's harsh, but it suits the way the piece kind of goes...it doesn't really feel, at the start, like it's going somewhere, but it sounds kind of like a 'reverie' almost, and then the sound kind of seems like that, like you know, in the concerto it's definitely going somewhere, but this isn't, and it doesn't sound like its going anywhere, but it sounds right, in that sense. Do you know what I mean?

Pupils articulated their reasoning through different analytical modes. Some stated exactly 'what was' or 'what wasn't', while others described 'what they wanted', or 'what it could/should have been'.

R2 – I'm pushing down.

S2 – It wasn't as solid as it could have been...I don't really want it to kind of slide and I don't want it to be crooked. I want it to have a solid kind of sound.

T2 – It went well...it didn't whistle and go funny...

V3 – I should have done it faster.

Z5 – I think I could communicate to the audience more. Just looking at myself, I'm very much in my own bubble...I need to include the audience more...

When everyday language seemed inadequate, a few pupils used more theatrical ways of illustrating their ideas. They chose to use metaphors to describe concepts, or gave physical demonstrations in the air, as if to mimic playing the violin.

T2 – I was thinking I was on a cloud eating marshmallows dipped in chocolate...

U3 – Like it's not, da da da [demonstrating short stopped bows in the air].

4.5.3 Advice and solutions

The role of *advisor* was examined in terms of the solutions pupils proposed for tackling troublesome issues and for sustaining general progress. Although pupils assumed this role by their own volition throughout the FAP, I deliberately suggested they do so in the final moments of their lesson as a reminder to fill in the Practice Maps of Layer 4. When reflecting from the role of *advisor*, instances occurred when some pupils were unable to articulate advice or solutions of any kind, but most did formulate a response. Some of the pupils' reflections included advice on the types of actions needed going forward, while others gave advice that was less prescriptive. Regardless of whether pupils offered strategic steps or not, most participants could at least state clearly what areas demanded their attention. The exception was R2, who verbalised advisory steps only once during the study.

Qp – Try and do straight bows.

X4 – The shifting bits...I need to work on it again this week...

Y5 – The harmonics, the dynamics, and some intonation.

Advisory action came in the form of physical fix-it strategies, such as checklists of things to remember, a series of sequential instructions, or single-issue directives:

- check lists
 - U3 – Slow down. Play the right notes. Bigger dynamics, like louder when it's loud.
 - S2 – Starting off a bit slower, and intonation, 4th fingers. Remembering the 4th fingers, straight bows.
- sequential instructions
 - T2 – I could like, slow it down and try to do it, then gradually build speed.
 - X4 – Work on vibrato on long notes, then on some of the short notes.
- single issue directives
 - V3 – Start doing it in front of a mirror.
 - X4 – Do rhythm work.

Although pupils tended to formulate self-advice and guidance that was very direct and/or simplistic, they revealed a basic awareness of their responsibility to design and

participate, ensuring their weekly practice would be more effective. This self-efficacious process surely validates a claim to their ownership of that projected path (Claxton, 2008; Bamberger, 1991; Duckworth, 2006).

4.6 Layer 2: Peer Collaboration

The intention was to keep five consistent pairs of pupils together across the three sessions of Layer 2, but mitigating factors necessitated flexibility. At the last moment Qp declared her unwillingness to participate in this intervention, and T2, her appointed peer, missed the first session owing to illness. Positioning T2 with the other grade two pupils was an option, but having experienced the level of excitement that S2 and T2 can generate when in each others company, I felt it better to keep them apart for these sessions as a way of safeguarding pupil reflexivity. The decision was taken to form a trio consisting of T2, V3, and W3 (see Figure 19). I staggered their arrival times by twenty minutes to alleviate any scheduling issues, and also to ensure that a pair of peers was always functioning. However, all three pupils offered to attend these sessions in full.

Pairing X4 consistently with U3 was done on the grounds that no other grade 4 pupils were participating, and that these two were closest in age.

Except for T2’s absence in the first sessions, the remaining eight participants attended all three of the collaborative sessions.

Layer 2: Collaborative Peer Sessions		
Session 1	Session 2	Session 3
S2/V3	R2/S2	R2/S2
R2/W3	T2/V3/W3	T2/V3/W3
U3/X4	U3/X4	U3/X4
Y5/Z5	Y5/Z5	Y5/Z5

Figure 19: Layer 2 actual pairings

Data for the Peer Collaborative Sessions of Layer 2 were coded in the same manner as Layer 1. The performer and peer’s perspectives were also separated in order to form a comparison.

Which voice dominated during the FAP fluctuated across sessions, but the performer provided more feedback overall (see Figure 20).

Layer 2: Collaborative Sessions		
(N=299)	Performer	Peer
Session 1	40	47
Session 2	60	20
Session 3	62	70
Total	162 (54%)	137 (46%)

Figure 20: Layer 2 comments

4.6.1 Focal points

The issues that surfaced from the roles of *listener* and *observer* in Layer 2 were found to be identical to those in Layer 1, with one exception: neither the voice of performer nor participating-peer referred to the topic of rhythm.

Layer 2: Collaborative Sessions	
Focal Points As Listener and Observer	
Dynamics	Vibrato
Harmonics	General Impression
Note Accuracy	Correct Bowing
Phrasing	Facial Expression
Pitch	Gesturing
Shifting	Left Hand/Arm
Tempo	Right Hand/Arm
Tone	Stance
	General Appearance

Figure 21: Layer 2 Focal points

Since Layer 2 wove in and out of the other Layers midway through the study, dividing comments by session into the roles of *listener* (aural) or *observer* (visual) showed that the *listener* chair was slightly more active than the *observer* chair (see Figure 22). Significantly, pupils' reflections were more complimentary in Layer 2 than in Layer 1 (see Figures 23 and 17).

Layer 2: Collaborative Sessions		
(N=299)	Listener	Observer
Session 1	46	41
Session 2	51	29
Session 3	80	52
Total	177 (59%)	122 (41%)
	R2 – All the bows were really crunchy. S2 – There was a nice sound. Y5 – I liked the way she shaped it...	R2 – You know she's not always looking at the music. W3- My actions don't suit it because I am very stiff and it's a very lively piece.

Figure 22: Layer 2 aural/visual focal points

Layer 2: Collaborative Sessions		
(N=299)	Favourable	Unfavourable
Session 1	58	29
Session 2	43	37
Session 3	71	61
Total	172 (57%)	127 (42%)
	U3 – I like the start of it...Because I started off kind of quiet, and got louder there, and I like the vibrato there. Y5 – I think the way she performed that piece was really good.	T2 – There's a miscounting. V3 – I think I look a bit squashed.

Figure 23: Layer 2 favourable/unfavourable comments

4.6.1.1 The voice of the performer

In the presence of a peer, the data shows that performers (see Figure 24) were reflecting on their own performance films and providing similar comments to those in Layer 1. While performers gave more comments about aural issues in both Layers 1 and 2, the significant difference is that in Layer 2 these comments were more unfavourable than favourable.

Performer Comments				
162 (54%)				
(N=162)	Listener		Visual Observer	
	Favourable	Unfavourable	Favourable	Unfavourable
Session 1	7	14	4	15
Session 2	15	21	8	16
Session 3	11	25	3	23
Total	33 (35.5%)	60 (64.5%)	15 (22%)	54 (78%)
		93 (57%)	69 (43%)	
S2 – Uhm, well, the phrasing is nice...		V3 – I was a bit off key.	S2 – The moving is nice, when I am playing.	U3 – Body movement. I didn't move at all.
Y5 – I think the general tonality was good.		W3 – My harmonic sounds awful.	Y5 – The bow... I think the bowing was good.	V3 – I don't know, I kind of look, I don't know. Stressed or something.

Figure 24: Layer 2 aural/visual breakdown Performer

4.6.1.2 The voice of the participating-peer

The participating-peer's feedback provided an additional perspective to that of the performer's analysis. While aural issues also dominated peer feedback, their comments were persistently complimentary (see Figure 25). Of particular interest is the absence of any unfavourable feedback in the first two sessions. Any form of remedial or corrective feedback only surfaced in the third and final session.

Peer Comments				
137 (46%)				
(N=137)	Listener		Visual Observer	
	Favourable	Unfavourable	Favourable	Unfavourable
Session 1	25	0	22	0
Session 2	15	0	5	0
Session 3	39	5	18	8
Total	79 (94%)	5 (6%)	45 (85%)	8 (15%)
		84 (61%)	53 (39%)	
S2 – Well, it was in tune when she shifted up.		W3 – And most of the shifts are very good. There is only one that is kind of... Sorry	R2 – She is good at keeping her elbow in... she is keeping her bow straight.	T2 – I'm not like trying to be mean, but like you should put your violin down a tiny bit.
X4 – I like the vibrato at the end.		Z5 – I think... uhm, that you could maybe use a wider vibrato.	X4 – Her hand is good. It's not like turned in.	W3 – You look nervous.

Figure 25: Layer 2 aural/visual breakdown Participating-peer

These charts show that, while in the presence of a peer, performers gave more favourable comments about aural issues than visual ones, but that they generally spoke about their own performances in an unfavourable manner. On the other hand, when assuming the role of participating-peer, pupils also gave more favourable comments about aural issues than visual ones, but generally tended to couch their reflections in more favourable terms.

4.6.2 Pupil illustrations and reasons

The peer collaborative discussion that accompanied the FAP for each pupil's performance film was an integral part of this intervention. I was uncertain about the degree to which pupils would openly discuss, share personal insights, or provide verbal feedback (as *analyst*), but it now seems significant that pupils were willing to share their reflections about their own performances in the presence of a participating-peer. Though performers tended to identify errors, they also established the reasons that corrective action was needed.

- U3 – Well, it doesn't sound, kind of as 'whispy', like I needed to lean on the bow a bit more, it sounds better that way.
- W3 – I think I am playing quite lively, but uhm, my actions don't suit it because I am very stiff and it's a very lively piece.
- Z5 – Like that one, that one is nice. [In] Parts of it I was confident, like I stumbled over the bowing, the off the string bowing, like it was a car traffic jam. Kind of a build up crash, it kind of stumbled and then others kind of fell over.

In contrast, the feedback given by the participating-peers was predominantly complimentary and often expressed as accepted fact. Peer feedback acknowledged actions that the performers took, what they did or did not do, or stated a general performance impression, and was generally less descriptive.

- R2 – She knows it off by heart...When she goes into 3rd position it is really in tune.
- T2 – It's enjoyable. I liked it.
- Y5 – I like that part...just the way she plays it. It kind of like tells a story.
- U3 – ...the way she changed, what are they called? Sections? Like, she kind of blended them in together.

In an attempt to give greater clarity about their own performances, performers often seasoned their reasoning with words such as ‘tiny bit’, ‘quite’, ‘slightly’, ‘especially’, ‘almost’ and ‘usually’. Peer feedback tended to be embellished with only a few, but acute, degrees of things, such as ‘very’, ‘really’ or ‘always’.

R2 – She is always looking at her fingers.

V3 – The shifting is really good, and the sound is like really big.

Y5 – I think it’s like a really confident performance. And the vibrato is really good.
And the bow, it’s like solid.

Looking at the data in this way was deemed important because at the outset of the study pupils claimed to be comfortable with the idea of giving feedback, either as performer or peer. Performers seemed to be as descriptive in regards to their own performance as they were in Layer 1, but perhaps the more simplistic nature of the peers’ feedback was a sign that some pupils were finding it difficult to critically reflect on the performance film of another peer. That participating-peers’ accounts tended to be simple, positive and direct statements containing words such as ‘always’ and ‘really’, could suggest many things. Perhaps this was an attempt to help boost the self-critical performing-peer, or that the participating-peer had an underdeveloped ability to recognise or describe finer details. Despite the intent, these *finite* words restricted further discussion.

Although all participating-peers explained their thinking, only Z5 attempted to expose and elaborate her reasoning in depth. While perhaps not always entirely successful, her repeated efforts provided evidence to suggest that Z5 seemed to be listening, observing and evaluating performances with more sophistication, or that she was more willing to exercise her verbal skills in an attempt to refine and sharpen her focus.

Z5 – But I really like that, her control over the sound that she is producing, like at the beginning and stuff, is really solid and very clean, and she doesn’t like, like that bit [as opening theme starts again] just sounds so confident. And it’s like the opening to the piece that those notes, that it is really kind of like enforcing them and you know, ‘I know what I am doing, I know this piece!’

The extent to which participating-peers agreed with the performer’s descriptive reflections is unknown, but peers did display the ability to voice an opposing view or an

alternative perspective with supportive rationale. As Claxton (2002: 37) points out, pupils gain a greater breadth and depth to learning if they develop the willingness and ability to consider the viewpoint of others, and that even if they do not agree with them in the first instance, taking time to ponder those views may lead to new ideas or hunches.

[Performer] U3 – I don't think it has a mood.

[Peer] X4 – I think it has a mood, like it's really peaceful, like a lullaby.

[Performer] V3 – I don't look very confident.

[Peer] W3 – I think you do.

[Performer] V3 – I look all squished

[Peer] W3 – You look nervous, but you kind of look confident on your face.

[Performer] Y5 – No, I think it all sounds the same.

[Peer] Z5 – No. I don't agree. There is a sense of phrasing. She just needs to work on defining it a bit more...

4.6.3 Possibilities: advice or solutions

All pupils, whether in the role of performer or participating-peer, displayed critical thinking when contributing from the role of *advisor*.

Performers surfaced as *advisors* in two distinct ways. They not only formulated advice in response to my questions, but also interspersed strategies for improvement throughout their verbal analysis. While some pupils made broad statements for general improvement, instructions remained relatively non-prescriptive or detailed.

Performer recommendations in Layer 2 included:

- Issues or ideas to explore – things to do or try
 - V3 – Moving more, and then I have to practise getting faster at like my fingers. My violin looks a bit high as well.
 - W3 – I think I need more vibrato.
 - X4 – I could use more dynamics to make it, uh, more exciting.
 - Y5 – There are parts I need to work on, but most of the rest of it is ok.
 - Z5 – I suppose they could be slower. I could take more time.

- Actions to explore
 - U3 – Learn it off by heart.
 - Z5 – Picking it out, doing rhythms, backwards bowings.

Participating-peers rarely offered advice to the performer unless prompted. However, when peers did express recommendations they were generally descriptive physical and cognitive strategies.

Participating-peer recommendations in Layer 2 included:

- Physical (fix-it solutions)
 - T2 – Slow exercises.
 - U3 – ...just leave your bow on the string for a while, and then drop it slowly.
 - W3 – Listen to the beat of the music, and then just sway with it. Like gently at first and then get more pronounced.
 - Z5 – So if you slowed down the piece like temporarily and just kind of concentrate on vibrato, but then speed it up still trying to put vibrato in the right places.

- Cognitive (ways of thinking)
 - R2 – Pretend there is no one watching you.
 - T2 – Think of clowns.
 - Z5 – I think that if you really just, consciously think ‘I need to relax and do a wide vibrato’, until you don’t need to think about it as such any more. In the sense of, ‘I will do vibrato’.

Participating-peers were sensitive and courteous at all times. When offering or sharing advice on issues with musical or violinistic difficulties that they recognised, peers displayed a level of empathy, appreciation and compassion.

- V3 – Well, an easier way to do it is if your hand is out like that [indicating a straight wrist].
- Z5 – ...the first time, it just felt a bit short. It’s probably because I play it so long every time. It just feels short to me.

That participating-peers waited until the third and final session to begin suggesting areas for consideration, might be an indication that this age group needed to experience

the FAP in a collaborative setting across a longer period of time before feeling comfortable to verbalise their corrective ideas. This assumption seems plausible because of the apologetic nature of some of the more overtly corrective comments.

U3 – She’s just using the top...is she meant to use the top?

W3 – Is it very stiff?...I think all the rest of them were ok, except, just that one.

Z5 – I think, I am saying this probably because uhm, we are always mentioning my vibrato, but uhm, that you could maybe use a wider vibrato.

Thus far, this chapter has untangled pupils’ verbal reflections seen through the reflective chairs of *listener*, *observer*, *analyst*, and *advisor* through deductive analysis in order to establish a backdrop of pupils’ reflective engagement. Being the only two data sets that involved the use of audio-visual tools, they were presented in tandem. In Part 3 of this chapter I continue to look at these data sets by providing different narratives that arose as a consequence of engaging with the FAP.

Part Three

4.7 Moments of Learning: A Teacher’s Perspective

It seems to me that most instrumental teachers hold strong opinions regarding the courses of action their pupils should take in order to become better musicians. Clearly, each pupil presents us with unique challenges that demand our careful consideration as to how we formulate and communicate our ideas. Teaching and learning is like a 3D puzzle, and I find that helping my pupils to sort and connect the puzzle pieces of their musical journey is a fascinating and enriching process.

The attraction to action research is that it is always evolving, and its design acknowledges trust in teachers to create ideas and theory from within a whirlwind of reflection and action (Carr & Kemmis, 1986). I entered this enquiry knowing that the changes I was introducing into my studio for Layers 1 and 2 would change my role. However, I had little idea of how my pupils would engage with change as individuals, as team members, or if sets of peers would even collaborate. Although I assumed that

there would be some benefits, I remained open to the idea that not every change would impact teaching and learning in a meaningful or positive way.

Finding ways to present some of the data in order to answer the research questions were not always a straightforward exercise. Using the six musical chairs to examine the data, I have tried thus far to give a flavour of pupil engagement with the tangible issues brought to light during the FAP, their supporting rationales, and the strategies they suggested for going forward. However, interwoven through this data were a variety of significant narratives that emerged as a consequence of introducing video into the lesson environment, some of which have just been discussed.

The rest of this chapter explores data and themes emerging from observations recorded in my reflective journal as my students and I engaged with Layers 1 and 2. By highlighting specific moments of learning, for both teacher and students, this section attempts to provide the reader with glimpses of how the two environments encouraged student autonomy and facilitated pupils in becoming their own agents of change. As detailed in the methodology chapter, I kept a reflective journal throughout the research process, creating notes and reflections on the implementation of each layer within each pupil's lesson and, in the case of Layers 3, within the Group Sessions. My reflective entries were sometimes recorded as bulleted lists of expected or unexpected issues observed and at other times were written in the form of free flowing thoughts about how I remembered our reactions and interactions during those sessions. These reflective entries were a useful aid in uncovering, interpreting and tracking themes for individual pupils, and/or across sets of peers for these two layers. They also facilitated me in recording significant pedagogical interactions and moments of insight for further consideration during the analysis process. This is not a story that can be told in a linear fashion and the approach adopted here is to present a series of narratives, drawing on both my reflective journal entries and on the audio-visual material, to illustrate specific moments of learning, illustrating a range of themes that emerged from the research.

4.8 Getting started: Stepping Into a New Teaching Role

An overarching concern was that the jovial relationship I felt I had with each of my pupils should not be destabilised by encouraging them to verbalise personal reflections

each and every week. I endeavoured to create and maintain student-centred environments where pupils would feel at ease to work independently and/or collaboratively, and that would encourage them to make their own decisions (Brandes & Ginnis, 1986: 15). Although the film analysis process (FAP) placed participants at the centre of attention in a very new and different way than any were accustomed to, at no time did I ever feel that the FAP impacted negatively on our working relationships. As Layers 1 and 2 wove and advanced, we all experienced change. I noted in my very first journal entry that the body language displayed by some pupils suggested that reflecting on a video of their own performances was indeed a new experience, but I ‘quickly adjusted to offer reassurance when pupils backed away from the computer, fidgeted or periodically looked away’ (Journal entry week 1). During the early weeks pupils gave ambiguous one-word answers, very short phrases with words such as ‘stuff’ or ‘kind of’ (Journal entries week 1 and 2), and though such responses were not found to be age dependent, they necessitated that I continually ‘probe in order to gain greater specificity’ (Journal entry week 1).

Journal entry

week 2 – I half expected to find myself needing to encourage the younger, or more quiet pupils, as they described what they were hearing or seeing, but I was not expecting the more talkative pupils like Z5 or T2, to give short one word answers, or responses that were shy of description...the questions that I repeated constantly this week were, ‘why?’, and, ‘Can you describe what that *stuff* might be?’

4.9 A Matter of Questioning

I was constantly aware that timing my questions was critical. If the interval between questions was too great, then the quantity of data collected might have been somewhat thin. Conversely, if questions were asked in quick succession, pupils may not have had adequate time to formulate their thoughts before responding. As we adjusted to our new roles I learned to time my questions with greater care, and the result was that as pupil responses became more descriptive my internal urge to interject with analysis subsided.

Journal entry

week 5 – ...a flow is appearing between when and how I ask questions to when and

how pupils are responding...sometimes they seem to enter into a type of describing mode before they have even told me what it is that they are describing...this alters my own *mode* of questioning...

I observed ‘no marked difference in the way individual pupils interacted with the FAP’ (Journal entry week 6) in Layer 2 compared to their engagement in Layer 1. Pupils seemed comfortable to evaluate their own films in the presence of a peer, and to comment on the performances of others. As in Layer 1, I noticed that ‘pupils were polite and participative at all times when giving or receiving feedback’ (Journal entry week 9). Our roles fell into a working rhythm of collaborative teamwork in both of these Layers. While our engagement provided insights into what pupils thought most pressing to examine, it also gave me a clearer understanding of their performance aspirations. Throughout the FAP, pupils were providing me with food for thought.

4.10 Voice of Silence or Uncertainty

Journal entry

week 5 – ...again, some pupils sat mesmerised by their films at times, offering no response to my questions ...

As previously stated, all pupils provided verbal responses, but due to the invisible complexity of reflection it is highly probable that many instances of pupil reflection went undetected. It would be incorrect to assume that pupils experiencing silence or uncertainty were not actively participating; indeed such moments warrant signposting because of the possible link to internal enquiry and reflection (Duckworth, 2006: 67). I also acknowledge that such moments may have been captured only because of my questioning tactics, since it often encouraged pupils to think deeper.

Journal entry

week 9 – ... since the project began, all my entries mention moments when pupils sit quietly, or unresponsive to some of my questions...after a question, and a few moments to think, some simply say ‘I don’t know’, but I don’t get the impression that they had given up because they still intently carried on viewing their films...

Pupils occasionally fell quiet after being asked a question, uttered an uncertain ‘uhm’ that trailed into silence, or stated, ‘I don’t know’ after pausing (see Figure 26). Such responses were not routine, but were interpreted as the pupil’s recognition of the fact that they were confused, did not possess the necessary language, or that they needed more time to reflect. I also suspect that these remarks indicated that pupils were processing, sorting, or gathering information to reflect with. All of these things signify a potential space for personal growth (Duckworth, 2006: 79), and moments where significant learning could be taking place. Though pupils may have experienced such moments when working in pairs, these would have been outside the scope and remit of Layer 2.

Layer 1		
	Silences	Uncertainty "I don't know"
Qp	9	9
R2	5	5
S2	14	8
T2	16	31
U3	15	8
V3	5	9
W3	3	1
X4	12	5
Y5	4	2
Z5	7	7
Totals	90	85

Figure 26: Silence and Uncertainty

4.11 Voice of Enquiry

‘Uptalk’, a recognised modern phenomena described as a rise in vocal pitch at the end of a stated fact as opposed to asking a question (Warren, 2016: 1), was not observed within this group of participants. However, I noted that some responses were posed with a questioning inflection or enquiring tone across both Layers 1 and 2.

Journal entry

week 5 – ...I am noticing that pupils (not all of them) state some of their responses in question form. This was a real surprise because I had never noticed this prior to this project (without video) - when asking questions. Do they not trust their own judgement? Or, are they reliant on my opinion and diagnosis? Or

are they trying to collaborate? Perhaps it is a way of exploring reflection...

Pupils' responses seemed to seek clarification, confirmation, an additional opinion, or give voice to the pupil's own speculations.

- Clarification

[Layer 1, week 1]

T.R. – What did you hear?

X4 – What do you mean like?

[Layer 1, week 2]

T.R. – What did you hear?

T2 – Good or bad?

- Confirmation

[Layer 2, session 3, Peer]

Z5 – ...and do you know the bit we were talking about with me and this whole 'conversation' thing? If you lifted between the little groups, in the sense of making it like two people, because, do you know what I am saying?

- Opinion

[Layer 1, week 3]

R2 – Am I too fast there?

[Layer 2, session 2, Peer]

V3 – Oh, was the low one suppose to be high?

[Layer 1, week 2]

Z5 – ... I mean... Is there anything you feel I should [do]?

- Speculation

[Layer 2, session 1, Peer]

T.R. – How does she do that?

R2 – Uh...with her bow?

[Layer 2, session 1, Performer]

T.R. – Is there anything else this piece needs?

W3 – Make it more lively?

[Layer 2, session 3 Peer]

T.R. – What does one do to not slide over the bridge?

Y5 – Have her bow tilted and closer to the fingerboard?

The most common form of pupil enquiry was that of a speculation: a query rooted in some form of prior reasoning with knowledge attached. This was often used when pupils were attempting to formulate advice or ideas to explore.

Since the FAP was a new activity for all participants, I interpreted all forms of enquiring inflections as a sign of active enquiry (Claxton, 2018; Duckworth, 2006), displaying a willingness to explore by being resourceful and resilient (Claxton, 2002). As the weeks passed, I interpreted such moments (see Figures 27 and 28) as an indication that pupils were becoming confident to ask for clarity, to revisit issues, to seek the opinions of others, or to speculate new paths for inspection, rather than retreating or acquiescing out of convenience.

Layer 1 Voice of Enquiry	
QP	15
R2	3
S2	0
T2	36
U3	3
V3	0
W3	3
X4	10
Y5	3
Z5	13
Totals	86

Figure 27: Layer 1 questions per pupil

Layer 2 Voice of Enquiry		
Session 1		
	Performer	Peer
Qp	n/a	1
R2	0	0
S2	0	absent
T2	absent	1
U3	0	0
V3	1	0
W3	2	0
X4	0	0
Y5	0	0
Z5	1	2
Total	4	1

Layer 2 Voice of Enquiry		
Session 2		
	Performer	Peer
Qp	n/a	n/a
R2	2	0
S2	1	0
T2	3	0
U3	2	0
V3	0	0
W3	0	0
X4	2	0
Y5	0	0
Z5	0	0
Total	10	0

Layer 2 Voice of Enquiry		
Session 3		
	Performer	Peer
Qp	n/a	n/a
R2	3	5
S2	1	0
T2	2	0
U3	1	3
V3	2	2
W3	1	2
X4	3	1
Y5	0	1
Z5	3	2
Total	16	16

Figure 28: Layer 2 questions per pupil

It could be argued that dissecting pupils' responses in this level of detail was unnecessary, but I maintain that encouraging curiosity and reflection was central to this enquiry. It might also be argued that pupil enquiry was the result of copying teacher enquiry (Meissner, 2017; McPhail, 2013; Burwell, 2005). However, when pupils launched a platform for enquiry I was faced with a variety of options. I could 'simply provide the requested information, state my opinion, and suggest alternatives for future consideration' (Journal entry week 7), all of which would have the effect of closing off the enquiry, or shift into a role that would guide pupils to continue reflecting. In these instances I preferred to do the latter, and maintain that these inviting and potentiating environments had provided the necessary safety within which pupils could exercise their powers of enquiry (Claxton 2018, 2008; Claxton & Carr, 2004).

4.12 Guided Reflection

Journal entry

week 7 – ...some commentaries that pupils are providing are underscoring their lack of knowledge in some areas...perhaps they are no longer aurally engaged when they miss obvious intonation errors, but centred only on the visual...these moments are becoming useful opportunities for me, to subtly redirect their attention through simple questions, but I am noticing that it does need care on my part no matter the personality or ability of the pupil...

A salient component of my role was to find ways of nurturing pupil autonomy, and to be what Vygotsky (1978) called a 'significant other'. While I viewed moments of pupil silence, uncertainty, or enquiry as open invitations to assume such a role, many situations needed creative manoeuvring on my part. Pupils' responses primarily fuelled the FAP process, but when they did not suggest areas to explore, missed important issues, or if their investigation stagnated or derailed, I adopted the roles of model, corroborator, or guide. Through these roles I could prompt or encourage pupil reflection in order to steer them towards making discoveries themselves.

A clear example occurred in Z5's lesson in week two. As she analysed her film, Z5 identified general improvements in line with what she had written on her practice map, but being so intently focused on these areas Z5 kept missing what I thought was an area

of concern in her performance. Setting the film to loop on a particular section, I used very simple and direct questions in conjunction with the video that guided Z5 to establish the missing link herself.

- T.R. – Tell me what else you see.
Z5 – I think the vibrato is improving, because it's like a good swing on it. Like there was wide moving in it...
T.R. – Yeah... that top note?
Z5 – Yeah that's about... [a long pause and then silence. The film loops a section containing the error]
T.R. – What did you hear with the vibrato on the top note?
Z5 – It's not, it's that... that it doesn't have enough vibrato.
T.R. – Ah... so what do you have to do for that?
Z5 – Uhm... pick it out and... [silence]
T.R. – What did you hear on that note?
Z5 – It wasn't as... it skidded a bit.
T.R. – Ah! That wasn't your vibrato.
Z5 – It slid as well.
T.R. – It did? What slid?
Z5 – My finger.
T.R. – Was it your finger? [still repeating that section of the film]
Z5 – Oh, my bow!!!! OOOooooooo, oh my gosh! [repeating the section again]...
It's gone right over the bridge!

The simplistic approach and significance of guiding Z5's discovery is exposed in the transcript, but perhaps the stronger narrative here is that this approach allowed me to model reflective enquiry by continuing to probe and ask questions.

While it was important for pupils to recognise troublesome areas, it was equally important for them to recognise, explore, and talk about why things were good. I wrote in my journal entry on week two about 'seizing every opportunity to model this form of reflection in the hope that pupils would begin to understand that greater awareness and deeper understanding is more likely to grow from exhausting all possibilities', even in areas not immediately considered troublesome. The opportunity to model such reflection occurred moments later in this same session with Z5.

- Z5 – I try to contrast the middle bit where it's kind of piano... I think that worked

- quite well.
- T.R. – Are you talking about this part? [I find the section in the film]
- Z5 – Yeah.
- T.R. – Lets hear it again. [letting that section loop over and over] What did you do to make such a nice contrast?
- Z5 – I changed my attitude towards it?
- T.R. – Watch, and something else [section of film continually loops] Look at your technique. There is something about your technique that totally supports it.
- Z5 – It's very kind of 'Airborne' a bit.
- T.R. – Yeah, but what makes that?
- Z5 – Lighter? [Z5 leans closer to watch the film]
- T.R. – Who makes it lighter?
- Z5 – My bow.
- T.R. – And look at your bow. What does she do? [Z5 sits silent watching this section loop several times without making the connection to what is going on with her bow] You can see it. [Suggesting that it is a visible movement to identify]
- Z5 – I don't know [a long pause] Oh, it's near the fingerboard?
- T.R. – Yes, it's your sounding point. Look at her! It's so beautiful. What does she do?
- Z5 – She just moves up a bit. [Spotting the change of bow placement towards the fingerboard]
- T.R. – Yeah, why does she move towards the fingerboard?
- Z5 – To achieve an effect of, kind of quieter.
- T.R. – There you go... you are in total control of the colour you want by your sounding point, your placement. Actually, actually look at the tilt of your bow. [The same section still looping]. Did you see it?
- Z5 – Oh yeah it just kind of, tilts.
- T.R. – Tilts away, so you have less hair, so you have a softer sound...

While both of these scenes, highlighted in my reflective journal, show different moments of learning, they reveal the utility of both the video and my role as corroborator, model, and guide in encouraging Z5 to reflect beyond the obvious. Adapting my role in this way right across the study encouraged pupils to reflect deeper, in more detail, and embrace the possibility of taking full ownership of their learning.

4.13 Ownership: Independent Discoveries and Awareness of Change

Not all discoveries that pupils made were a result of my guidance, and my reflective journal entries record instances of interactions showing increasing independence and autonomy on the part of my pupils. At times, pupils readily admitted that they had previously been unaware of certain observations, although I sometimes asked them to confirm whether or not their observations were new. Determining how many issues were unanticipated was never my intention, since collecting that information may have stifled their reflections. The important finding was that ‘pupils were making new discoveries independent of my guidance’ (Journal entry week 2), suggesting pupil appropriation was a consequence of the FAP. Pupils were using these tools, and seemed to be silently signposting ownership of their learning.

[Layer 1, week 1]

R2 – I could hear other strings when I was playing.

T.R. – Did you not know you were hitting other strings when you were playing?

R2 – No.

[Layer 1, week 1]

T.R. – Is there anything that stood out to you?

T2 – My mouth...My mouth was twitching...I never noticed it before.

[Layer 1, week 2]

V3 – ...I just thought that the violin looked kind of up a bit.

T.R. – Did you know it was like that?

V3 – No.

While the quotes above show that ownership of learning was taking place independently, this was also apparent when pupils’ awareness of change was embedded within their comments. The point at which pupils commented on noticing change was normally after viewing the film for the first time, and before any form of questioning started.

Journal entry

week 3 – ... even though some pupils were still settling into reflecting on their films, some jumped into mentioning changes straight after the film had finished...

Journal entry

week 6 – ... comments suggested that pupils are getting the hang of noticing:

- things sounds different
- things are getting better
- things they need to do

Journal entry

week 12 - ...right off the bat, W3, Z5, and T2 began speaking about what they were noticing had changed, or needed work, almost immediately as their films began to play. I wonder why they were compelled to speak straight away...

When assuming the role of *analyst* in Layer 1, pupils mentioned specific issues that had changed, the exact cause of the change, and used previous performances as a means of comparison.

T2 – The harmonic was better...I think I have improved full stop, like in the way I look, instead of looking all like small and nervous...

W3 – It's really improved...my arm isn't as stiff as it was last week.

X4 – It's improved, than like, even last week.

Comments about noticing a change in the way they performed were generally positive. Only two pupils commented mid-way through the study that the piece that they had chosen to perform during the week had regressed or remained unchanged.

V3 – It's terrible.

U3 – It didn't improve.

Change, or the lack of, was not always as clearly voiced in Layer 2. It 'did not seem appropriate in these sessions to continually ask if pupils were aware of change' (Journal entry week 4). However, the way in which the pupils spoke about their endeavours to improve revealed an awareness of both achievements and issues needing further attention.

[Layer 2, session 3, Performer]

S2 – Vibrato...I used a lot of it...yeah, it's something I had been working on.

[Layer 2, session 2, Performer]

Z5 – ...there are things that I have like, accomplished in the sense of like, I can do them, but then it also kind of highlights what and like where I need to work.

It was when pupils voiced their own awareness of change that I took the opportunity to corroborate their observations or probe deeper, and in so doing acknowledged the pupil as the most important agent of that change, as shown here with Z5 during the second week of Layer 1.

Z5 – I think the start is coming on.

T.R. – How?

Z5 – In that the... it's very solid, and kind of ...[pause]

T.R. – I agree with you. Go on, tell me more.

Z5 – It feels like I know what I'm doing, in that kind of way. It feels very grounded.

Teachers reasonably assume that change is often inevitable, but I suggest that the probability of pupils noticing changes in their performances was greatly increased because of interacting with an audio-visual tool and discussion.

4.14 Managing the Environment

A sense of pupil appropriation emerged as a result of providing pupils with opportunities to notice, monitor, and discuss issues that they were endeavouring to change. I noted in my journal on several occasions (weeks 3, 4, 6, 7, 9, 12) that, as pupils rotated between the reflective roles 'they never hesitated to use the film as a resource to support and affirm their reflections' (Journal entry week 12), direct the course of engagement, or to acknowledge issues under development.

[Layer 1, week 3]

T.R. – How did you think it went?

X4 – It was ok, but uhm, I see what you mean that it's high in the bow and I'm stopping in between the ...[silence...the film is moved to the spot X4 is talking about]

T.R. – You weren't aware of that?

X4 – No.

[Layer 1, week 12]

Z5 – [As the film begins Z5 begins the discussion] See what I mean? At the start.

T.R. – What’s wrong?

Z5 – My harmonic didn’t sound.

[Layer 1, week 12]

T2 – [As the film repeats for the second time, T2 begins the discussion] My bow.
Sometimes it is bouncing.

T.R. – And you don’t want it to bounce?

T2 – No. It crash-landed. See?

T.R. – Oh my goodness! So talk to me.

T2 – It bounced. Well, in this performance it did, a lot. Oh, and there, wait... [T2 manipulates the film to play a few bars repeatedly] There. I did the wrong rhythm.

While working on personal goals that they had set for themselves in Layer 1, it was encouraging to observe pupils ‘using Layer 2 to monitor and explore these issues further’ (Journal entry week 4). These actions not only signalled the importance that pupils placed on their goals, but also that they were willing to be resourceful and resilient in their approach to learning about them (Claxton, 2002). My reflective journal entries on Layer 2 also record how I witnessed pupils screening the performances of others through a similar lens to the one they were using for themselves in Layer 1. This was particularly obvious in some instances when ‘the participating-peers’ very first comments to the performers were unequivocally linked to their own learning directives or improvement goals’ (Journal entry week 4) that were expressed in Layer 1, or those written on their Practice Maps of Layer 4 (see Chapter 6). Examples of such can be seen with R2, whose personal goal was to improve bow control, and S2, whose main concern was to find ways of improving her quality of tone, dynamics and accuracy of intonation.

[As participating-peer]

Layer 2, Session 1: R2 – She is keeping her bow straight.

Layer 2, Session 2: R2 – She is using really straight bows.

Layer 2, Session 3: R2 – She doesn’t have a locked elbow.

Layer 2, Session 1: S2 – Well, it was in tune when she shifted up...

Layer 2, Session 2: S2 – There was a nice sound, and it’s in tune...
the shifting is in tune as well.

Layer 2, Session 3: S2 – The tone was really nice...and there was dynamics.

Unless the participating-peer candidly linked the feedback they were giving the performer to their own personal learning goals, only the participating-peer and I knew of these goals. However, many pupils voiced such connections, which I interpreted as a signal of ‘their willingness to share and empathise with their peer, but also as a sign of their willingness to use this collaborative approach for exercising and asserting’ their discernment skills (Journal entry week 4).

[Layer 2, Session 2, as participating-peer]

W3 – ...the choppy bow kind of thing. I can’t do it. It’s really well in tune, and she doesn’t have sticky fingers like I have.

[Layer 2, Session 3, as participating-peer]

Z5 – Unlike me, she didn’t uhm, kind of do the thing of going over the bridge on the long note...she controlled her bow.

4.14.1 Pupil as educator

Journal entry

week 5 – The persistence and tenacity of some pupils to dig and hunt for things in their films is starting to surface more often now. It was particularly delightful to witness T2’s obvious display of willingness and ability to be her own ‘teacher’ this week ...like others, she seized the moment to really *use* her film...to find resolve for an error that she identified rather than me.

During these Layers I observed how the pupils’ reflections fuelled conspicuous displays of resiliency, reciprocity and resourcefulness that can be detected throughout these data sets. I argue once more that this was because of the opportunities for pupils to see, hear, and discuss (Claxton, 2002) a representation of their performances or those of their peers. Although some pupils were more talkative than others, none gave the impression of feeling coerced into providing verbal responses. I noted in my journal how pupils exhibited different degrees of curiosity when exploring their performance films or those of their peers, and how they all put the video tool and my facilitation to constructive use. As such, many instances seemed to suggest to me that pupils were stretching themselves

into the role of educator, and I have chosen to illustrate this finding through a few narratives.

4.14.1.1 Snapshot 1: education by persistence

This first snapshot was chosen to display how one pupil utilised Layer 1 to satisfy her own curiosity and enquiry, but also how our collaboration was exploited.

I knew T2 to be energetic in the company of her peer group, but she was never overtly talkative in the context of our one-to-one weekly violin lesson. T2 did not provide lengthy responses in either Layer 1 or 2, yet I observed her assert her developing sense of agency many times using the video, and asking questions to satisfy her curiosity.

Sitting side by side in front of the computer during week five of Layer 1, T2 and I observed in silence until the start of the developmental section in Manhire's *Caprice* when T2 identified an error, then gave what she thought was an acceptable description. Because of my simple enquiry as to the cause of the error, T2 started on an investigative journey that displayed her persistence to find a resolution.

It was T2 who launched our discussion.

T2 – It went a bit ...

T.R. – What went a bit?

T2 sets the film to play the section containing the error again, and we listen one more time.

T2 – Intonation...I hit the wrong string.

I set the film to repeatedly play the section with the error if either of us tapped the computer mouse.

T2 – I don't know.

T.R. – Ok.

T2 – To me...[voice trails off]... Can you see how it happens?

T.R. – I can see how it happens.

T2 – I don't. [said in a puzzled voice as she taps the mouse to play the section again]

I was conscious to use the same terms as the pupils, so while I agreed with T2 that I saw something, I did not yet know if T2 actually meant to link this aural observation to something visual. In order to make this distinction, I subtly steered a few questions in such a way that T2 focused on both visual and aural issues. After the film had looped the error a few more times, I again asked T2 about its cause.

T2 – My hand.

T.R. – Which hand?

T2 – Right.

T.R. – What does your right hand do?

T2 – It went, like, a trained bow, you need to move your right hand so... [voice trails off]

This response showed that she had indeed been critically thinking, analysing both aurally and visually. Her original assumption about faulty intonation had now developed to include the bow hand. She was using her time to expand her perspective and explore from different viewpoints in this investigative environment.

As her voice trailed off into silence twice, my next questions attempted to play along with her line of enquiry.

T.R. – What type of bowing are you doing there?

T2 – Slurred.

T.R. – What speed is it?

T2 – Ahhh... [in an uncertain voice] Slow? I don't know. Slow?

We took turns tapping the mouse to repeat the section needed as our question and answer engagement continued, very much like the game of 'Tag'. Although I had been giving her subtle hints through a long line of questions, T2 stated after a while that she still could not determine what caused the error. I decided to provide her with one more concrete hint in the hope that it would help her pinpoint the cause herself, but as I attempted to speak T2 energetically blurted out an idea:

T2 – Tension!

I was delighted with T2's outburst because it confirmed that she was not ready to give up. While I could have encouraged her to elaborate what she meant by 'tension', I felt she needed more time to reflect. T2 sat for a short spell absolutely transfixed to the screen. I eventually interpreted her silence as an indication that perhaps no further information was forthcoming, then asked if there were other issues she was noticing. T2 named a rhythmic issue, but immediately jumped back to comment on her earlier error, signalling that she was not ready to be diverted to other issues, and that she had not given up but had been silently and independently investigating. She needed time.

I refrained from questioning for a few more moments as T2 turned away from the film and started bowing in the air with a puzzled look on her face.

T2 – [shouting] Wait! [Bowing in the air, T2 paused, then sighed] I don't know.
T.R. – What are you trying to figure out?

Neither of us tapped the mouse for the film to repeat, and it continued to play well past the error. T2 sat watching until a few bars before the end, and then suddenly turned to me with eyebrows raised and confidently made an all-knowing statement:

T2 – It's my elbow!

She re-started the film to an earlier point, and as we both awaited the approach of the section with the error, she confirmed her idea.

T2 – It's my elbow.
T.R. – Let's watch her again, it could be.

We allowed the section containing the error to play a few more times, both watching in silence, after which T2 stated that she now doubted her claim.

T2 – No.
T.R. – No what? It's not your elbow?
T2 – No. [pause] ...is it?

T2 leaned forward to look at the computer closely, taking a few minutes to view a longer portion of her film. I took the opportunity to point out successes that she had not

yet acknowledged, and an area she might consider during her week's practice, and on each point T2 gave considered remarks before quickly diverting our attention back to the initial error. She was not giving up. At one stage T2 accused me of knowing the reason for the error, but never relented in trying to solve it herself. While she was quite willing to accept that I knew the reason behind her error, her tactic was to only seek my confirmation of ideas that she periodically posed. I suspected that this was a sign that she was prepared to continue investigating until it resulted in her own reasoned deliberation. This assumption was confirmed when, after confessing again that I did have my own idea behind the error, her vigour to find the solution seemed to be charged with new energy.

T2 – You know!

T.R. – I do know. Tell me, what is happening? Can you describe it to me? Exactly what do you hear?

T2 – A bur in intonation.

T.R. – Is it only a bur in intonation? Listen to what your bow is doing.

T2 – It jerks! I don't know. Is it when I change? Is it? Is it? When I change? My bow is crooked? I don't know!

T.R. – What finger does it happen on? The exact note.

T2 – The fourth. It's blurry and weird and, it's changing string.

At no time did T2 directly ask for me to tell her what it was, why, or challenge any of the suggestions I posed for analysis. Throughout this session T2 speculated, voiced ideas, asked for clarity, opinion, or knowledge while setting the film back to repeatedly play the section with the error, and then continued to reflect.

It took T2 another few minutes, but she did formulate a reason for her error. What matters here is not so much what her reason was for the error, but that through insistent deliberation she had created her own rationale, which incidentally made sense to us both. From my teacher's perspective, it would clearly have been easier to simply tell T2 the reason for her error and provide a solution. Perhaps many instrumental teachers would have used such an approach in this instance, but I question who would have benefitted more and in what way. T2 was successful in managing the environment to satisfy her own curiosity.

Whether or not pupils would have participated to the same extent, or have come to the same conclusions about their performance videos in Layer 1 had I not been present to collaborate and facilitate their reflections, is unknown. However, I suspect that, like mine, their perspectives widened and became more detailed because of our engagement, and T2's story can be seen as evidence to back such a claim. Facilitating and working with pupils' reflections provided me with an insight into their view of things, through their lens (Duckworth, 2006; Bamberger, 1991), in part by my questioning, but also by the use of video. Video allowed me in my role as teacher to shed authority. Video became the authority, one free of bias, opinion, and judgement. As such, both the pupil and I entered this Layer on an equal footing, and we entered to run around as enquiring companions, to learn with and from each other.

By taking a few moments of their lessons to facilitate performance and its analysis through an enquiry-based activity, I experienced moments when pupils took complete ownership of their learning. It is a claim supported by narratives like this one of T2, from her display of determination, resilience, and persistence when exploring and solving a topic of her choosing, to her resourcefulness at utilising the learning tools that this holistic environment provided. Although many reflective roles are visible in this snapshot, the reciprocal and democratic nature of our engagement is clear. This environment was a safe space for T2 to willingly listen, look, illustrate and reason, pose possible solutions, and to engage the active processes of learning in an educational experience (Claxton, 2018, 2008, 2002).

4.14.1.2 Snapshot 2: education by adjusting a personal perspective of enquiry

As indicated above, my reflective journal entries suggested that pupils used Layer 2 as an additional space to stretch their learning. I began noticing that some pupils adapted their learning lens in order to continue 'exploring personal issues through their own performances and those of their peers' (Journal entry week 4). However, unless supported by verbal contributions, the view through this lens was not as easily observed in Layer 2. From my observations I surmise that along with my role, the voice and viewpoint of the participating-peer was a driving force for pupil reflection, but reiterate that with one more companion in this Layer there must have been times when reflections were either left unheard and unconfirmed, or unchallenged nor developed. Throughout Layer 2 the FAP made numerous investigations transparent, but I also

suspect that many individuals were conducting less obvious enquiries, though no less important, supportive of and prompted by peer feedback. Although this was a busy Layer, I certainly did observe less conspicuous investigations taking place.

I will use T2 again in a second snapshot because it provides an enlightening view of how one pupil engaged during another Layer. Even more than her verbal contributions, T2's physical actions displayed her increasing autonomy, and particularly her appropriation of resilience and resourcefulness. 'She seemed to be using a lens of enquiry to reflect on her peer's film' (Journal entry week 6).

Journal entry

week 6 – T2 just doesn't give up... I just found myself silently giggling this week because regardless of what V3 and W3 were discussing, T2 was going to undertake her own investigation of V3's film...but others were doing this too. Each reflected from different standpoints, though they were often in agreement...at some stage they all seemed to spot and follow different things in their peer's film...

Due to a lack of available pairing, T2 joined V3 and W3 to form the only trio in the collaborative peer sessions of Layer 2. These sessions consisted of each pupil filming a short piece, followed by its analysis through a collaborative effort. During the second session, I observed T2 manipulating her time within this environment to oscillate between her own investigation and a reciprocal investigation with her peers. While collaborating in the FAP of V3's film, T2 periodically seized the computer mouse and began to manipulate the film until she found something to support a previous comment, or an idea that she was about to contribute. The concurrent discussion of V3's film between V3, W3 and myself did not seem to distract T2 in any way. She was able to make the occasional contribution as she continued browsing the film.

As we saw in the previous snapshot, T2 seemed to stretch her ability to improve her learning in a kind of feedback loop during Layer 1 by asking me numerous questions, but in this environment she chose to investigate silently and independently, never asking a question. Her responses were few, and came in the form of brief additions to a peer's comment, or as the result of finding a spot in the film that she wanted to draw everyone's attention to. Perhaps T2's abstinence from asking questions and her silent

investigative approach were out of courtesy to others, but I suspect that her independent engagement had two motives: firstly, it may have provided the opportunity to satisfy her own curiosity, or to double-check any hunches she might be formulating; secondly, for her contributions to hold value in the collaborative discussion, perhaps she felt they needed to be substantiated by gathering information and evidence, and by checking her facts first. I interpreted T2's actions to be visible demonstrations of agency by her willingness and capacity to readjust and use her learning lens in a different environment. This demonstrates the potential for a collaborative environment to be moulded by pupils for their needs.

4.14.2 Recursive learning

Earlier in the chapter, data revealed the general nature of the performers' and participating-peers' engagement during Layer 2 through the six reflective roles (musical chairs or lenses), but, because pupils were willing to engage in a reciprocal manner, moments occurred when they 'intentionally or inadvertently stepped into the role of collegial educator' (Journal entry week 9). Just as I observed the feedback from peers educating others with new knowledge or insights, these next snapshots show the educator becoming educated because of their own reflexivity. Hence the spiralling feedback loops. This recursive learning self-evidently extends to me, the teacher-researcher, as insight and thus expertise is gained.

Journal entry

week 9 – I am certainly learning from my pupils. To know that they are willing and able to explain concepts to each other, that they can offer advice or new ways to think about things, as *educator*, is informing how I have started viewing their role, and I hope, how they are beginning to view themselves. That pupils listen to, and perhaps accept, what each other say is uplifting. I have witnessed them assume the role of educator, and become the *educated*...

4.14.2.1 Snapshot 3: reciprocal education

Layer 2 became an environment in which pupils could learn from each other by assuming both the role of learner and educator (Green, 2008, 2002). T2 was critiquing her own film in collaboration with V3 and W3 in the last of the Peer Collaborative Sessions of Layer 2, when she identified an unarticulated harmonic. Not having yet

encountered harmonics in her repertoire, V3 began asking T2 questions as they continued reflecting on the film. Their discussion took on the form of a tennis match, with V3 asking questions and T2 providing informative responses, until V3 was satisfied that her knowledge bank on the issue had been adequately filled. T2 shared her knowledge of what a harmonic is, how to correctly articulate it, and why she had not. Both pupils seemed quite comfortable and confident in their roles, with V3 willing to seek peer assistance and T2 willing to provide it, leaving no reason for me to interfere.

4.14.2.2 Snapshot 4: coincidental education

It was often obvious when pupils assumed the role of educator, but sometimes I witnessed pupils inadvertently stepping into this role by simply answering one of my questions with no knowledge of who their reflective insight was educating, or how profound that education and learning would become. The potential power of peer feedback in bringing about greater awareness is illustrated in this next scene.

Unknown to V3, W3 had a longstanding goal of increasing the amount of bow she was using for one of her slower pieces. During the second collaborative session, W3 did not catch sight of her own improvement in this area until V3 started answering my questions as to why she thought W3 had captured the character of the piece.

[Layer 2, session 2, Performer: W3, Participating-peers: V3, T2]

T.R. – How does she move her bow to capture the style?

V3 – Long bows.

W3 – Oh my god I'm doing kind of long bows. I never noticed.

T.R. – Have you just noticed you are using long bows?

W3 – Yeah. Everyone was telling me to do it. My mom is always like, 'longer bows' and I'm like 'I can't'...I am very proud.

T.R. – And you weren't aware of that?

W3 – No.

Though this scene is very innocuous, the capacity of peer reflection to educate is clear. Two words from V3 alerted W3's awareness of her own goal being achieved. The depth of W3's learning, and how she had set about to achieve her goal were not explored at this time, but its acknowledgement was an assurance that her effort and actions were yielding positive results.

Instrumental learning and education revolves around discovering about and how to do things, but it is also important for pupils to recognise when they have achieved things. Perhaps encountering another visual lens of a peer would encourage W3 to readjust her own visual lens of enquiry in future. Here though, clarity and variety of observation was the key.

4.14.2.3 Snapshot 5: reflexive education

The role of the FAP encouraged individuals to investigate ways of tailoring their own experience of learning, while collaborating with a peer offered a means to experience learning from an alternative viewpoint. Some pairs were working on the same repertoire at that time, while others brought unfamiliar repertoire or pieces that their peer had studied in the past. No control mechanism was engaged to ascertain the extent to which pupils may have been influenced by having knowledge of a piece about which they were receiving or giving feedback, but nevertheless I observed pupils benefit from flexing their analytical and advisory skills, both as observer and the observed. This last snapshot shows Z5 engaging in the challenges of verbalising her learning, and in so doing becoming her own reflexive educator.

During the last of the Peer Collaborative Sessions, both Y5 and Z5 chose to play the same short work by Fritz Kreisler. Z5 performed first, and as she and Y5 analysed Z5's film, neither needed more than my occasional gentle probing for clarity. Perhaps it was Y5's opening comments about how she liked the way Z5's performance told a story that influenced Z5's own reflective engagement, since she carried this theme for the entirety of her own performance analysis and into her reflections on Y5's performance. It was as if Z5 needed to explore and exercise this lens.

[Z5 as participating-peer]

Z5 – It could be like if the whole thing was like a dance. And then it's like a curtsy, or like a bow, or something, and then it goes back into the dance again. But I really like that Y5 takes control over the sound that she is producing, like at the beginning and stuff. It is really solid and very clean. It just sounds so confident, and it's like the opening of the piece that those notes are really kind of like, enforcing them, and its like, 'I know what I am doing, I know this piece!' I was going to say that it is kind of like a Fanfare, like a trumpet or something, but I don't think so now.

T.R. – Really?

Z5 – No, I think it is kind of ‘brass’, like in a way, but...[pause] I suppose if you put it into an orchestral piece, it like opens with like a big group of like, either a large group of strings, or brass or something, and then goes into like a soloist or something, for a little bit, and the middle could be like woodwind or something... you know?

T.R. – Is that what you think about when you play it?

Z5 – No, but I just did now, so, I probably will now the next time I play it!

While it was obvious that Z5 did not need help in expressing her thoughts, this potentiating environment seemed to have encouraged and allowed her the freedom to end up in an unexpected place.

4.14.2.4 Snapshot 6: the camera doesn’t lie

Journal entry

week 3 – That some pupils are less vocal than others does not seem to matter. Maybe it is an advantage to just sit quietly and observe what the film is revealing, it does not lie. I got the impression from how both Qp and S2 quickly glanced at me this week when something very obvious occurred in their films... they seemed *thankful* for the film revealing what it did.

Journal entry

week 9 – ...mapping in combination with the video, continues to benefit those pupils returning them...this combination is a great source confirming the usefulness of their strategy design, or choice, but also for how we talked about practising at the close of the peer sessions this week.

Journal entry

week 12 – Pupils accept their films. Whether their performances contain errors, or successes, none have tried to ‘escape’ from what their films reveal.

Perhaps the thread connecting all of the snapshots given thus far in this chapter is the power of video. As a tool for teaching and learning, the use of video in Layers 1 and 2 created possible links to the Practice Maps of Layer 4. Although Layer 4 is covered more thoroughly in the next chapter, one final snapshot is needed to demonstrate how I experienced combining the use of video with the maps.

When pupils were unpacking and tuning their violins at the start of each lesson in Layers 1 and 2, I took the opportunity to read any Practice Maps (Layer 4) that were returned. I often dedicated a portion of the lesson to directly addressing troublesome issues that pupils had indicated within their written reflections, but filed their map for future reference if the lesson needed to cover different material. The maps also provided a path for acknowledging or addressing practice issues at the end of each lesson during the FAP moments, especially when, as this next snapshot shows, the pupil chose to film and analyse the same piece that had been used for mapping that week.

S2's lesson in week three included different material than the piece she had used for mapping, but it was the piece from her week's mapping process that she chose to film and analyse in the final minutes of her lesson. As we sat in front of the computer after filming, I quickly read S2's map and noted that she had worked to secure 'clear harmonics' and 'clean shifting'. I knew S2 had been working to master combining these two elements in a particular bar of this piece, and detected a slight sense of eagerness from her as we began to view it. A few bars into the film we both glanced at each other with raised eyebrows as her intonation momentarily slipped, but moments later I had the opportunity to smile and silently give her a 'thumbs-up' sign after she executed the combination of the harmonic and shift beautifully. To make sure she understood this gesture, I played the section again and asked, 'Did you hear that? You wrote here that you were going to work on the harmonics, and getting down to the G string clean, and you wrote that (pointing to her map), your "shifting down is cleaner", and that you are "not touching the D string any more while shifting". It worked, didn't it?' S2 answered yes by smiling and rapidly nodding her head up and down as we continued to view her film. Though I had observed this success during the making of the film, and could have simply mentioned it to S2 before we began viewing, this reflective environment had created a space to acknowledge that together.

Like other pupils, S2 had achieved her goal through a strategy she devised and executed. However, when pupils noticed recurring or unexpected errors in their films, such as S2's intonation slip here in this snapshot, the atmosphere between us was no less enthusiastic. The video was accepted as an honest representation of their performance and as such narrowed the need for debate in moments when both the pupil and I heard or saw the same error. Here with S2, the video was a tool that freed me from

detailed comment because we both knew her intonation to be normally very accurate. It was no surprise though that the issue of intonation featured on S2's next map for this same piece.

4.14.3 Adjusting the environment

For the length of time that Layer 1 ran, Layer 4 ran continuously, while Layers 2 and 3 wove in and out for shorter periods of time. A point came midway through the term when I decided to schedule a break away from the FAP process. Although the Practice Maps of Layer 4 continued through weeks 8 and 10, during these two weeks pupils only made audio-visual recordings, but did not analyse them. This adjustment came at a point when I had a feeling that some pupils were in need of a small respite from the weekly reflective tasks, though no pupils showed outward signs of unease with the exception of U3, who had started to sigh or 'roll her eyes when asked to evaluate her film' (Journal entry week 7). Her reactions could have been the result of many factors unrelated to the study, but I had begun to wonder if a weekly video representation was too much for some pupils to cope with.

These two free weeks yielded some positive results. In the absence of FAP, I adopted the approach of questioning throughout the entire lesson on all content in the same manner that I had been doing for the small FAP portion of their lesson. Most pupils responded very reflectively for the entirety of their lesson and seemed 'to be more verbally responsive than in the past' (Journal entry week 8). They seemed to be carrying the *analysis* chair into a context free of video critiquing. A particular change was observed in the normally very quiet S2, who, in the first of these two free lessons, began asking me questions about the material being covered. It could have been that S2 and the other pupils who exhibited this behaviour were experiencing greater confidence to speak their mind, testing a new discursive approach to learning that was a result of reflecting, or felt more at ease to speak because their comments were not being recorded. Whatever the reason, this new alteration to the lesson environment had promoted a marked change in the pupils' engagement and vocal contributions. Perhaps we both had benefited from weeks of enquiry training, so to speak, and that some pupils were now comfortable to work through a lens of enquiry as a norm.

A further change was noted in the second of these two free sessions. Though no FAP was undertaken, a film was still recorded in the final minutes for the pupil to review during a later interview. This small change in the cycle of events produced reassuring and promising results for many of the pupils, as noted in my reflective journal entry below.

Journal entry

week 10 – This week found some pupils very relaxed...maybe they felt well prepared (?), but a few said they felt under pressure. Each knew that I had heard them play better...Z5, who studies three instruments to quite a high standard, was very tired and unsatisfied with her ability to control a few technical aspects in her concerto... When I turned on the film, she transformed. She *became* a *performer!* She seemed to let go and trust herself, and it was there...

Z5 had displayed dissatisfaction when working on bow control during her lesson and I was slightly worried that her frustration would impact the quality of her filmed performance in some way. But as the recording commenced, she completely transformed to conduct herself as a confident, engaged and relaxed performer. I could not tell if such transformations were the result of past performing history, weeks of rotating between the reflective roles and making digital recordings, or from the regular performing opportunities in the other Layers of the study. What is clear though is that from having regular opportunities to make a performance *film*, pupils had exercised their skills at quickly assuming and settling into the role of *performer*. Perhaps pupils were signalling to me that filming had become an accepted and complementary type of companion for their learning environment.

4.15 Conclusion

The first part of this chapter introduced the reader to the participants by establishing a profile for each pupil. After using a deductive and quasi-quantitative analysis approach (Marshall & Rossman, 2011) to look at the data for Layers 1 and 2, the second part of this chapter gave an overview of pupils' engagement in these roles. Though pupils did not receive training in how to engage with the FAP, they identified and monitored issues commonly used in third level formal assessment situations (Hunter & Russ, 1996; Blom & Poole, 2004). That they had the capacity to construct their own frame of

reference may be of interest for those furthering research on the younger pupil's ability to effectively self-evaluate (Hewitt, 2002, 2011).

Both data sets showed that pupils mentioned slightly more aural issues than visual issues. However, as the result of opportunities to engage with a visual tool as an aid for reflection, they demonstrated the ability to identify, integrate, and make use of visual observations (Daniel, 2001). Pupils displayed critical thinking skills during the FAP by giving both complimentary (favourable) and corrective (unfavourable) analysis. In both Layers pupils commented about their own films from the *analyst* chair in the same manner, and offered more unfavourable comments than favourable. Differences occurred when pupils assumed the role of participating peer. In this role pupils gave fewer comments generally, and provided analysis that was predominantly complimentary. Across both Layers 1 and 2, some pupils found the role of *advisor* more problematic than others.

The third part of this chapter presented themes that surfaced in my reflective journal as I implemented the FAP in Layers 1 and 2. By presenting small episodes, I tried to give the reader a sense of pupils rotating between the six reflective roles in real-time, and to illustrate their displays of resilience, resourcefulness and reciprocity (Claxton, 2002). It was also an attempt to relate my observations and reflections on the use of audio-visual tools, in combination with peer collaboration and an enquiry approach. My journal entries tracked the pupils' growing sense of autonomy. Because of the FAP, pupils made their own discoveries, but they also realised new things as a result of my gentle guidance or peer collaboration. Pupils' growing sense of agency surfaced when they manipulated the digital recording to manage their own investigations, monitored personal issues in the performances of their peers as they gave feedback, formulated questions, and assumed the role of educator to assist a peer.

Chapter 5 examines the data gathered from the Group Sessions of Layer 3, pupils' practice mapping of Layer 4, and my own reflections on their participation in the formal performances of Layer 5.

¹ Percentages were formed from establishing the totals of aural and visual comments pupils gave, rounding to one decimal place and corrected to whole percentages.

CHAPTER 5

EXPLORING DIFFERENT ENVIRONMENTS: PLACES TO PERFORM, PRACTISE, AND CELEBRATE

5.1 Introduction

This chapter presents the data sets for Layer 3 (Group Sessions), Layer 4 (Practice Maps) and Layer 5 (Celebratory Concert). Whereas the FAP undertaken in Layers 1 and 2 created the ideal opportunity to analyse and present individual pupil's reflections discretely through many of the musical chairs, it was not always possible or deemed necessary to scrutinise individual pupil's comments in Layers 3 and 4 in the same manner. However, the forthcoming excerpts provide evidence to suggest that pupils engaged with each of the musical chairs at different times.

Data presented for Layer 3 examines pupil engagement within a larger peer group setting. With performing and discussing general performance issues as the two main activities, the pupils' perspectives and experiences of the *performer's* chair are represented as a collective voice. The data for Layer 4 were gathered from the pupils' written mapping process. More than any other data set, this data provided a unique opportunity from which to scrutinise the role of *designer*. It shows the areas they chose to practise, the strategies they designed, and whether pupils thought that their practice strategies were effective. Layer 5 was a public performance, and the data for this intervention is represented by my observations.

5.2 Layer 3: Group Interaction

Commendable effort was made by all pupils to attend the three group sessions.

Attendance	Qp	R2	S2	T2	U3	V3	W3	X4	Y5	Z5
Session A	X	✓	✓	✓	X	X	✓	X	X	✓
Session B	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Session C	✓	✓	✓	✓	✓	X	✓	✓	✓	✓

Figure 29: Layer 3 attendance record

Due to unalterable commitments five of the ten pupils missed Session A, but nine attended Session B. All pupils attended Session C, though V3 left after a few minutes owing to feeling unwell. Pupils knew from the outset of the study that they could decline to participate during any part of it, but all those who attended these sessions willingly performed and engaged in discussions with their peer group.

Order of Performers	
Session A	
Round one: Z5 R2 W3 T2 S2	Round two: Z5 R2 T2 W3 S2
Session B	
R2 Qp Z5 T2 W3 X4 U3 S2 V3	
Session C	
S2 Y5 R2 U3 Qp T2 Z5 W3 X4	

Figure 30: Layer 3 performance order

The data collected during Session A showed feedback from the voices of the performers or the participating-peers. The discursive element of Session B exposed pupils' critical thinking on issues as a performer only. Although I made a conscious effort during Sessions A and B to give pupils equal opportunity to express and discuss their thoughts, some pupils were less vocal than others. As Session C was a performance only platform and void of discursive data, only the ambiance and manner in which the pupils participated was noted.

5.2.1 Group Session A, round 1

Pupils came to this session with their own predetermined performance goal for the first of their two performances pieces (round 1). Though I was privy to each pupil's goal, it was not mandatory that they share it with the group, though all did so willingly.

Performance Goals Session A: round 1	
R2	Bow Control – not hitting adjacent strings
S2	To control pitch when shifting
T2	To create an enjoyable experience for the listeners
W3	Pitch accuracy and secure shifting
Z5	Control of tone generally

Figure 31: Layer 3 performance goals

All performers expressed that they had met their performance goals for this first piece with the exception of R2. However, reflecting on her performance, she included a new and positive observation, one that R2 deemed worthy to share with her peers. Closer inspection revealed that on her Practice Map for the week prior to this session, R2 was the only pupil to specifically link the week's work with her intended performance goal (bow control). Also on her map was the matter of left hand tension, which was evidently related to her discovery concerning mordents.

R2 – I kept hitting other strings, but I was able to play the mordents.

For T2 and S2, personal reflections alone did not seem to be enough to validate the success of their performance goal. The value of peer feedback, the affirmation, was seen to be the most important determining factor at that time.

T.R. – Did you meet your performance goal?

T2 – I think so yeah, but the question is, did you enjoy it? I have to ask them.
[waving an acknowledging arm towards the observing peer group].

Performing directly after T2, S2 seemed to consciously abandon reflecting on her known goal (pitch accuracy when shifting) and adopted T2's approach.

S2 – Yeah, I think so.

T.R. – You mean you're not quite sure?

S2 – Probably, probably, I don't know. I have to listen to [gesturing to all other participants]... first.

For the duration of the session peers voiced feedback in an encouraging and positive manner, and gave approximately three times more comments about aural issues than visual ones. Topics voiced were seen to be typical of this age and level, and ones that were surfacing in the other Layers of the study, such as pitch, rhythm, vibrato, bow control, and expressivity. The feedback almost always included a simple and direct critique.

T2 – When she shifted it was in tune, and the tone on her harmonic was clear...

S2 – The sound was very clear. A very good sound.

Z5 – Her vibrato on the very last note was really like, consistent. She captured the mood of the piece.

Visual issues that peers identified were areas generally easy to spot such as:

R2 – ...straight bows...

T2 – In the fast bits, she had an unlocked elbow.

Z5 – ...she looked really happy....

As I facilitated peer feedback in round one some comments included additional topics for their peers to consider. For example, when discussing how W3 used her bow to create the character of her piece, T2 interjected as an *advisor* that she thought W3 had used the concept of ‘W.A.S.P.’ (weight, amount, speed, and pressure). Although everyone in the group knew this concept, I could tell by their reactions that some had not heard this acronym. Also, while T2 and S2 spoke about the importance of ‘playing from memory’, Z5 added that she ‘felt different’ performing for this bigger audience, to which T2 replied, ‘Ah, that’s the real audience’.

5.2.2 Group Session A, round 2

During round two, I changed from questioning individual pupils to asking questions that all pupils were free to answer. These responses were collated forming a collective voice of the *performer*.

Peer feedback needed no enticing, as pupils responded immediately after a performance had finished. Pupils began delivering responses in a type of checklist format, at times absent of descriptive reasoning. Causes for this were not determined, and this should be noted for future replication. It could be assumed that pupils were becoming too familiar with repeated comments, or that they were no longer sustaining concentration and observing each performer from a fresh stand point, or simply that individuals were overeager to participate in offering feedback. In fact, pupils were so eager to voice their ideas during this round that they often talked over each other, or immediately after each speaker had finished, not allowing time for additional rationale to be articulated. Such occurrences might just be an indication that pupils felt comfortable and safe enough in

this environment to be an active, participatory voice. Again, pupils' comments were rudimentary, and centred on issues that repeat across the Layers.

When this round of performances and feedback was complete, I asked the group to take a moment and reflect back on the types of issues each had stated as being important in performance over the past few weeks. After giving them a few moments to reflect, I read out the list that I had made of their remarks:

- Intonation
- Rhythm
- Bow control
- Vibrato
- Tone
- Individual's effort during performance
- Movement/Physical gesturing
- Expression (dynamics)
- Delivery – Movement -Looking pleased
- Enjoying performing for others
- Displaying confidence

These issues were the ones consistently and repeatedly voiced while giving feedback in this session. Therefore, it was not surprising that all pupils nodded in acknowledgment when I asked if they were aware of noticing these issues during the evening's performances. It seems that these topics were becoming a structured frame for their performance observations. It was never determined what influenced this list, or if pupils would have suggested all of these elements at the beginning of the study. It was clear that at some stage during the study, all pupils were active in the construction of this frame and its use, if only in part. These were independent contributions that were made as a result of pupils observing and collaborating.

There was enough time left for probing whether or not pupils felt their performances had met their highest personal standards. Collectively, they all stated that their pieces were not there yet. T2 shared her personal view implying that preparedness is directly

linked to the study of music generally, also that performance preparation does not necessarily have clear boundaries and should not be thought of as finite, but as a continuous process of growth.

- T.R. – ... does everyone feel like their pieces are at their highest standard? [all pupils shake their heads to indicate 'no']
- Z5 – No.
- T2 – They never are. You can never be. You are never, ever finished with a piece of music. I have a good saying: 'The more you practise, the better you get, and the better you get the more you practise'.
- T.R. – There you go! Can you tell me a bit more about that? What does that make you think of?
- Z5 – Practice.
- S2 – Well, it's like you know, if you practise, you know, you get better because you practised it, but then, and then when you are better you practise more.
- T2 – Because you feel, 'Oh, I've practised before and it made me go here so I'm gonna' practise more'...

Over this 90-minute session pupils seemed to be resourceful, resilient, reflexive and reciprocal (Claxton, 2002, 2008) in their approach to engaging and rotating through different roles. All pupils revealed that they were happy to give feedback, but after pointing out that their feedback tended to be positive and complimentary in nature and void of any form of corrective advice, a few pupils hinted that they shied away from offering any form of negative criticism.

- T.R. – No one gave any constructive kind of...
- W3 – Sorry!
- T.R. – I was just wondering do you feel uncomfortable doing that?
- S2 – No not really, but like, you may help them maybe by, you know...
- T2 – yeah, but like some people could like take it the wrong way.
- S2 – But like everyone was good.

In the final minutes of the session, I encouraged pupils to share the impact of hearing feedback from their peers. From their comments, pupils seemed to have experienced:

- An increased sense of wellbeing
 - T2 – ... it made you feel better about yourself.
- An increased level of self confidence
 - S2 – ... And then you are more confident when you play.
- An awareness of new issues
 - R2 – ...and you mightn't have realised you were doing things.
 - T2 – ... you mightn't have realised you were doing it.

The last reflection of the evening yielded responses which indicated that this environment was inviting, potentiating, and a worthwhile learning venture. When asked to describe how observing their peers perform made them feel, the pupils who attended this session suggested that this activity had left them feeling 'inspired' and armed with new or alternative ideas to explore.

- T2 – Inspiration [pointing to S2].
 T.R. – So were you inspired today?
 S2 – yeah...
 T2 – ... like, 'this is what I can do with my piece!'
 S2 – Things that you like in their piece, that you could do to your piece.

Pupils' energy and commitment to participate never waned during this session. They continued to engage the role of *listener* and *observer* with vigour during the remaining minutes while viewing a video of Midori Goto perform Sarasate's *Zapateado*.¹

5.2.3 Group Session B

Changing the cycle of events in the second session enriched this reflexive and collaborative environment. A more formal concert atmosphere was achieved by providing an accompanist and allowing pupils to perform two pieces consecutively without the interruption of subsequent peer feedback. With nine of the ten participants attending this session, discussion time was limited. In order to manage time effectively, a predetermined list of questions was used to frame the discursive element that followed all performances after the accompanist had departed. This discussion attempted to consider:

- if pupils were feeling at ease on stage
- if pupils were engaging pre-performance thinking
- what pupils were thinking during the act of performing

As pupils spoke about the performance issues their collective voice started and remained in a positive tone. Once again, in many instances pupils were so eager to contribute that they spoke at the same time, making it difficult to follow the flow of the discussion and distinguish what was being said, and by whom. This frenzy resulted in some issues being left unacknowledged or developed, but I took pains when transcribing to log as many issues as I could discern.

The majority of pupils spoke in a way that suggested they had felt at ease while performing in this session. Only U3 and W3 claimed otherwise, though they did not give reasons for their unease. Others implied that their repose stemmed from perceptions formed by past experiences. Though S2 and T2 dominated the discussion, many others nodded their heads in agreement as they spoke. Pupils commented that when on stage they felt empowered to:

- willingly display achievements.
Z5 – ...you've practised the piece...you know it, then you can just say, 'I've done the work'.
- enjoy the act of performing.
T2 – Because, I like performing.
S2 – yah, me too.
- freely express their own ideas and interpretations
T2 – You can do whatever you want.
S2 – You can make it your own piece.
- share their performance with others.
T2 – ...I can show people what I can do.

Though there seemed to be a consensus among the group that preparedness stems from practice that achieves physical security, pupils also discussed issues impacting their pre-performance mental state that could also undermine their sense of security. This discussion was started when the narrative breeched the topic of 'being the first or last' to perform. A few agreed when S2 stated that for her, 'waiting is like the worst bit'.

Some pupils expressed their preferred positioning within the group concert line-up, while others shared experiences of self-inflicted mental distractions, such as comparing themselves to their peers when they should have been focusing on their own approaching performance. Pupils then began sharing strategies that they were aware of using to avoid distractions, or ones to achieve a healthy pre-performance state of mind. For example, T2 suggested, ‘clear your mind and think of the speed and all the stuff you’re going to do’, while Z5 suggested, ‘calm down, [and] take a deep breath’. S2 added to ‘think positive thoughts, [or] think of something funny and smile, and then you would feel better’. Both S2 and W3 stated that for them it was best to ‘just look away’ from whoever was in the audience and ‘don’t look’ to see who is there. T2 suggested ‘pretending’ as a mental strategy. Many heads nodded in agreement as she suggested pretending ‘you are playing at home in front of nobody...instead of thinking, oh my god there is a huge audience. Just think, there is no one here except my Mom’. Others suggested pretending that there was no audience at all, or that the only people in the audience were those who did not make them nervous.

The pupils also seemed aware that their performances were not only impacted by their attempt to collaborate with the accompanist, but also by their internal thought processes while performing. For example, Z5 shared that she often has a ‘conversation’ with herself, ‘...I am not talking to myself, I am thinking to myself’. She elaborated by sharing an example of her experience of thinking when performing from memory.

Z5 – I’ve actually noticed in like the last Feis that I’ve done, if you are thinking, ‘I don’t know my piece, I’m going to go wrong’, then you actually do go wrong. But then if you think, ‘I know this part of the piece’, you don’t go wrong.

T2 followed Z5’s example with saying that she too heard her own thinking, but explained that, ‘like, you play your best if you go like, “T2 the Great!”’

While these seemed to be personal strategies for warding off self-doubt and any form of negative thinking, they also seem to indicate pupils’ awareness of agency. As the topic of performance thinking continued, T2, S2, and Z5 joined to discuss what they called the performance ‘bubble’, a space where they mentally placed themselves in order to

stay focused as they performed. Although each voice is reported consecutively below, all three pupils were actually talking in very quick succession or even at the same time.

T2 – Your ‘bubble’.

S2 – You float away...

T2 – You create your own ‘bubble’.

Z5 – Your ‘bubble’, like you just completely ignore them. That’s what happened to me in Feis Ceoil...you just focus on your piece.

S2 – ...and get lost with the music.

Metaphor was used again as T2 brought up the idea of the performer as a ‘painter’. The group agreed with T2 that this metaphor adequately explained the performing process. T2 and S2 elaborated this further by saying that the music was like a blank canvas which they, as performers, could ‘splash colour on’, and engage with in order to ‘paint a picture’. While the tools for this include issues already discussed, such as dynamics, vibrato, and phrasing, Z5 interjected that, when seated in the performer’s chair, these are not necessarily in the foreground of her thinking. Z5 described that she strives to expand her thinking more broadly, to think ‘more of the performance ... than of [specific] technique’.

When pupils observed a peer perform repertoire that they themselves were studying, their comments suggested that they were aware of participating more discreetly. S2 implied that she generally listened, observed, and analysed from the perspective of specialised knowledge by saying, ‘you don’t pay attention to the actual notes of the piece, because you know the notes of the piece. You pay attention to like... do they do the accent?’. However, a personal knowledge of the repertoire did not seem to be required, or used to bias their critique. There seemed to be openness to the uniqueness and interpretation of others.

T2 – Or, what do they do differently than you. Like you could have 50 million children playing the same like, two notes, but every single person would play the same two notes differently.

S2 – yah, like your fingerprint and stuff.

Like Session A, this second session had been an opportunity for pupils to experience the stage and test out their work, and also to join as a collective in order to reflect and discuss performance issues from different perspectives. The pupils managed to sustain a dynamic and productive atmosphere that held its own momentum for the duration of the session, though the youngest pupil, Qp, never contributed verbally. Their acceptance that my role had changed to be one of questioner and collaborator fed a synergy within the group that seemed to establish a secure environment for pupils to freely explore and express their thoughts.

5.2.4 Group Session C

The last session of Layer 3 was a performance only session. Although all performances were recorded for pupils to analyse at a later date, the following report is my reflective entry about Session C.

The final Layer, the formal *performance*, was near. This was it. This Group Session was the last time in this term for pupils to test and share their learning with peers on the bigger stage. Having journeyed through the different Layers over the course of the term, I hoped that they all were feeling part of a performing community.

All ten pupils arrived and participated apart from V3, who left during the first ten minutes owing to feeling unwell. As a group, we decided on the ordering of performers after making sure that all violins were tuned. Three pupils would have performed on this same stage before as solo pianists, and another three as violinists, but as the session progressed three issues began to surface that affected even those pupils familiar with this stage. Firstly, despite past performing experience and our discussions on stage presence, the majority of these young violinists seemed to be physically awkward on the raised stage, displayed a lack of spatial awareness or poise, and were cumbersome in how they approached and exited the stage. Some pupils seemed to display signs of feeling unsettled by turning inwards towards the accompanist as they played, their back almost to the audience, as if seeking some sort of comfort from the accompanist, or to block their view of the audience. This created a disconnection with the audience and also affected the performers' ability to project their sound. For two of the more experienced performers, this behaviour appeared to be the result of trying to

communicate with the accompanist rather than being apprehensive. Such behaviours suggested that their physical stage presence needed to be addressed, so we took a small respite from performing and discussed ways of standing on stage in order to improve audience communication and sound projection. However, this discussion did not completely rectify the situation for the remaining performances. The knowledge clearly had not been assimilated.

The second issue emerging was that all performers seemed generally more relaxed than in previous sessions. This was noted in the way that pupils smiled and quickly took to the stage when their name was called. There was a sense of eagerness to perform. Perhaps this was linked to, but not the sole reason for, the third observation that pupils appeared to be enjoying this environment. As the night progressed pupils started giving standing ovations, roaring cheers and applause ensued at the end of each performance, and by the end the atmosphere was euphoric.

For the entire session I sat quietly observing some distance away from the pupils at the back of the room, only becoming involved when announcing the next performer. As the violins were packed away and parents began arriving to collect their children, the pupils' display of high spirits filled the room with a jubilant sense of camaraderie. Perhaps this was acknowledgment that they felt valued as members of a performance learning community.

5.2.5 Snapshot 7: context makes a difference

A recurring theme in Claxton's writings (2018, 2008, 2006b, 2006a, 2004, 2002), and those with his colleagues (Claxton *et al.*, 20011; Claxton *et al.*, 2010b, 2010a; Claxton & Carr, 2004), is the suggestion that learning can be ignited and sustained by providing pupils with opportunities to engage learning independently and collaboratively, but also by observing others in the act of learning. Such was the aim of Layer 3. This Layer provided me new insights about pupils that may have otherwise remained hidden. To glimpse the potential of this environment, I use both S2 and T2 as examples.

Surrounded by her peer group, S2 seemed to remain confident and in full control of all her performances, a trait that she has displayed since the outset of her violin studies.

Unlike her engagement in the other Layers, where she was often a silent learner mesmerised by the film viewing, unable to give complete or articulated comments, and who often needed prompting to verbally engage, S2 seemed to be uninhibited at exercising her vocal skills in the group context. She started and remained in a continuous communicative mode with her peers and me (Flusser, 2000), often being the first to respond to a question and never reticent in collaborating with her peers to explore a variety of topics. S2 willingly and repeatedly illustrated her critical thinking, shared experiences, offered advice, answered questions, and even challenged a peer's comment. Her feedback consistently included clearly stated points and reasoning, invariably focusing her lens in a positive manner. Although I knew that positivity was one of her personal traits, I had never witnessed this very vocal and clearly articulate S2.

I have always known S2 to hold firm opinions and, in this light, two further points caught my attention. Firstly, and as mentioned earlier in Session A, S2 abandoned her own performance goal to adopt T2's goal and way of reflecting on it. Violin classes that S2 attended prior to this study never incorporated a peer discursive element, so to observe S2 adopt a peer's goal by abandoning her own was a surprising observation for me. Secondly, though S2 was increasingly more vocal here than in the other environments, she was also the only pupil to challenge a peer's choice of language. This occurred when T2 was assisting Z5 to describe what advantage there was to perform for a bigger audience, and T2 commented that an audience gave her 'a rush of adrenaline'. In an exasperated tone of voice S2 said, 'Ah! You are using all these words! Rush of adrenaline, and unlocked elbow'. T2 stood her ground and replied, 'Well, I noticed an unlocked elbow and I have a locked elbow when I go fast'. While T2 might have been surprised to find S2 commenting on her use of language as being somewhat unusual, this may have challenged T2 to reflect further. This interaction also suggests that through sharing and discussing ideas S2 had been introduced to how others use language in musical learning.

In comparison to S2 within this group context, T2 was very vocal and continued to display a reflective, resourceful, resilient and reciprocal approach to learning as she did in Layers 1 and 2. She participated in all discussions, and from the feedback given to her peers showed that she could continue to hold her own focus areas in the foreground while rotating between different reflective roles. T2 frequently asked for my opinion in

Layer 1 and this act of resourcefulness also surfaced in the Group Sessions, albeit in a slightly different way. In this session she sought the assistance of her peers when unable to articulate her thoughts or observations clearly.

- T2 – I like the mordents and the lifts!
- T.R. – What did you like? Can you describe what about it that you liked?
- T2 – I can't describe it.
- T.R. – What did it add to the piece for you? [silence and giggles from the group] How did it make it more enjoyable?
- T2 – Uhm... I don't know... [giggles]
- T.R. – What was the piece sounding like? What type of piece was it?
- T2 – Like a ...like like... like a... [bouncing in her chair] Can someone help me?
I can't put it into words...

Interestingly, the peer group did not intercede to help T2 clarify her thinking in this first instance or later when the topic of playing from memory surfaced. It should also be noted that, in the second instance, T2 did not ask for peer assistance as she seemed to be content with her own lack of knowledge, as if it were trivial.

- T.R. – Does it make you feel happier as a performer not to have to read the music?
- S2 – Yeah, because you're not like looking.
- T2 – Yes! But don't ask me why.
- T.R. – Why can't I ask you why?
- T2 – Because I don't know what the explanation is.

In summarising my observations of S2's and T2's engagement during this Layer, the higher number of communicative verbal responses given by S2 could have been the result of any number of variables. It could have been due to such things as existing friendships with peers in the group, experiences earlier in the day, a general in-the-moment mood, as a result of evaluating live performances, or from engaging in group discussions rather than reacting to digital performance recordings, but in any case ascertaining why pupils engaged in the way they did was not a focus of this enquiry. However, S2's surge of freely and clearly expressed thoughts (Bandura, 1993) were taken as an affirmation that this environment allowed positive reflexive forces to impact her experience of learning (Dewey, 1938) through having opportunities to reflect and speak about learning independently and collaboratively (Claxton, 2008).

These claims can also be made from the level of engagement that T2 displayed consistently during this and the other Layers. Never timid or reluctant to vocalise her thoughts, feelings or ideas, these Group Sessions seemed to show that T2 possessed a developing reflexive learning lens that she was willing to activate in different environments.

5.3 Layer 4: Practice Mapping

Over the term, 70 out of a possible 130 Practice Maps were collected. Those that were returned had all parts completed with the exception of the ones from R2, who never filled in the ‘strategy’ section although she hinted at her actions in the weekly reflection section.

Total return rate per participant									
Qp	R2	S2	T2	U3	V3	W3	X4	Y5	Z5
8	5	6	5	10	11	5	7	6	7

Figure 32: Layer 4 Map return rate

Reasons for the low return rates of the maps in some weeks were never determined. Mitigating factors such as forgetfulness or outside influences are only assumptions. The lack of any submissions in week 11 could be owed to returning from a school holiday. However, this could not be verified.

Overall total return rate	
Week 1	6
Week 2	10
Week 3	8
Week 4	6
Week 5	6
Week 6	5
Week 7	6
Week 8	6
Week 9	4
Week 10	1
Week 11	0
Week 12	6
Week 13	6

Figure 33: Layer 4 Map return rate

The return rate of over 50% indicated pupils showed some willingness to engage with this task during their independent home practice.

5.3.1 The mapping process

The mapping process revealed the specific topics that pupils chose to practise, their strategies and reflections on its impact. Audio-visual documentation of participants' home practice was not a form of data collection, making it impossible to directly observe the pupils' practical application of these forces. Indications of such could only be based on the pupils' weekly written reflections.

The Practice Maps did not set out to capture the totality of the pupils' approach to practice within a given practice session. They aimed to expose the pupils' approach to practice to some degree, understanding that there may have been reciprocal influences from other pieces and technical studies in progress. The active learning depicted in the following sections is representative only of those issues chosen by the pupils when engaging with the maps.

5.3.1.1 Focus for action

When identifying their focal points, pupils used a minimal number of words, often just a word or two. Despite this, a wide range of issues was represented and bundled under the headings of:

- control and accuracy
- expressive playing
- stage presence and image

5.3.1.1.1 *Control and accuracy*

Given the age and level of these participants it is not surprising that control/accuracy formed the largest group of issues. Asking the pupils to identify areas of work revealed the different ways pupils were thinking and approaching these areas of practice. Some pupils wrote down items with a specific purpose, while others gave broad generalised intentions.

- Qp – Straight bows - secure notes.
- U3 – Fast passages- articulate notes cleanly - don't stop.

Other control issues were isolated under the categories of left or right hand. The youngest participant, Qp, was the only pupil who seemed concerned with the generalities of merely holding the bow correctly, whereas other participants noted areas that suggested the need for working on bow control.

- S2 – Bow stroke - not so bumpy - clarity of off string stroke.
- R2 – Bow control - not hitting other strings. - pull faster bows.
- U3 – Control sounding point.
- W3 – No squeaky bows.

When pupils identified left hand issues, intonation and vibrato seemed to be their main concerns. Because the left hand's primary function is to alter pitch in some way, there is an underlying assumption that intonation is continuously scrutinised during violin practice. With this being the case, although pupils may not have identified a concern for intonation work, it was generally categorised as a topic for attention in very specific instances on 17 of the total 70 maps. In these cases, pupils seemed keen to establish well-centred tonality across a variety of keys, positions, in sections with difficult finger patterns, when shifting, and when fingering chords.

- U3 – Fix pitch on last three lines.
- W3 – Shifting - pitch - 3rd fingers line two.
- X4 – Intonation 3rd and 4th fingers.
- S2 – Check intonation does not go flat.

Vibrato was a particular left hand element that seemed to overlap with the category of expressive playing. Regarding control/ accuracy, some pupils seemed concerned with the rudimentary control and development of the physical movement of vibrato and explored ways to integrate this learning into their playing. For more advanced pupils, it was the monitoring of its use generally.

- S2 – Use more vibrato.
- U3 – Vibrato speed.
- Z5 – Wider vibrato.

Focal points that pupils wrote on their maps seemed to indicate that they understood the importance of working aspects of each hand in isolation, but also implied they understood that for some issues success relies ultimately on both hands working as a functioning unit (co-ordination).

- V3 – Bow and left hand fingers work together - Faster - Clean fast notes - Chords.
- T2 – Fingers with bow (slurs) control tempo.
- Z5 – Clear articulation of technique - Double stops (middle and end).

These last quotes point to how they were grappling with the difficulties of co-ordination. In the case of V3, it seemed that her left hand fingers were not coordinating accurately with the slurred bow changes needed for Dmitri Kabalewsky's *Clowns* (op. 39, no. 20). Due to the quick tempo of this piece, clarity of sound depended on precision between the hands. Likewise, this very same issue concerned T2 in a passage of a short *Polonaise* arranged on a theme by George Phillip Telemann. At a more advanced level, Z5 found that controlling the co-ordination of both hands in the middle and end sections of Franz Drdla's *Souvenir* was crucial in all aspects of securing the pitch and tone for the double stops.

5.3.1.1.2 *Expressive playing*

Additional to the list of technicalities that pupils focused on, they used metaphors to describe expressive outcomes. These seemed to indicate the particular ways of thinking or approaching the music that they intended to use in order to create and communicate their expressive interpretations. It can be extrapolated that all participants were developing a symbolic practice frame that informed their end goal, the intentions of their performance.

- R2 – March style.
- T2 – A story.
- U3 – Tempo-mood- swan like.
- X4 – Mood- rainy day.

The maps also suggested that pupils fragmented their practice in order to critically explore and focus on a range of elements and actions that contributed to the expressivity within this performance frame.

- elements:
 - Qp – Rit. To slow down.
 - R2 – Dynamics.
 - V3 – Timing-contrast.

- actions:
 - X4 – Contrast between sections.
 - Z5 – Make long notes go places-smooth change of colour into new section.
 - V3 – Energy in bow-lively bow- set down bow carefully.

5.3.1.1.3 *Stage presence and image*

Thinking visually was a process that this study introduced to some pupils, and developed in others. Only Y5 and Z5 did not include visual thinking as part of any practice strategies. For others, visual issues could fit comfortably into the category of control/accuracy, since at least on some occasions their visual focus on muscular movement was a direct result of pupils viewing their performance films in Layers 1, 2 and 3. This finding was the reason for a category that listed pupils' visual observations. Pupils did not connect their observations on posture merely to stage presence and/or image issues; they implied that they were clearly intertwined with technical development.

- QP – How you stand.
- R2 – 4th finger tension.
- T2 – Shoulders-mouth, body presentation.
- U3 – Not looking bored...body movement.
- V3 – Relax shoulders...movement to beat – gesture.

5.3.1.1.4 *Notes on focal points*

By collating the pupils' weekly focal points a picture was formed that revealed specifics, but a few generalities are also worth mentioning. Firstly, from the pupils' written words, no evidence could be found to suggest that any pupil held a hierarchical view of the three focal headings of control/accuracy, expressive playing and stage presence/image. However, the way in which pupils combined items from across the three categories suggested that pupils had some understanding of their interconnectedness.

- R2 – Mordents, march style.
- T2 – Bow control – phrase ends- release gently, thoughtful start of each phrase.
- U3 – Practise performing.
- V3 – Staccato bowing, ending phrases, relaxing shoulders.
- Z5 – Wider vibrato, smooth change of colour into new section, more contrast in ‘sul D’ phrase.

Secondly, regarding pupils’ resilience in working with specific focal points over several weeks, little could be determined about some individuals because of the sporadic return rate of the maps. Pupils’ choice of focal points may have changed because of a range of unknown factors, but resilience was implied in a few instances. For example, Qp displayed a degree of tenacity as she continually focused on her bow hold issues in weeks 2, 3, 4, 5 and 7. This could be indicative of a conscious and positive form of continuing commitment. A similar example of resilience was revealed on the maps of Y5 and Z5, where expressive elements persistently dominated their practice throughout the term.

5.3.1.2 Strategies for action

As *designer*, the pupils actively explored their focal points by creating and/or choosing strategies. These suggested to me that they had engaged by using two distinct approaches: task-management for particular items, and the conscious channelling of their energy and effort.

5.3.1.2.1 Task-management

The task-management strategies, or how pupils structured the exploration of issues, appeared to involve selecting or combining the processes of:

- Deconstruction / Reconstruction
- Monitoring / Probing

Evidently, they used deconstruction strategies in order to work on issues in isolation. Managing tasks like this implied that pupils were exploring strategies to work in micro-analytical ways that accomplished small and specific directives. Common tactics seemed to be tempo reduction, working in small sections and repetition. Such strategies

implied that pupils were becoming aware of directing their practice towards developing reliability and precision.

- T2 – Take out sections and work slowly.
- V3 – Do small bits over and over.
- X4 – Practise in sections until it is in tune.
- Y5 – Practise sections individually to focus on detail.
- Z5 – Pick out bars around section changes.

Some pupils wrote down specific management tools such as an allocated number of times or minutes that an issue should be worked, the incorporation of various rhythms, or created their own exercise designed to solve specific problems.

- T2 – Intonation Line 1 with Piano. Silent notes – finger on body of violin.
- U3 – Use different rhythms.
- V3 – Play without flicks ten times.
- W3 – Made a study: Seven times – C B♭ D C♯ D.
- X4 – Put violin against wall and polish.
- Y5 – Practise vibrato for five minutes every day.

Unless pupils documented modifications to their strategy[ies] over the week, it was assumed that they used the same ones each day. Results showed that no pupil documented altering or abandoning their strategy[ies] within a single week. X4 was the only pupil who applied the same kind of tactic (deconstruction) to small sections of her pieces for achieving two separate goals within a week. This strategy was designed to deliberately increase in difficulty as the week progressed to make it more challenging.

- X4 – With both problems...slow work until last two days...then speed up a small bit each time.

De-construction strategies were often followed by re-construction strategies.

- W3 – ...then put back in rhythm and bowing.
- V3 – Play without the flicks, then put back in.
- Y5 – ...then together at normal speed.

Their task-management strategies led me to believe that pupils were both monitoring and probing issues. These were clearly reflective processes. Moreover, the nature of these strategies seems to indicate that pupils were engaging with resilient and resourceful forms of deliberate practice (Claxton, 2008; Hallam, 2001a). This was implied by the pupils' very clear written instructions on how they planned their work, and also from the additional support tools they chose.

Not unreasonably, the two dominant forms of monitoring pupils used while practising seemed to be those of *listening* and *looking*. Tracking pupils' preferences between these two methods of engagement may be an interesting area for future study. In the context of the Practice Maps, pupils wrote about listening to and for things, and checking that what they were producing was aurally satisfying. When incorporating additional tools, pupils made traditional choices.

Z5 – Check with open strings – practice with metronome.

T2 – Match intonation – play on piano.

Pupils wrote about using strategies for observing particular things that were fairly simple to monitor.

Qp – ...looking down at your bow...

S2 – Look at sounding point-look at fingerboard.

However, pupils also incorporated strategies that made use of a mirror for fixing specific physical issues. Such strategies implied that they were aware of exploring the effectiveness of visual aids.

Qp – Look in mirror for violin in case it falls, I can fix it.

T2 – Use a mirror – stop at the end of every long note to see where I am in the bow.

X4 – Practise in front of a mirror so that you can watch your movement.

Pupils did not always seem to understand how to design strategies, unlike when they designed their deconstruction and reconstruction modes of task-management. Some of the actions pupils documented as strategies did not really imply clear strategic thinking, and this ambiguity made it difficult to establish definitive categories. Even so, these

intentions (or beginner strategies) of the *designer* are worth mentioning. Such instances suggest that pupils were engaging a holistic approach to addressing action. They seemed to combine doing and thinking about particular physical and artistic concepts during what could be interpreted as configuring, moulding or assembling the piece as an integral unit. For these strategies, the pupils' musical intentions seemed to motivate their actions as shown here by Y5, X4, and Z5.

Y5 – ...use vibrato to let notes grow.

X4 – ...play the piece really calm and really light and make it kind of sleepy.

Z5 – Think in phrases rather than individual notes...put more of myself into the music...

Interestingly, although pupils critiqued their films weekly in other Layers, only Y5 chose to use video on one occasion as a tool for monitoring and probing her daily practice.

5.3.1.2.2 *Channelling mental energy and effort*

The reflection-before-action encouraged by the mapping process implied that the pupils used deliberate ways of thinking or being in order to effectively channel concentration, relaxation, and enjoyment into their practice. For example, one of U3's strategies was to 'concentrate ...take a deep breath and think of the tune in your head.' V3 simply wrote, 'relax my shoulders', while Z5 wrote, 'think [about] what I want to achieve, and how to make these sounds...be aware, make mental effort...relax and enjoy.'

5.3.1.3 Reflections-on-action

The maps required the pupils to reflect-on-action at the end of the week through a written exercise. This gave pupils an alternative way to articulate their thinking and experience of practice with regard to their specific focal point[s], and also to register the outcomes and effectiveness of their strategies.

Even though pupils' reflections were written as simple statements, I interpreted them as honest evaluations. As the written reflections below indicate, strategies that pupils used did produce results. Although pupils also included why or if they thought their

strategies were effective, some like X4 admitted there was further work to be done. These statements imply a growth in autonomy.

- Qp – ...the screeching thing got better, nearly stopped.
- X4 – They are a small bit better but I will still have to listen carefully because my 3rd and 4th fingers were inclined to be flat.
- Z5 – Practice with the metronome made me slow down and pay attention to finger patterns and string-crossings. I was able to compare and contrast with what I played making me more aware of my intentions and music... Practising in front of a mirror helped me to be more aware of my posture and of how I was visually presenting my performance.

Many written reflections were an acknowledgment of how pupils thought they had or hadn't progressed, whereas some implied that they were viewing their development as an on-going process. Some seemed to be making discoveries about practising, as seen here in the reflections of X4 and Z5.

- X4 – The part of the piece where I kept stopping has improved, I don't even need to think about it anymore...it's helped a lot in this piece and in some of my others too and it didn't take that long to practise...
- Z5 – I found it a bit tricky to put more of myself into the music. However, I soon found that by hearing the music in my head first, it allowed me to try and play what I wanted to hear...Still can't do double stops perfectly, but has improved.

The pupils were evidently experiencing a sense of self-satisfaction with their work by statements such as:

- Qp – I think it improved a bit. I'm happy with myself.
- V3 – I feel happy about it. It's getting way better and I'm enjoying it more.

Much of the literature on instrumental practice specifies the importance of mental effort, and this is certainly borne out in this study as seen through the comments below. While T2 suggested this in a subtle way, others such as Qp and Z5 specifically acknowledged their mental effort. Implied in their writing is that they had experienced a shift in their level of awareness by critically reflecting on their chosen, designed, and executed strategies.

- Qp – Well, it worked when I thought about it. I was able to remember it quite easily.
- T2 – Both methods helped and made me focus a lot on my bow and my bow hold. I was much more aware of my locked elbow as well when I was using the mirror.
- Z5 – Making a conscious effort helped as I was prepared for slides, so they didn't happen...Knowing what I wanted to do, clear intent, helped me shape the piece.

5.3.1.3.1 Reflections on what is perceived through a lens

Anticipating that pupils would develop a personal practice style, I assumed that they would also adopt a personal way of reflecting on their work. By looking at the reflections of U3 V3, and R2, we can glimpse a personalised view of the above themes.

	V3: Map Reflections	U3: Map Reflections
Week 1	I felt I improved very much when my little finger was curved on the bow. I also think it helped me when I used less bow. I sounded much better.	none returned
Week 2	I felt I did well enough this week again. I am getting way more confident in <i>Spanish Tanz</i> and I feel I am improving so much more. I also feel that I prefer this tune to all the others.	The 2 nd fingers sounded better. The 3 rd fingers didn't change that much. To look like I'm enjoying didn't work that much either because I felt stupid smiling all the time.
Week 3	Elbow and arm height I thought were fine and the contrast is getting better. Still getting a bit mixed up with the timing on the first page after the flicks. But overall I think it was fine.	For the sounding point exercises, as long as I concentrated, it worked. The bow stayed in its position throughout whatever I was playing. For evenness & rhythm it did that skipping thing with my fingers again, but not as often as before.
Week 4	I think I got a bit better. I am finding it easier to move more with the tune. I still get a little bit mixed up on the part on the G string.	Vibrato: the vibrato bit worked but I always seem to end up on the wrong bow. Like up bow if its down bow or the other way round. Body movement: it worked as long as I concentrated.
Week 5	It is getting way better. I am happy with everything.	none returned
Week 6	I think it is really getting better. Still a bit unsure of the shifting on line 3.	It worked and made the piece sound much better. I practised my vibrato in orchestra so it has gotten stronger which made the piece sound even better than before.
Week 7	Got way better. I'm much more confident playing it and when I was practising this week my Mom said I was moving much more.	Accent: this did work for some of the accents. Evenness in rhythm: it worked if I remembered & concentrate. Smooth[ness] of slurs: it works especially if it is loud.
Week 8	Very good. I feel very comfortable now doing it. I am happy with everything.	A) It did work and everything - I did it afterwards. It was faster and more together. B) I forgot the first time, so you didn't notice it, but when I concentrated the second time and after that, it sounded perfect. C) They sounded much clearer & louder.
Week 9	I am happy about it. It's getting way better and I'm enjoying it more.	Repetition worked because I learned it the right way this time so it sounds way better. It sounded better when I put big dynamics in.
Week 10	none returned	It's easier to perform at home because they don't play the violin so they usually wouldn't notice any mistakes. If you don't think about who's in the audience, it helps. Just thinking about the music and nothing else helps too.

Week	none returned	none returned
Week 11		
Week 12	I think it's better. A few more practices and it will be perfect.	My concerto does sound better when it's played slowly, but my bow sounds very squeaky.
Week 13	Very good. I am confident about it and I feel I am ready to play it for my exam.	It worked and when I slowed down it sounded way better.

Figure 34: Layer 4 reflection comparison

With the exception of week one, V3's written reflections (see Figure 34) seemed to be negligible in terms of strategy effectiveness. For the remainder of the term her reflections were often limited to broad statements describing her progress generally, but did not comment on her strategies specifically. Up to the midway point V3 seemed to acknowledge general development, but also cited a few specific areas still having room for improvement. However, V3's reflections also seemed to summarise how she felt about herself and her progress. Regardless of her actual performance level, this weekly written activity created a log of 'things getting better', of V3 feeling 'happy with everything', or 'very comfortable', and feeling 'ready to play for my exam now.'

Like V3, U3 also returned most of her maps. Her reflections also seemed complimentary, but more explicative. In contrast to V3's emotional lens, U3 reflected on concrete results, such as how she was sounding, while detailing strategies that worked, or didn't, and why. While reflecting on her many focal points and strategies, U3 repeatedly implied that a strong connection existed between how she sounded and the mental energy she had applied (weeks 3, 4, 7, 8 and 10). For all weeks other than 2 and 9, her reflections imply a sense of developing awareness as to the level and type of mental and physical resilience required to execute a successful practice session.

It is worth taking a look at R2 in isolation, since she engaged the map-keeping process in a unique way (see Figure 35). R2's low return rate and neglected strategy sections could have been the result of the layout and/or requirements of the form. However, with what R2 did return, we can still get a glimpse of her as *designer* by the focal points that she addressed and her reflective comments. R2 wrote about the consequences of what she was able to do and why. Like U3 and V3, this implied conscious recognition of experiencing change as she learned about practice. Evidence of this is seen during the early weeks where bow control dominates her objectives.

R2: Map Reflections	
Week 1	none returned
Week 2	If I tilt my bow over to one side I tend to go on the fingerboard. I don't know how to stop playing on different strings though.
Week 3	I found working on looking at my bow made it easier. It made no difference on how I planned to work on it though.
Week 4	none returned
Week 5	I was able to keep my bow off the fingerboard by tilting it slightly. I did not hit other strings by keeping my bow closer to the bridge. My fourth finger is not curling into my hand when I relax my thumb.

Figure 35: Layer 4 reflection sample

R2 acknowledged satisfactory results and described a few of the tactics she used. Between weeks 2 and 5 she seemed to have made progress in solving her bow control problem and was noticing the relationship between the cause and effect of how her bow tilted and drifted over the fingerboard. Although R2 does not directly state that she completely reversed the angle and tilt of her bow, it is the only probable explanation (the bow can only be tilted in two directions). However, this in itself is not important. What is consequential is the impact of her willingness to keep exploring, her tenacity. Through persistence she seemed to have solved the secondary problem, that of hitting other strings. Her personal exploration involved re-positioning the location of her sounding point away from the fingerboard and closer to the bridge, and in so doing she made a new discovery. Even though her success was not verified to be the result of a stated strategy, R2's willingness to partially engage in map keeping did yield results and provided a glimpse of a learning lens in action. Like U3 and V3, R2's reflections implied that she possessed the ability to work independently on problems, and find alternative solutions to issues she decided were important.

5.4 Layer 5: Reflections on a Celebratory Concert

At the end of the term pupils underwent the performance assessment for the music school (see Appendix E). Since school policy prohibited me from collecting data from the assessments, it could not be included as part of Layer 5. It should be noted, however, that all participants of this study easily passed their end of year performance assessment.

One week after their official assessments pupils gathered to celebrate their learning by performing two pieces from their assessment repertoire in a public concert for family and friends. It is reported here through my reflections of the event.

Sometimes, as teachers we can get it right, but not always. We think we know our pupils in some specific or general way, and sometimes what we think we know is only part of the picture, or a falsehood altogether. Sometimes, what turns out to be true can be the result of direct or unexpected influences and/or factors we are not necessarily privy to (Maddock, 2006). With that said, I looked forward to this concert and wished my pupils well as they had the opportunity to experience each of the six musical chairs for the final time in this project.

The school's recital room was ideal for this age group and quickly filled with approximately 75 close family relations and friends to create a wonderful ambiance. As the audience settled, violins were tuned as participants organised their music and chose a seat in the front row. Feet not yet long enough to touch the floor were rapidly swinging back and forth while quiet chatter and whispered giggles were heard amongst well-acquainted peers. Others turned around now and then to catch sight of familiar faces. Older pupils sat very straight and still, perhaps mentally preparing, or just enjoying observing their younger peers fidgeting.

My short opening speech was greeted by smiles and nods of gratitude as parents were acknowledged for their support. Pupils were thanked for their dedicated commitment to the project and for taking on the challenge of working in new ways over the term, but particularly for putting up with my endless questioning.

I observed that all participants seemed relaxed before and after their performances. Many of the pupils had been working on issues that were easy to observe. In many cases I noticed improvement, although for a few I did not. Even pupils with less years of experience performing seemed to be in control of performance issues generally, while others delivered their performances with a greater sense of authority. Overall, the concert ran smoothly even though only two pupils remembered to acknowledge the audience applause with a bow, and two raced to exit the stage.

At the end of the concert I arose to give my final words of gratitude. I hoped that, despite any expectations individual pupils might have held prior to this end of term concert, each of them had enjoyed these final performances, and that they would be consciously aware of each and every one of their achievements.

5.5 Conclusion

This chapter examined the data for the different types of reflective learning that pupils experienced while engaging in Layers 3, 4, and 5. The section on Layer 3 aimed to show how its design provided a safe place for pupils to not only practise performing to a larger audience, but also to learn about performing by observing their peers, and to discuss performance issues within a larger peer group. Findings from this data set support other research that shows how an element of peer-learning is indeed beneficial (Green, 2008; Bartleet & Hultgren, 2008; Neill, 1998). Pupils' feedback was mostly complimentary and covered issues mentioned throughout Layers 1 and 2. Although this group of participants enthusiastically shared and discussed ideas during each of the three sessions, some pupils were notably more vocal in this setting than in Layers 1 and 2.

The unique data set of Layer 4 was the result of pupils expressing their reflections in written form. Although the overall return rate was reasonable (70/130) a future study might explore ways to increase this average. Only one of the ten pupils displayed difficulty in understanding how to use the maps, but simply adapted it to suit her mapping style. The maps revealed that pupils focused their practice on areas of control and accuracy, expressivity, and physical presentation and used a combination of both task-management and mental energy strategies. When writing about the effectiveness of their strategies at the end of each week, this mapping process showed that pupils could provide clear and honest views of their work, and also ideas for going forward. This data set intended to show how a written element might be a useful tool for both the pupil and teacher.

From the observations made of Layer 5, all ten performers, the audience and I enjoyed the occasion to celebrate learning. Although there was varied proficiency demonstrated in these performances, all pupils seemed comfortable and competent enough to perform on the formal stage.

In the next chapter the interview data is examined to relay pupils' perceptions and experiences of learning, practising, and performing for each of the five Layers, and also to relay their impressions of participating in the project.

¹ <http://www.youtube.com/watch?v=DUUcWKtoALY>

CHAPTER 6

PUPILS' PERCEPTIONS AND EXPERIENCES

6.1 Introduction

This chapter presents data collected through semi-structured interviews at various points in order to explore pupils' experiences of the project and its impact on their learning, with the exception of Interview A, which has already been presented in Chapter 4. Although a thematic approach (Mason, 2002) was used for all interviews (see Appendix C), Interviews B and C emphasised practice and performance. All five Layers were drawn together during Interview D to report on the pupils' experience of their learning generally, but also on their experience of each of the five individual learning environments specifically.

6.2 Interviews B and C on Practising

All participants were committed to regular home practice, but at no point in the study was empirical data collected to indicate the quantity or quality of their practice. However, to expand the emerging picture of pupils' practising experience, I asked questions about practice generally, and the maps specifically. Pupils interpreted my questions in different ways resulting in a data set that was broad and diverse.

6.2.1 Practising: Interview B

Since the Practice Maps were a weekly source of data, I asked only one question about practice at week seven to glimpse if pupils were aware of thinking differently about practice, and if so, in what way. Three pupils responded by saying that they were not aware of thinking differently about practising, while one said she was unsure. The remainder answered this question by commenting on how their practice was changing. Pupils seemed to be becoming aware of focusing their thinking on specific issues and ways of practising.

T2 – I have become more able to pick out more things to work on...

- U3 – I don't think I practised as good as I do now. If I get stuck on notes, I would practise it better now. I go over things more.
- V3 – I try to think and feel the music more.

While X4 claimed that practice was generally 'easier' because of sustained effort from the beginning of the year, Y5 and Z5 attributed changes in how they were thinking and practising to the fact that they were able to observe their own performance films.

- Y5 – I am working on stuff in more detail. Before, I never took notice of it that much, and it's the same as when you can see it. It's easier to practise.
- Z5 – ...it kind of motivates me more, if you can see like, one week you have these kind of things to work on, and then the next week if you are filming, you can see how they have improved, or if they haven't improved as much as you would have liked them to.

6.2.2 Practising practice: Interview C

Interview C took place during a school holiday and further probed into their experience and perception of practising (see Appendix C). All pupils participated with the exception of Qp who was away on a family holiday. Time constraints were not favourable for rescheduling this interview upon her return.

When discussing what pupils were learning about practice, only R2 stated outright that she was not learning anything about her practice. T2 and X4 gave non-descriptive responses such as, 'practice helps', or 'that it makes you better', while V3 claimed that she was learning that she enjoyed practice more this year because she preferred the repertoire more than previous years. Y5 claimed to be 'practising how to perform more' at home, while U3 and Z5 were learning from exploring the ideas suggested by their peers.

- U3 – Well, ...when the other girls give me suggestions I'll use them at home when practising for a performance. Like I wouldn't have, before all this started, the questions and stuff. I wouldn't have really thought about performance, just getting the pieces right, but then as soon as I started, I was like, thinking more about it and it helps.
- Z5 – Well, I suppose I've learned about, like people have suggested ways of doing things differently...

I was also interested to continue probing to find out if pupils were aware of thinking differently when practising. Comments from R2, S2 and V3, indicated that they were aware of becoming generally more mentally focused and visually aware while practising (see Figure 36). T2 found that by deliberately focusing her thinking towards doing well in the moment, she could experience a reduction in the time needed to practise, whereas it seemed that W3 accredited experiencing progress this year to efficacious thinking when taking on new challenges. Only X4 claimed to have not experienced any further change in her thinking while practising.

However, comments from U3, Y5 and Z5, suggested that as the end of term assessment approached, they were aware of running a kind of continuous background program in their head that kept the end goal of performance in mind.

	Changes in Practice Thinking	Reasons for Change
Qp	absent	n/a
R2	I focus a lot more on the piece...	...by doing the maps
S2	...thinking it would be nice if I move more, maybe if I kept my eye on my bows...a bit more to make sure they are straight and things...	...because I have been kind of playing in front of people, and I have seen people play, so I am kind of thinking some times of what I am thinking while I am watching them.
T2	...I used to think, 'Oh this is going to go on forever and ever', and then now I'm thinking, 'If I do well now, it will be over faster'.	For a week I started doing like, thinking that way and it really helped. I'm thinking of the piece, what you said and what I can do to make it far better and I read the note book before I practise.
U3	You've got to think how you would perform this piece... you have to concentrate on getting it, playing straight through and if there is a section that goes on more than once in the piece, that you get all that section right because if you get it a bit wrong, all the three times that you play it, or the two times, then it shows that you haven't practised enough.	The suggestions from all the other people...if they watch your video and then they are like, 'Oh you could change this' or 'this would make it sound better', that helps.
V3	I have more things to like watch out for now and I look for them.	When we started videoing this year I saw that my violin was too high and that I should be moving more
W3	well, I was thinking, like last year, 'Oh my ... I can't do this, its really hard'. But if you like think, 'I can do this, I will get it,' then you actually do.	I don't know... it's the kind of group practice thing, knowing that everyone is in the same boat as you and you are not the worst or anything, that's making you feel more confident.
X4	No	
Y5	... normally I just practise to just like fix things in the pieces, but now when I practise its like, practising how to perform more.	Since I've been watching the videos and the group sessions and stuff.

Z5	I am thinking more about kind of the things we have been looking at and that I have been aiming at...delivery and performance. And it has kind of changed the way that I think about the piece before I play it.	I suppose just kind of my aims, like really, because it's like the sense of, 'How would I be playing this if there was an audience and if I were performing it?'
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Figure 36: Samples of map reflections

Although these statements provide only a small glimpse of how pupils were thinking about practice, it does show that pupils used different ways of thinking as they worked towards developing skills that would enable them to sit comfortably in the *performer's* chair (see Figure 36). The underlying influential factors for change also seemed to differ. We can see this by looking at T2 and W3 and the reasons they gave for undergoing a shift in practice attitude. T2 acknowledged success when she undertook a trial and error experiment that set out to control the way she thought during practice sessions, while W3 seemed to experience a positive change in her practice attitude from absorbing feelings of camaraderie generated during the Group Sessions.

With the term more than half over, I was interested to know if pupils were aware of any change to the duration of their daily practice sessions. While some pupils acknowledged increasing their practice time because of the forthcoming assessment and concert, others admitted that the time they spent practising remained unchanged.

Since Y5 mentioned that she had begun 'practising how to perform', I decided to visit this topic directly by asking each pupil whether performing was one of her practice strategies. For some pupils, their idea of practising performing was simply to 'play through' a piece. Others spoke about seizing opportunities to perform for family members or friends at home.

V3 – Uhm, well, if there is somebody in the room, like if my Mom was there, then I would kind of do it. I'd like perform, but then if I was just on my own, I would just kind of think it in my head, but I wouldn't actually do it.

W3 – ... sometimes my Mom and Dad come in to watch me and sometimes if my friend is coming over like, she'll listen to me...because like you get used to performing rather than just practising on your own.

While pupils spoke about focusing on specific elements or techniques as they practised performing, they also spoke about monitoring the frequency of performances within a given practice session.

X4 – Body movement and the way that I end the piece and start the piece.

T2 – Not all the time because you can over perform it.

I also asked pupils if they were pleased with the way they were practising thus far in the term. Three pupils gave slightly non-committal answers regarding claims about their practice satisfaction.

T2 – I think so, but I don't know.

W3 – I think so.

Z5 – Ah, overall yah. Yah, except that my year has been so busy...but, like I think, overall I am happy with my practice.

Others simply replied 'yes', that they were pleased with how they were practising, but X4 included, 'because I like practising'. Two pupils elaborated by stating that they felt that the way in which they were practising had improved in terms of quality and approach.

V3 – Yes, I think its better...like I do it better.

U3 – ...the practice maps give me a certain one or two things, or three things, to practise on ... and then I would put them all together.

As S2 and W3 show below, some pupils suggested that they were aware of thinking, focusing, and concentrating in more detail because of the written exercise. However, T2 and Z5 claimed to have used this form of reflection in other parts of their practice. While all of the comments below indicate that pupils were becoming more aware of their own growing sense of agency because of the mapping process, T2's response is evidence to show that this activity had helped her to become more autonomous.

S2 – ...I think more about those kind of things...I can look and see in case I have forgotten what I was meant to be thinking about

T2 – It makes me like, think a bit differently again, because like, if I have something wrong, I usually go to you, but now I can fix it straight away, on

every piece.

W3 – ...last year I wasn't really concentrating on things like, that I was meant to, because like, I kept forgetting them. But then writing down how you do it just helps you like, realise what you are doing.

Z5 – ...they have helped me realise things about myself, or the piece, or something that I could use in other pieces that I could improve the way that I do them.

6.2.3 Performance: Interview B

During Interview B all ten pupils admitted to noticing some sort of improvement in how they were playing or feeling about performing. Examples of technical issues that each pupil provided were found to be comparable to the ones they had been mentioning in different Layers of the study. For example, R2 stated that she had 'mostly stopped hitting other strings', while S2 claimed, 'in the *Humoresque* I am more in tune when I shift'. Both pupils had monitored these topics in every FAP session across Layers 1 and 2, during Session A of Layer 3, and on most, if not all, of the Practice Maps returned by the time of this interview. While V3, X4, and Z5 stated at the start of the project that they had hoped to experience a decrease in performance anxiety at some stage, only V3 expressed that she felt more proficient as a *performer* saying, 'I feel more confident and I feel better when I am playing. I am not as scared to perform now'. T2 also commented that she felt 'more confident'.

Though neither Y5 nor Z5 identified specific areas of improvement, it would appear that they were aware of a growing level of discernment because of the frequent opportunities to see and hear themselves as a *performer*.

Y5 – The performances overall and noticing stuff in performance kind of helps you. Like when you see how you performed it, and like you see it's gone wrong, so you know how to fix it because you don't actually see and hear it (when you are playing).

Z5 – You see like the way you perform is improving and I think it is helping me see the layers I need to work on, and I think it is actually more effective when you can actually see it as well... I think for me, I think of it [performance] more visually now than previously.

When probed about observing their peers perform, three pupils admitted that they were not aware of thinking differently when watching others perform, while others gave

responses to support Y5 and Z5's earlier comments, that their ability to critique was changing. For example, S2 stated, 'I can notice things that I maybe, like, would not have been looking for before...', while W3 claimed, 'Before I wouldn't take much notice at how anyone moved, or if they did vibrato, or shifting, but I do now'. Y5 summed up what many of the pupils seemed to be aware of, that they were 'thinking in more detail' while watching others perform. However, only S2 seemed to suggest being aware of consciously changing the way she thought while performing because she had observed her peers perform.

S2 – I saw what people could do and it helped me to think about it more when I was playing it.

Pupils' statements also indicated that they believed that the comments from their peers were influential or beneficial in some way. S2 seemed appreciative that peers' comments had confirmed and supplemented her own critique, while comments from V3 and X4 indicated that the ideas and advice received from their peers had encouraged them to consider making adjustments. Only T2 and Z5 suggested that their motivation to improve had actually been influenced by their peers' comments.

S2 – Like I know things, and I wouldn't actually take notice if I was playing it, so it's nice to get it from people actually listening to it.

T2 – They are very helpful because I know what to work on, and how good they think I am.

V3 – When W3 talked to me about moving, it really made me think about it more.

X4 – ...They have given me tips, because the thing that I am doing they might have done the same thing, so they can tell me how to practise.

Z5 – When you hear a comment from someone your age, it motivates you to work harder, so you'll get more compliments.

6.2.4 Performance: Interview C

During Interview C questions about performing were framed in a way that encouraged pupils to reflect only on their own performances and the learning process. When encouraging pupils to reflect on themselves as a *performer*, I also probed their thoughts

on using audio-visual tools, learning about performance preparation, and what they were aware of paying attention to while performing.

As the section on performance started, pupils were asked if they felt that they were performing better and why, or why not. Only R2 said that she did not feel she was performing better, and declined from explaining further. The responses from all other pupils were encouraging, and none needed a prompt to elaborate their answers. The majority indicated an awareness of feeling ‘more confident’, ‘less nervous’, or that they were finding performing ‘easier’. Some explanations implied that this growth was the result of having frequent opportunities to perform.

- R2 – No. [T.R. – Can you explain why?] – No.
- S2 – Yah, because I have done it more often.
- T2 – I think it is easier, because I have performed in bigger places. I am less nervous. In this [project] there was just a small group of people and I knew them all, I am friends with the group of people, so.
- U3 – Well, it is easier because I get to practise more times. I get to practise at performing, I mean, I get to perform more times...
- V3 – I’m like more confident, and I’m kind of more, I enjoy doing it now. I got used to it in front of the groups and in shared lessons, so it is easier now. I don’t mind playing in front of an audience now...
- W3 – For me, I don’t think performing will ever be easy, but it is easier.
- X4 – Oh definitely! I know the pieces better, and, it’s easier because I’ve performed to a few different people now, so I don’t get really nervous anymore.
- Y5 – I think I just find it a bit easier now....
- Z5 – Well, I suppose I’ve had more opportunity to perform a bit now. So I suppose it is easier.

In order to explore the topic of improvement further, pupils were asked to comment on a film made the previous week. All stated that they noticed improvement in how they played and performed while mentioning many of the topics that they had been monitoring, such as R2’s bow control, W3’s vibrato, or Z5’s stance, to name but a few. Only Y5 declined to describe detailed improvement, and instead made a generalised but surprisingly positive statement, ‘I didn’t think I could perform that well’. However, two things caught my attention during this exercise. Firstly, I noticed the acuity of some

pupils to give a nuanced critique, listing both concerns and achievements without my help, and secondly, I noticed that many included a critique of what they looked like as a performer.

- T2 – My shoulder [is down]. Well, I think I have improved, full stop. Like, on the way I look, you know, instead of looking all like small and like, nervous and, my mouth [tension] has improved.
- W3 – A lot of things are improving, like I can move a bit now and I can do a bit of vibrato, and I don't look as bored, and I think like I can keep in tune. I could move a bit more and sometimes my bow slips when I am performing.
- X4 – Well, the dynamics, the tone, the intonation. For some reason I seem more relaxed.

When exploring the impact of using video, only S2 and R2 responded that they felt they were learning more from listening to their films than from looking. The remaining pupils claimed that both the aural and visual features were equally valuable to their learning. W3 summed it up for many pupils by saying, 'Listening and watching, because it's not all about sound. Well, it's a big part, but like, not all of it'.

As pupils reflected on what they were learning about performance preparation their responses jumped again to emphasise the importance of practising and their approaches to practising. For example, both W3 and X4 spoke in an elementary way about the need for being secure and 'knowing the piece well', while S2's approach was to, 'go over it and go over it, in small bits, and kind of just memorise it'. T2 simply provided one of her favourite sayings that she had shared during a Group Session, 'the better you get, and the better you get the more you practise'. Two pupils suggested that performance preparation benefits from 'practising in front of people' as a means to practise performing. Z5 responded to this topic on a different level than her peers. As the eldest and perhaps most experienced performer, Z5 acknowledged commitment to practising, but was also the only pupil to acknowledge the important interplay between performance nerves and self-belief.

- Z5 – Well, I suppose I kind of know most of the things already, in the sense of like, practice and whatever, but then...everyone else does go through the same things as you and everyone is nervous, and that it is a natural part of it.

Because like, it is more ‘real’ now... the nervousness gives you adrenaline... it spurs you on to greater heights...when I perform, usually I do play better...I suppose your nervousness gets balanced out with this kind of thing that you know, ‘I’m performing now, I’ve worked for it’.

Pupils were also encouraged to speak about what they were aware of paying attention to when performing. A few reflected on the same issues that they had been mentioning across the FAPs in Layers 1 and 2 such as bow control, gesturing, dynamics, tone production, note accuracy and pitch. However, both S2 and Y5 spoke about being aware of phrasing and blending with the accompanist, while W3 and T2 mentioned thinking about how to ‘make it really enjoyable’, so that ‘the audience enjoy(s) my piece, my playing’.

6.3 Pupils’ Final Reflections: Interview D

The final interview was conducted one week after the public concert in order to explore pupils’ experiences of the project and its impact on their learning (see Appendix C).

As there were approximately three weeks since the pupils had formally engaged in any kind of reflection for the project, I reacquainted each with this capacity by asking more general questions before examining their experiences of the individual learning environments. How pupils responded helped determine the order of my interview topics. What pupils felt they had learned over the duration of the project is implied within the many excerpts provided in this chapter, while which of the Layers that pupils felt they had learned the most from, and which environment was the most enjoyable is given per Layer. In answering these questions many pupils seemed to experience difficulty in choosing between the Layers, with some pupils giving more than one Layer per question. Answers to these questions feature throughout the following sections.

6.3.1 Layer 1: impressions of engaging personal enquiry

Although all pupils gave examples of how participating in Layer 1 positively impacted their learning, only W3 put Layer 1 into the category of the most enjoyable activity. When asked which activity they felt that they had learned the most from R2, W3, X4, Y5, and Z5 named Layer 1. Their reasoning was grounded primarily on having had the

opportunity to engage with the video and see themselves as performer. Only Y5 mentioned the benefit of having the opportunity to speak about performance.

Y5 – Probably the solo filming lessons, because I could see myself, and I never really talked about my performances after.

Comments about Layer 1 primarily centred on the usefulness of video as a tool to help pupils learn to assess their playing, track their progress, or generate new ideas. Although T2 was the only pupil who stated outright that Layer 1 motivated her to improve, this idea of the utility of video seemed to underpin many pupils' reflections about Layer 1 as shown below.

R2 – ... you could see things you mightn't have noticed when you were playing...I thought of other stuff I could improve on...

T2 – They helped me as well because, when I was like playing, I didn't actually notice like, stuff, but then when I watched them on the computer there was a lot of stuff that I hadn't noticed when I was playing...because I saw what I was playing like, and wanted to be better the next week...

W3 – I thought they were really helpful, like you could watch and listen to yourself and see what you needed to improve on or what you thought was really good.

Z5 – Because I was able to see myself, and I could see, and hear, my progress over the weeks, and like how I was improving, what things weren't improving as much as I would have liked them to, and like, it just showed it to me effectively.

6.3.2 Layer 2: impressions of engaging collaboratively with peers

While half of the pupils remarked that Layer 2 was the one they learned the most from engaging, only three said it was the most enjoyable. Pupils gave many different examples of how Layer 2 complemented their learning, and there were many different accounts of how they appreciated the opportunities to perform for a peer, observe a peer perform, and to give and receive peer feedback.

Throughout this interview pupils gave only positive reviews of Layer 2. This environment was a place where T2 said she could trust that her peers (the only trio) would give their 'honest opinions', and it was also a place where R2 (one of a pair) learned about things that she 'mightn't have thought of', unless the peer had shared her

opinion. X4 suggested that not only was it helpful to have an extra person to perform for, it was helpful when someone her own age voiced and shared the same views as the teacher.

X4 – I learned most from the shared lessons...you didn't hear it just from your teacher, you heard it from more than one person...it might have been because, like, she was the same age as me so...and it helped playing in front of people...

In return, U3 remembered being grateful for receiving helpful advice from X4 on, 'how to start' *Autumn Song*, an issue that X4 had conquered the previous year.

The appreciation of a more intimate setting in which to learn about performing was something that came through strongly in many pupils' comments about Layer 2. For example, V3 suggested that the value of Layer 2 (collaborating with just one peer) was that it became a welcome stepping-stone that built confidence before playing to bigger audiences.

V3 – It was fun to have like one other person hear you...it was only one more person so you wouldn't be so nervous ... You can just watch them perform and then, like, when you perform you wouldn't be as nervous as you were, because you saw them perform...

As a pair, Y5 and Z5 seemed to have embodied all of the above. Their comments suggested that they had not only learned from observing each other perform, but had also learned from their collaborative dialogue.

Y5 – Seeing the other person performing and then talking about each other. It kind of helped...learning about the other person... getting positive feedback, helpful feedback from them.... Like, something in the piece I wasn't happy about, and she told me how, like, I could fix it or work on it.

Z5 – ... you actually can see that other people are in the same boat...we are at the same level... she is like better at that than I am, and I could work to improve on that.... I learned, that I am not that far behind on violin, compared to other people... I could see that the other person also had difficulties, but then I had my own difficulties, and I was able to help her try to improve those. And it kind of gave me an insight into how I could help someone else.

6.3.3 Layer 3: impressions of engaging within a group context

Sessions in Layer 3 gave all pupils who attended multiple opportunities to perform for a larger audience, and to engage in peer feedback and group discussions. While S2 and Y5 were the only two who expressed that this was the Layer that they enjoyed the most, all pupils spoke of these sessions as being advantageous to their learning in some way. Enjoyment for Y5 was the result of performing ‘in front of everyone’, whereas S2’s comments seemed to point to the importance of being a member of a performance community, from ‘everyone being together, and listening to other people play’. T2 suggested that these sessions impacted her learning more than any other Layer because of the reciprocal nature of the activities.

T2 – It was when I was observing, because, when I think back, I think I am observing someone else, and they are going to be observing me in the exact same way.

S2, V3, and W3 also said that Layer 3 was the environment that they learned the most from. Their reasons were very different, however. For example, W3 said that she learned from observing how others do things, both in terms of how they looked and sounded. V3’s reason seemed to align with S2’s notion of community mentioned earlier, that from observing her peers she had gained new insight into performance nerves and confidence issues.

W3 – Being the Observer I think, because you learn how they are doing their posture and how they were making it sound nice and stuff like that.

V3 – ...like everybody else was confident so then I was able to, like they didn’t mind performing in front of us, so then I knew that I could be able to kind of like, do that as well...one person said that, that you could show off how you do it and that is why you shouldn’t be nervous... like we all experience it [nerves], and we all know what each other’s feeling when we go up there.

As pupils reflected on Layer 3 they all continued to provide examples of how this Layer influenced their learning. Through peer feedback, W3 received helpful tips on how to move, and that she should also ‘do more vibrato’, but it was this environment that had ‘made performing easier because you had to stand up in front of your friends...you kind of got a bit more used to it’. U3’s experience of Layer 3 was that, ‘they did help...

[because] I got used to playing in front of people'. R2 observed that her peers had a 'different way of playing' the same pieces that she was learning, as did U3 who stated, 'Like I was playing the same pieces as another person, but they played them completely differently to me'. Although U3 and T2 acknowledged that they had learned something by witnessing their peers cope with mistakes, others, such as V3, seemed to be motivated to improve and try new ideas as a result of observing their peers perform in this group context.

- T2 – Well like the things that I was watching out for in the other people, then, I could say, 'Oh!' and like you just realise that it might be in your playing so then you try and fix it, something you could improve, or make happen
- U3 – ... and if they made a mistake in one bit, then I would say, 'Oh, I am not going to make that mistake, or if I do, then I am going to try and fix it'.
- V3 – ... because when I saw like other people play, then I wanted to be as good as them, so then I wanted to practise more and be better.

6.3.4 Layer 4: impressions of a new way of practising

Individual's return rates were not presumed to be indicators of their like or dislike of the mapping process, and while no pupils thought that the mapping process was the most enjoyable activity, pupils generally talked favourably about it, with two individuals stating that they found the mapping experience 'fun'.

- Qp – ... they were fun.
- W3 – ...it was quite fun.

While four pupils said that this was the activity they learned the most from, it was the two eldest participants, aged thirteen, who hinted that the extra mental and/or physical written obligation was a slight burden.

- Y5 – They weren't my favourite thing but...I don't know, like... I don't know...It wasn't that bad, it was just... it was just the writing about after.
- Z5 – ... over all I liked them, it's just that they were kind of annoying... I didn't look forward to doing them, but once I did them, I was happy I did. Does that make sense? ... I didn't think of them as homework because, I mean, you have to practise, and I don't look at that as homework, I look at that as something that you kind of have to do to improve, for your own good.

The comments from R2, the pupil who never filled in the strategy sections, implied that if she had received assistance with the ‘focus’ and ‘strategy’ sections it could have impacted her engagement and return rate.

R2 – Well, sometimes I wouldn’t know what to put. Let’s just say I had like, making my bows straight, one week, and then I had it again another week. I might want to put something different on, I wouldn’t know what to say.

Pupils spoke about the mapping as being a useful process for helping them decide what needed to be developed each week, but also for formulating, sustaining and carrying out a vigorous plan of action throughout the week. Pupils suggested that this process helped them to manage and structure their practice, while encouraging them to set personal goals.

R2 – Well, it was helpful because that was something that I wanted to improve on, so I would focus on it.

U3 – Well, they helped me practise...because they helped map out what I was going to do for that week... just for that piece. And then they helped me focus on things that I had problems with, or that I was getting wrong every time.

X4 – ... they helped a lot, because I knew what to practise and how to practise and then ... conquered the problem.... it kind of like, shows you like... the main ones that you need to like watch and then like, you kind of remember them and like when you are playing you like try to get those right.

Y5 – ... When I was practising the piece, sometimes I would just run through the whole thing, and I’d kind of, if I messed anything up I would stop on it, whereas, when I got the practice map, I would just pick the spot that I kept messing up on first and just did that... it gave me kind of like a focus, to practise on the bits that actually needed practising...

Z5 – ... maps also really helped in the sense that I could focus on what I wanted to work on, and then work on that specifically.

Some pupils’ comments seemed to suggest that the experimental nature of the mapping process had encouraged a general maturity in how they designed and implemented their practice strategies. In subtle ways their comments seemed to indicate a growing awareness of the need to be flexible in their approach to practising.

W3 – [strategies worked]...most of the time. Some of the time not really, but you know, you learn from your mistakes.

Z5 – ...they were helpful like I said earlier, uhm, allow you to focus on what you wanted to work on over the week, and then being able to see how you actually progressed from your own point of view....I was better able to focus overall because I had a plan.

Mapping was the only learning environment during the study that challenged pupils to reflect and participate through a written framework, and upon such reflection pupils seemed to emphasise that it was the written activity that deepened their engagement with practising.

T2 – ...now I know if I have a problem how to fix it... the way you had to write the problem, the solution and result.

W3 – ...[maps] taught me new stuff like, new ideas that I could do to improve this or that... because it made you actually realise when you wrote them down, it made you realise what you were doing ... so you were definitely noticing it rather than like ignoring it...

Y5 – ...when I actually had to write about it, I kind of looked into it a bit more.

V3 was one pupil who explained that the written element had wider implications than just organising what or how she practised. Not only was the mapping process a means for sharing a visual representation of her intentions and evaluations during her lessons, the entire process seemed to orchestrate a sense of self-satisfaction.

V3 – ... I could just write it down and show you what I did over the week, and that was good...when I like wrote them down, I could see myself what I had done and like, I'd be pleased with it if I had a lot done.

At the close of the section on Practice Maps in Interview D, I asked pupils to reflect on their practising generally. A few remarked that their practice sessions had increased in length as the performance assessment approached, or because their list of repertoire had increased. However, in addition to R2 and S2, others also commented that they had been aware of generally 'focusing more' as they practised, or were just aware of 'think[ing] about it more'. Both W3 and T2 provided examples to show they had been aware of giving more thought to the way they practised.

T2 – Because like I thought about it. Like, say when I was at home, I was like, 'Oh,

what was the last video I did?', and then I thought about that, and then I thought of that video and what I could improve on it, and then I worked on that for the morning. Like, you thought you were trying to think of new things you could do to practise.

W3 – I would kind of think up new ideas, like every few weeks. Say, if I was having trouble with one piece, I would start doing it over and over, and then if that wasn't going as well as it should then I would like, think up different things.

It was also encouraging to hear pupils infer at the end of the project that performing itself had become a practice strategy.

U3 – ... I focus more on bits that I get wrong a lot or every time I play it. And then I would work on that bit, and then I'd like play [that] line or ... and then I would perform, and I usually wouldn't do that. A few years before I wouldn't have done that.

Y5 – ... when I know the piece, and I just perform it, and I work on the 'performance' aspect.

While this section reflected on the pupils' experience of practising and the mapping process, the discussion between V3 and me is perhaps an apt way to show that the topic of practising will remain complex and dynamic.

V3 – I am practising more now, because the tunes are longer and harder, so like I wanted to be better at them. I wanted to do good in my exam.

T.R. – Do you know exactly what you are doing differently?

V3 – Well I enjoy it more, the pieces. It's because they are fast and lively, and I like that kind of music. And it was a bit of a challenge.

T.R. – So you like a challenge?

V3 – Yeah, a small bit, because I am grown up now, or maybe it is the group sessions. I don't know, but I just do it differently now for some reason.

6.3.5 Layer 5: impressions of the celebratory concert

Five pupils stated that the celebratory formal concert was the most enjoyable activity of the project, and while many others spoke about this environment as being 'fun', all said it was beneficial. Both R2 and S2 enjoyed the opportunity of 'listening to other people play', of 'being together' as a group of pupils who took turns performing on a bigger

stage. Other pupils, such as Qp, W3, and Y5, were also aware of feeling less awkward and nervous on stage, or that they had learned to control performance nerves.

Qp – I just learned that if you pretend they are not there, and that I just pretend I am performing for you, it's kind of different. You don't get all nervous.

W3 – I was pretty nervous, but I wasn't as nervous as I thought I would be like, you know?...I enjoyed it like. I always do. I think I am going to hate it, but then I like, enjoy it...just keep calm because it will probably go right anyway, so there is no point in panicking.

Y5 – I didn't have a problem performing in front of them...I think I am just used to it.

U3 was the only pupil who confessed that she found the public concert 'awful'. The reason was that she forgot to count the two bar introduction in Kabalevsky's *Clowns* before she started playing. U3 showed that she could learn important things from mistakes by saying, 'I won't do that again'.

As pupils discussed their experiences of the formal concert, their comments often hinted at their appreciation of having the opportunity to share their learning with others in a more formal setting, and that performing was 'fun', and made them feel 'happy' and 'proud'.

Qp – Like it was fun performing, and it was great, just a great opportunity to do it in front of everyone. It was just fun standing up on stage and me doing my violin, and just playing along there. It made me feel proud of myself.

T2 – I thought it was fun. I felt really comfortable. I was just like, I am going to show them how I can play...after all the work you have done in the year you can just show it off in the end to all the parents

W3 – I enjoyed it like. I always do. I think I am going to hate it, but then I like, enjoy it...just feeling happy having everybody knowing how able I am do to it.

X4 – ... the concert at the end, was just nice to like show off that I had done all the work.

However, when I asked what activity the pupils learnt the most from only, V3 and Z5 said the public concert. V3 implied that she set out to 'flow' with the music rather than be too worried about a more analytical, technical approach. She observed that she had

succeeded in her concerto movement, and implied that this formal performance had helped her to learn about herself as a performer. Z5 implied that while she enjoyed the kind of goal-oriented approach that was not directed towards an examination or comparative evaluation, she also appreciated the direct value of concert experience, which is so necessary for the *performer*.

V3 – Probably the parent concert because it was a bigger crowd, and like it was more of a test. I was testing myself... confidence, and, just, I wanted to feel like flowing with it...instead of being like, concentrating so much...I think I could have done better in *Spanish Tanze*, but the concerto was ... I was kind of more nervous but then when I went to the concerto I wasn't nervous.

Z5 – ...it was nice because I could perform and it was [a] nice way to end the year, in that it gave me something to look forward to, as like, it was displaying work that has been done over the year. It gave me something other than my exam to work for, and I think that helped me in focusing...

After reflecting on their experience of the celebratory concert, pupils viewed and compared their first film to the one made of their public concert performance. Most pupils mentioned the topics and issues that they had been continually monitoring across the project. For example, R2 mentioned noticing improvement in her bow control, for Qp it was her posture, T2 commented again on tone, while S2 continued to identify issues with her shifting and pitch. I finished by probing how they felt about themselves as a *performer*, now that the project was complete. Although I asked the closed ended question of, 'are you happy with the performer you are today?', only U3 replied with a hesitant, 'I suppose so'. The remainder of pupils quickly said yes followed by an immediate and unprompted explanation, except for S2 who could not formulate a reason for her answer. While many of their responses acknowledged the impact of the various different interventions (Layers), they also implied recognition of their own commitment to learning.

R2 – Yeah, because I know how much I have improved.

V3 – Yes, because of all the group lessons and the shared lessons. Me practising.

W3 – Yes. I am just more confident and, I don't know, I just have more knowledge of how to perform properly and stuff like that now, because I worked. I mean, I wouldn't be very good if I didn't.

Y5 – Yes, because we spent so long working on it. I think some of it comes

naturally, but not all of it.

- Z5 – I am happy because I've achieved something that like, is my standard... like, I'm not a bad performer so, I'm happy, because, it's like what I am able to do. I suppose it's like that I have improved from that whole ... building up of performing...first you had the [peer collaborative] sessions, groups [sessions] and then you kind of did the parent concert, yeah, building up.

One question that I was keen to hear answered was whether pupils felt differently about performing for the end of year performance assessment in comparison to the public concert. It seemed that who was in the audience, more than the number of attendees, affected how these pupils felt. An overwhelming number claimed that they felt more nervous for the school's assessment because they believed they were being judged and marked. Many implied that the larger audience who came to the formal concert had a different mind-set than those on the assessment panel, one that was more relaxed and supportive. As R2 said, 'in the concert they don't mark you. They don't tell you what was good or what was bad'. This difference seemed to impact how the majority of these pupils felt about performing on the public stage. For example, W3 and V3 clearly stated battling the fear of failure because of the comparative nature of assessment, but that this particular internal conflict did not arise when they performed in public.

- V3 – I think the exam is more nervous because you know they are going to mark you, and they are going to judge you on everything that you do, like they were experts, but then the people in the crowd would think you were good even though you make a mistake.
- W3 – I think I felt a bit more confident at the parent concert because the exam I kind of knew, 'This is it! You have to do well now!' whereas it didn't really matter if I messed up in the parent concert.

Z5 also hinted that the comparative analysis of the assessment could be distracting, but that the formal concert was an enjoyable and non-judgmental environment in which to 'perform for people, to make music'. T2 was the only one of this group to have a somewhat different view of these two performance stages. T2's view was that the assessment was less ceremonial, and a friendly environment in which to share her learning with experts. As she put it, 'the examiners talk to you...[but the public audience] sit there and clap and then you leave. The performing is more like, formal. The exam is just like, they want to see what you have done for the term'.

6.3.6 The final ‘stuff... like’ - listening, looking, analysing, speaking, and learning

The final part of this interview invited pupils to consider a few of the reflective roles for the last time as part of this project. When asked to reflect on the act of listening, S2 said that she was unsure if the way she was listening had changed since the start of the project. Moreover, R2 simply stated that her listening had not changed. The remaining eight pupils implied that they had learned to listen more critically (in detail) and mindfully (considering possibilities) as shown here by T2, W3, and Z5.

T2 – ... if I was listening to like a concert of someone I didn't know at all, I would just listen like, 'Am I enjoying this?', and like things that they'd do that I might want to put into my violin playing, but if I was listening like to myself, I might be picky. I am getting a bit picky... like that everything has to be perfect...

W3 – Before I was just thinking of the tune, but now that I kind of know how to play it properly I am listening to all the other stuff. Like, I would be listening past the main things... to all the other things in the back ground...because I have got more used to it... Like a few months back I wasn't really listening to that, but as I got to know the piece I started listening to the details.

Z5 – Yeah, I think I am. Like if you listen to a professional musician who is playing a piece, you would listen for their interpretation of the piece, and I think I do that more now because I am thinking about how I could interpret the music myself, so, you are listening, you are going kind of past the bare notes of it. You are looking at the emotions.

When asked if they were aware of visualising themselves any differently when playing the violin, both R2 and X4 said that they were not. Others implied that they were aware of visualising, before quickly deviating to explain how the video was a useful resource for monitoring their progress and noticing new things. Further probing uncovered that although the majority of pupils claimed to have experienced moments of self-visualisation as they played their violins, it was not a common occurrence. For example, W3 said that it was a matter for consideration, 'but [that] it is not the number one thing', as did V3 when she said, 'not as much, like, I am concentrating on the notes and everything I need to do in the pieces'. Only Qp and Z5 reflected on how aware they were of thinking visually as they played.

Qp – I think about what I am looking like, my wrist, my posture, but I think about

my tune, my tuning and my pitching and my rhythm, I think about everything.

Z5 – ...you are thinking of what you want to look like, and then, how to make yourself look like that.

As pupils spoke about the impact of their engagement with my persistent questioning, I became aware that a few pupils were appreciating their growth as an *analyst*. For example, W3, Y5 and Z5 implied that the questioning process had made them think more inquisitively.

W3 – ... It makes me think about things more that I wouldn't have really thought about before... I would take a different view on some stuff because of the questions, but I wouldn't have thought about them before... When I am playing I think of the stuff that I was kind of asked in the questions... and take some of the advice, or my own suggestions...I am thinking about stuff to do with the music...like what I need to concentrate on or what I thought was really good.

Y5 – It has made me start to think more about it...because I never really thought about it in such detail. I would just play it and that would be it.

Z5 – I suppose automatically when you are asked a question, you need to question to give an answer ...It has made me more conscious of the good things, and, kind of help me to just, improve the bad things, well, the things that need to be improved.

Similar to her response to many of the questions across the project, which tended to be terse, in this interview R2 simply denied being aware of any changes in the way she was thinking, or even that she had begun to question things at all. Qp, S2, U3, V3, and X4 also claimed to be unaware that they had begun to enquire in response to my persistent questioning. However, much of the evidence contradicts this. We need only to look at the numerous examples in this and previous chapters to find evidence which confirms U3's observation that, 'if you had asked me a question [before the project] I would have just gone like, "yes" or "no", but now I think deeper than just the basics'.

Although I had encouraged the pupils to reflect and articulate their reflections across the project, I began to notice during this final meeting that they needed very little prompting to answer my questions. Many of their answers implied that they were aware of being able to talk about violin performance and practice issues with greater ease. This was

even the case for R2 who often came across as non-compliant. However, when enquiring as to what helped R2 to talk about things more freely, her response was simply, ‘I don’t know’. Pupils’ ability to express themselves seemed to have grown by virtue of having opportunities to speak over a period of time.

W3 – At the start I wouldn’t really be able to answer some of the questions you are asking me now because they are, you kind of have to know the piece very well...

X4 – ...well, it helped in like English essays.

Y5 – I think because we have done so many, uhm, interview things, that it has just made it easier. Like at the very start I wasn’t really sure what to say and stuff.

Z5 – Yes, because I have had more experience talking about things, so, like I’ve talked to various people about performance and stuff...

Although I was interested in what pupils had to say about the things they learned while examining each of the Layers separately, I asked pupils to reflect on the project as a whole and comment on what they had learned; were there things that they might carry forward? At this point R2 and U3 brought up two new issues. R2 explained that from watching her peers she had learned how they did vibrato correctly, while U3 mentioned that she had learned about gesturing as a means to help the performer ‘tell the story’. The other pupils spoke of issues that they had continually been working on and monitoring across the entire project, as seen here by the quotes given of S2, T2, and Z5.

S2 – I learned about bow control and like where to put your bow and how much pressure to use...bow control and shifting.

T2 – I’ve learned like, how to be lively with your bow...making a story into our music, like lying on clouds eating marshmallows dipped in chocolate.

Z5 – I have learned to express myself more, to like, to use, to like, see my own progress through the videos, and that’s kind of helped me to like, improve in ways that I might not have without the videos, like for example, the bowing thing, that was my eureka moment...performance, don’t worry about it, not to worry as much...I kind of learned to just trust myself a bit more.

Only Qp and Y5 struggled to articulate the learning that they might carry into the future. Others responded in a way to suggest they had an implicit understanding of learning as a process, that learning how and about things does not end, and that there is always more

to consider or investigate. Pupils wanted to continue to explore most of the issues that they had been monitoring, examining, and working on over the term, except for R2 who, it seems, had only recently become sensitive to vibrato and was just now ready to start exploring it. S2 wanted to continue investigating ‘bow control and shifting’, while T2 wanted to sustain the development of her ‘tone, because people in concerts had nice tone’.

Having noticed that the word enjoyment continually surfaced across each of the various data sets, I decided to finish this section with all ten participants’ responses to the very last question, ‘why do you play the violin?’ since this is a personal reminder of how important my role is to their violin studies, and that enjoyment underpins their learning experience.

- Qp – Because I really enjoy it. I have a really nice teacher, and it’s fun.
- R2 – I like the instrument and I like the sound of it.
- S2 – Because I like it, I like the sound, and I like playing it. It feels nice.
- U3 – I had to choose between violin or piano, and I chose violin because loads of people play the violin, so I decided to do violin.
- V3 – Like, I enjoy playing it. It is really fun. I love the sound of it.
- W3 – Because I enjoy it and it’s just nice to know that you can play something and somebody else might not be able to. It just makes you feel good.
- X5 – Because I enjoy it.
- Y5 – I just enjoy it like.
- Z5 – Because I enjoy it, and I suppose it’s kind of, when I was small, my cousin was an amazing violinist...I always wanted to be like her... I enjoy it because when you are performing on the violin, you are with the violin... and it’s like, you have the power! yeah! You’re holding the violin... you have to bring it with you, it is yours...with another instrument like a keyboard instrument, the instrument is there, any one can play it, and it’s not as personal. It’s not as personal.
- T2 – Because I like it. I made a poem on music:

Music is the sound of life
It makes you happy and bright

When you hear it you start to smile
Even if it’s for a little while

It might be a little funny or about a
silly bunny

But music is about not being in a
pout

Music is never bad
Just sit down with a pal

You'll never ever whine
With Music all the time

6.4 Conclusion

Pupils' perceptions and experiences of learning to practice and perform were specifically probed during the term, and revisited during the final interview along with an enquiry into how pupils had perceived each of the five interventions. Although I did not analyse the interview data through the *musical chairs* as I did for the other data sets, these are clearly embedded and implied throughout.

The majority of pupils reported that practice was an enjoyable activity, something supported by the work of Hallam (2001a). Although logging the actual minutes pupils spent practising was not a part of this project, the majority of participants claimed to be unaware of any major increase to the amount of time they spent practising prior to any of the performance opportunities in this project. However, pupils expressed their awareness of experiencing a conscious shift in the way they focused their attention and honed their physical skills over the term, and this is a significant finding considering that the violin literature strongly advocates the nurturing of both mental effort and physical control (Gerle, 1983; Galamian, 1964; Havas, 1961; Auer, 1921). The majority of pupils spoke about practice in a way that suggested it had become more self-regulated and deliberate in nature (Lehmann *et al.*, 2007). Pupils indicated that their practice, and moreover their desire to improve, had been influenced by factors such as viewing their own films (Hatfield & Lemyre, 2016), viewing their peers' performances, collaborating with peers, and from designing or testing new ideas while engaging with the mapping process (Hatfield & Lemyre, 2016). However, the degree to which any of these activities might have influenced their development is grounds for further research.

When discussing the topic of learning to perform, the majority of pupils reported to have experienced a general decrease in performance nerves, together with a growth in their level of confidence and ability to perform. Pupils owed such benefits to having

participated in regular performance opportunities themselves and from witnessing their peers perform, from hearing peers comment on their own performances and those of other performers (Napoles, 2008; Rucker & Thompson, 2003), and also from critically reflecting on their own performance films (Burrack, 2002). Although pupils described that they felt differently when performing in the various performance contexts, the majority of them thought that performing was an enjoyable experience as well as a welcome opportunity to share and learn from others.

There was no consensus among this group of participants on whether their participation in any of the Layers made their studies generally more enjoyable. However, all pupils spoke favourably about each of the five Layers in terms of the positive impact it had on their learning. The opportunities to engage with the reflective roles of *listener*, *observer*, *analyst*, *advisor*, and *performer* informed their appraisals of Layers 1, 2, and 3, and regarding Layers 2, 3, and 5 they implied that the collaborative element had generated an atmosphere of trust and camaraderie. Even though many pupils found the written element of Layer 4 less than enjoyable, it was in fact this same written element that seemed to have instigated new and deeper ways for the pupils to engage with their learning, especially in becoming the *designer*.

The next chapter discusses the outcomes and implications for teaching and learning from the data presented in Chapters 4, 5, and 6.

CHAPTER 7

REFLECTING ON THE ADVENTURE

7.1 Introduction

The first part of this chapter reiterates my motives for the project, and gives a brief overview of the supporting literature. Outcomes for each of the five interventions are discussed as well as the emerging themes, which draw them together. I give an account of my own experience of the research process in the second part of the chapter, plus the limitations of this project and ideas for future research.

Part One

7.2 Environments for Reflection: Changing the Nature of Engagement

The primary purpose of this action research project was to explore ways of improving my teaching practice by engaging with the following research questions:

How might learning and teaching environments change to assist younger violin pupils develop a greater awareness of their roles in violin learning, performing and practising?

What are the outcomes and implications for teaching and learning when the opportunities for pupils to critically reflect, collaborate, and perform are increased?

By addressing such questions I set out to encourage ten of my younger violin pupils to explore their participation in the learning process so they might learn how to learn more effectively (Claxton, 2018, 2008, 2002). I attempted to find creative synergies by fitting pupil centred enquires into the tight confines of the weekly instrumental lesson where I could facilitate my pupils' engagement with specific reflective roles that I deem vital in instrumental learning. I have called these 'musical chairs' (*listener, observer, analyst, designer, advisor, performer*). While I had a hunch that pupils might experience a growth in autonomy by increasing their opportunities to perform and reflect on

performances, I neither expected nor forced them to comply or participate past their capabilities (Brandes & Ginnis, 1986: 44). Respecting that each pupil possessed their own unique lens for learning, I attempted to create non-judgemental environments where pupils felt empowered to explore ways of learning (Claxton & Carr, 2004). In essence, I explored simple ways to manipulate how my younger pupils and I could use our time with the hunch that they might experience a shift in their level of critical awareness and sense of agency.

I positioned my enquiry within action research as it is accepted that teacher researchers are ‘uniquely positioned to provide a truly emic, or insider’s, perspective’ (Cochran-Smith & Lytle, 1993: 43) when investigating ways of improving teaching practice. Such enquiry builds useful knowledge for teaching and learning, and by inviting my pupils to be a part of my journey it was reasonable to assume that they too might become ‘empowered as knowers’ (Cochran-Smith & Lytle, 1993: 43).

As a violin teacher and music educator, I have been influenced by the violin literature and the received wisdom from its wide array of authors. From Auer (1921) to the present day, these authors discuss the importance of carefully attending to the unique needs of each pupil in a way that also nurtures their abilities to work independently of the teacher’s supervision. The recognition of the need for pupil autonomy is unmistakable throughout the violin literature. Galamian’s directive (1964) that ‘the prime duty of the teacher is to educate the student to stand on his own feet’ (p. 107) has been the basis of my teaching approach for over thirty years, and has influenced the design of the various activities in this enquiry.

Adhering to this wisdom, I designed interventions (Layers) that encouraged pupils to be part of the decision-making process so that they would leave their lessons understanding what needed their attention and why, but also that they would think about how they might design and implement ways of addressing issues of their own choosing (Whone, 1972; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921;). This was significant because, while the violin literature provides a conceptual frame for practising that is self-regulated and deliberate (Gerle, 1983; Whone, 1972; Galamian, 1964), it is evidently not easily embraced by younger pupils like many of mine who attend lessons without a parent and who practise independently at home. In fact, the way in which this study encourages pupils to design and reflect on their practice is all the more important

because there seems to be a disparity between how teachers think they influence their pupils' practice and what pupils actually do when practising (Bugos & High, 2009; Jorgesen, 2000; Pitts, Davidson & McPherson, 2000; Hallam, 1997; Barry & McArthur, 1994; Flavell *et al.*, 1966). My attempt to explore this gap by asking my young pupils to write down reflections about their practice each week is further supported by more recent research on the benefits of practice journaling by third level students (Hatfield & Lemyre, 2016).

The value of such an investigation is further implied by findings from studies on motivation (Hallam *et al.*, 2016; Sichinvitsa, 2007; McPherson & McCormick, 2000; Hallam, 2002;), goal setting (Schatt, 2011; Neilson, 2008), and strategy choice and use (Hallam *et al.*, 2012; Neilson, 2008; Hallam, 2001; Pitts *et al.*, 2000b) which continually position the teacher as the best possible source for instigating change in these areas. Furthermore, because pupils learn and make sense of things in different ways (Duckworth, 2006; Bamberger, 1991), the actions taken by an instrumental teacher impacts how pupils engage with learning generally (Meissner, 2017; Steele, 2010; Kennell, 2002; Jorgensen, 2000) and practising specifically.

The five interventions of this study were cultivated from concepts that general education calls *experiential learning* (Dewey, 1938), *student-centred learning* (Brandes & Ginnis, 1986), or *real-life learning* (Claxton, 2008). By engaging and participating with these types of environments, pupils are more likely to experience learning that draws on the past to impact the present, with the potential to influence how they engage with learning in the future (Dewey, 1938: 23). These are places where teachers step into a facilitatory role and encourage pupils to choose what they focus on and how they go about engaging with that material, rather than orchestrating and directing this process. I maintain that while the very nature of a one-to-one instrumental lesson provides the ideal conditions for such environments, much depends on how the roles of teacher and pupil interact. The small augmentation of the one-to-one lessons to include performance analysis and peer collaboration seemed to amplify the beneficial effects of the individual lessons.

Since I well understood that time was a limited resource, incorporating and developing the use of such environments necessitated flexibility. Having taught the violin to all ages for over thirty years, I do appreciate the value of traditional master/apprentice

approaches, but I also know that children are usually flexible, insatiably curious, and rarely turn down opportunities to explore something new, especially if they are in a relaxed environment. In wanting to capitalise on these traits, and because of my firm belief that learning is more likely to be deep and long lasting if pupils feel invited and are encouraged to explore a variety of potential possibilities (Claxton & Carr, 2004), I grounded the changes to my teaching practices on Claxton's idea (Claxton 2008: 127-137) that environments promoting learning how to learn should be more like an *Exploratorium* and/or *gymnasium*, or what I have called *Layers*. Underlining the plasticity in how pupils learn (Duckworth, 2006; Dweck, 2006), it seems to be that these spaces encourage pupils to build new skills when working independently or collaboratively using such attributes as reflection, resilience, resourcefulness, and reciprocity (Claxton, 2002: 17).

Acknowledging that my pupils might be intuitively aware of these four attributes, I predominantly explored ways to assist the building of their reflective skills because I hold the view that reflection is a prerequisite for the others. That thinking (reflection) should be a 'profitable' act (Claxton, 2008: 17) is not in question, and although the violin literature does not explicitly discuss reflective processes, it is implicit throughout each volume. Auer (1921) exemplifies this when he writes that how well a student learns is proportionate to their skill at 'observing and criticising themselves' (p.14). Reflecting is the active process behind observing and criticising as an instrumentalist. The importance of investigating reflection in teaching and learning should not be underestimated because it is in learning how to utilise and navigate through the reflective processes that one can ultimately determine the instrumentalist's success as a student and 'development as an artist' (Bamberger, 1991: 87).

Positioning myself as a facilitator for reflection, or 'significant other' (Vygotsky, 1978: 86), I set out to enhance the profitability of how my pupils reflected by encouraging them to formulate and express their thinking. This venture not only contained the possibility of uncovering how they made sense of things in order that I could better facilitate their engagement (Bamberger, 1991: 283), but it also opened the possibility for pupils to make their own connections and discoveries, and to be the creators of educational experiences (of violin learning) that held more 'depth and breadth' (Duckworth, 2006: 81).

The term *modelling* in instrumental teaching usually refers to the teacher providing a physical demonstration with the instrument for the pupils to then observe and copy. However, in order to provide my pupils with examples of how they might ignite and sustain an enquiry, I chose to model enquiry by continually asking them questions (Claxton, 2018, 2008). This strategy is further supported by findings that show how experienced instrumental teachers employ enquiry (Goolsby, 1997) tailored for each individual student (Burwell, 2005). I used questions to ‘check for understanding and elicit greater attention’ (Lehmann *et al.*, 2007: 195), but also to establish useful reference points that we both could use (Flusser, 2000) throughout the term. I felt it was important to establish a mutual enquiry that allowed me to show I respect and value my pupils’ opinions, and wanted to encourage their independence (Burwell, 2005). In summary, and this is the crux of my intent, by asking pupils questions they were immediately invited to reflect, to be creative, to enter ‘a world of openness and possibility’ (Claxton, 2008: 153).

Reflecting on and evaluating one’s work is ‘an integral part of the learning process...and encourages pupils to take a greater responsibility for their own learning’ (Boud, 1995: 28). In this regard music programmes have begun to incorporate the use of self-evaluation and/or peer evaluation tasks for instrumentalists of all ages as a means for developing critical thinking skills (Hewitt, 2011, 2002; Blom & Poole, 2004; Bergee *et al.*, 2002; Burrack, 2002; Daniel, 2001; Hunter, 1999; Hunter & Russ, 1996). Research shows that from portfolio assessments to evaluating live or recorded performances, reflective tasks usually place an emphasis on how performances *sound* more than on how the performer *looks*, and perhaps rightly so. However, although the value of scrutinising and reflecting on an audio-visual recording is signposted as valuable to pupil learning (Boucher *et al.*, 2017; Hatfield & Lemyre, 2016; Daniel, 2001), there is a gap in research as to how such technology might impact the learning for younger instrumentalists.

While it is important for instrumentalists to learn to work independently, research shows that learning in collaboration with one’s own peer group can also be productive (Claxton, 2018, 2008; Bartleet & Hultgren, 2008; Green, 2008, 2002; Lebler, 2008; Hunter, 2006; Neill, 1998). Nevertheless, the majority of instrumental teaching and learning is through one-to-one instrumental lessons. In my study I shift that balance

slightly. Although I drew on findings that promote the usefulness of peer collaborative learning, collaboration in the context of my project was linked to performance investigation. This was further supported by research revealing that advanced students assign value to peer feedback, since it provides an additional view from which they can compare their own opinion to the comments received from their teacher (Napoles, 2008; Rucker & Thompson, 2003). I was further motivated to explore peer collaboration in the context of performance analysis because research has found students of various ages experience an increase in their level of discernment when asked to evaluate and comment on the performances of others (Hewitt, 2001, 2002; Hunter, 2006, 1996; Daniel, 2004; Burrack, 2002). I hoped to contribute to this area by exploring the benefits of incorporating some peer collaborative engagement into the instrumental lesson of the younger violinist.

7.3 Embracing Change

In addressing the first of my research questions, the fore-mentioned literature supported very simple changes to my teaching studio that allowed me to facilitate and encourage my pupils to engage with the six musical chairs of reflection (*listener, observer, analyst, designer, adviser, performer*). I manipulated our time in a way that allowed five reflective interventions (referred to as Layers 1, 2, 3, 4, and 5) to interweave over a term to form a multi-layered web of data from which to gather evidence and form a broad understanding of pupils' reflective engagement in relation to learning, performing, and practising. These changes created a sustainable and holistic paradigm for teaching and learning in the weeks leading up to the pupils' performance assessment (see Figure 4).

Why investigate the five Layers rather than just one? Early on in the research process as I was presenting my work for a review to TU Dublin faculty, a panel member mentioned that the design of my project could result in extremely rich data and that such a large quantity could be cumbersome and difficult to handle. Although I also understood that investigating any one of the interventions in isolation could have been a study in itself, I persisted with the five Layers arguing that the depth of meaning derived from the richness of the data is precisely why exploring all five was so necessary. Manipulating time to include the use of a multi-layered approach increased my understanding of pupil reflexivity because these interventions each created a distinctly

different data set. The overlapping richness expanded the possibilities to reveal the progression of awareness, the building of pupil autonomy and sense of agency.

To reiterate, I set out to improve my teaching practice by nurturing pupils' engagement with the process of learning rather than by testing theory, or measuring any form of product. I was curious to explore how pupils independently and/or collaboratively engaged with six *musical chairs* (reflective processes) in different environments: what would grab pupils' attention aurally or visually, how would they describe or explain things, and what would they recommend for going forward?

The changes that this project introduced increased the possibilities for experiential learning (Dewey, 1938) with an emphasis on reflection in order to explore the skills of *listening, observing, analysing, designing, advising, and performing*. Layer 1 (Individual Enquiry) gave pupils the opportunity to perform and analyse a recording of that film during their weekly lesson. Layer 2 (Peer Collaborative Sessions) provided this same opportunity, but in collaboration with a peer. Layer 3 (Group Sessions) offered all ten participants the opportunity to perform for the entire group, and to discuss performance issues in a group context, while Layer 4 (Practice Maps) encouraged pupils to continue exploring the six reflective roles during their home practice sessions. These four Layers aimed to prepare pupils for their final performances of the term in Layer 5 (Celebratory Concert), and to celebrate their learning with interested parties outside of the project.

7.4 Outcomes and Implications: Layers 1 and 2

The range of talent among the participants was broad, with only a few having any prior history of viewing a film of themselves. However, they all displayed the capacity to comment on instrumental performance (Blom & Poole, 2004) by reflecting on issues specific to violin technique and general musicianship. Because the musical chairs were easily visible in these two reflective Layers, I used the chairs to code pupils' comments in the first instance. An evaluative frame then emerged inclusive of and supported by criteria used across the literature (Hewitt, 2011, 2002; Blom & Poole, 2004; Burrack, 2002; Bergee, 2002; Hunter & Russ, 1996).

Aural (*listener* chair) perspectives dominated slightly over those of visual (*observer* chair) in these Layers, though this was not always the case per individual. However, it was noticeable that the overall number of visual perspectives voiced increased over time to support research that claims visual tools are beneficial to teaching and learning (Daniel, 2001). What is less obvious when examining the data were if the pupils' visual or aural analyses influenced one another.

Breaking down these two data sets established the nature of pupils' remarks in terms of being either complimentary (favourable) or corrective (unfavourable), something that is less conspicuous in the literature for this younger age group. Although no variation was detected in the subject matter that pupils mentioned when reflecting on their own films in either Layer 1 or 2, pupils tended to give slightly more corrective comments about their own films in Layer 2. All participating-peers in Layer 2 remained sensitive to how and when they provided feedback (Atlas *et al.*, 2004; Brinko, 1993), and although no evidence for bias was detected, peer feedback was more complimentary in nature than corrective. Future research may indicate whether this younger age group would benefit from prior training or explanations of the assessment procedure as has already been explored with older instrumentalists (Blom & Poole, 2004; Hunter & Russ 1996).

Examining pupils' reflections from the role of *analyst* further supports findings that encouraging pupils to evaluate performances exercises critical thinking skills (Blom & Poole, 2004; Burrack, 2002; Daniel, 2001; Hunter & Russ, 1996). Pupils gave detailed and descriptive reasoning about the issues within their own films in both environments, but as the participating-peer in Layer 2 they tended to offer either short factual statements or general impressions about their peers' performance. However, when pupils' analyses contained opposing views, both pupils willingly undertook to discuss their differing opinions.

The violin literature underpinning these two Layers recommends that pupils should leave their instrumental lessons feeling informed, empowered and enabled to explore new ideas and work independently to find solutions for existing problems (Gatward, 1984; Gerle, 1983; Whone, 1972; Galamian, 1964; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921). In this context, encouraging pupils to rotate between the chairs of *analyst* to that of *advisor* during the FAP encouraged another mode of thinking. This

could potentially influence how they self-regulate their home practice (Leon-Guerrero, 2008) in terms of goals and strategy ideas when engaging with the Practice Maps of Layer 4. All ten participants regularly identified areas within their chosen repertoire that needed attention, but the ability to formulate advice or suggest practice strategies seemed problematic for some. This second finding supports the literature that encourages instrumental lessons to address the development of practice strategies (Jorgensen, 2000; Barry & McArthur, 1994). Interestingly, when advice or strategies were forthcoming, pupils created a frame for themselves that involved both physical and cognitive strategies.

7.4.1 Developing reflexivity

Examining the data through the reflective chairs also revealed other narratives. It seemed that pupils were comfortable to vocalise their thoughts during their individual lessons, and that the presence of a peer did not negatively impact their willingness to voice their analysis during collaborative sessions. That these two Layers nurtured pupils to assert their own agency in learning was demonstrated by how they began managing the learning environment to suit their individual needs or to assist their peers. The way that some pupils manipulated the performance film of their own volition, the way that many pupils began asking questions to satisfy their curiosity or to obtain knowledge, their willingness to share and remain open to alternative views, and their simple but confident statements provided further evidence to support this claim.

Pupils spoke about Layer 2 as a positive influence on their experience of learning because of the reciprocity that it encouraged between peers (Neill, 1998; Green, 2008). This is supported by samples of how pupils inadvertently or willingly stepped into the role of educator (Claxton, 2018, 2002; Green, 2002). This was demonstrated when T2 informed V3 about the difficulties of executing harmonics, and when Z5 vocally pondered different ways that Y5 might consider phrasing. Pupils gave of their knowledge freely and sought out each other's advice, used each other's language, and discussed differing opinions while remaining open to the views of others.

While pupils did not receive prior training on how to comment on the performance films of others, all ten pupils seemed to be instinctively sensitive to how they commented on the performances of their peers. Although this supports findings from

research on peer evaluation with third level students (Bloom & Poole, 2004; Hunter & Russ, 1996), no evidence was found to suggest that peer feedback was given only to appease, or that it inadvertently caused harm. However, a few explained how they held back out of concern that their comments might have been taken as harsh or unkind. Finding that pupils only began offering corrective comments during the third and final collaborative session is grounds for further research into how this intervention might be improved.

The data for Layers 1 and 2 revealed that pupils did not always find the reflective process easy, and while many expressed their awareness of change and improvement, others did not. However, across the FAP were displays of inquisitiveness, collaboration, reciprocity, persistence and determination as individuals, when collaborating with a peer, or as a direct result of my facilitation. As evidence, I only need to recall my engagement with T2 and her display of resilience in utilising the video as a resource for satisfying her own curiosity, how peer analysis gave rise to W3 acknowledging the success of a long standing goal, or how my corroboration and guidance assisted Z5 in discovering and understanding a major mishap in her bow usage.

A demonstration of growing autonomy was evident by the way in which many made their own discoveries (Claxton, 2018, 2002; Brandes & Ginnis, 1986) across the term in Layer 1, and also by monitoring their own personal issues of interest while reflecting on the performances of their peers (Claxton, 2018, 2002) in Layer 2. The latter was demonstrated by R2 and S2 as early as the first session in Layer 2. Significant too was that, as the weeks passed, I observed pupils beginning to assert their sense of agency by deliberately using each other's language, lengthening their verbal reflections, or contributing comments without my prompting or guidance. Perhaps the latter was a sign that they were subconsciously pre-empting my prompts for elaboration, or perhaps these were signs of growth. Nevertheless, pupils seemed to be developing into confident, reflective learners that were willing to voice and share their opinions as a consequence of the environments they had been given the opportunity to explore (Claxton, 2008).

7.5 Outcomes and Implications: Layer 3

The pedagogical design of Layer 3 and its emphasis on performance, reflective enquiry, and collaborative discussion facilitated a space in which pupils had the opportunity not only to perform, but also to exercise reflexivity independently and collaboratively through a lived experience and social context (Sheldon *et al.*, 2005). Discussions amongst this group unearthed performance issues they were willing to share, while also exposing two perennial themes: the willingness of pupils to participate and engage, and their ability to keep a positive attitude.

Although each session involved the act of performing, observing and discussing performance issues, pupils' verbal contributions remained unequivocally supportive in nature. Peer feedback focused on specific violinistic issues that many of the participants were studying. Although pupils used the same technical frame for acknowledging both errors and achievements as they did in the other Layers, this frame was used only to support and/or compliment peer performances. There was a near continuous level of positive or complimentary criticism throughout each of these sessions, with all peer feedback seemingly well received. All pupils claimed to value their peers' opinion (Blom & Poole, 2004), but due to time constraints and the number of pupils eager to voice their views, feedback was delivered in quick succession with only a brief time for contemplation between each speaker.

Although some pupils experienced moments of awkwardness while performing, this group remained optimistic as they discussed the process of preparing to perform. During the groups discussions that took place in this Layer, pupils demonstrated that they were becoming accustomed to reflecting and sharing their ideas with others. Pupils clearly took advantage of the opportunities to illustrate and share their own experiences, offer advice on playing from memory, and discuss ways to regulate mental and emotional states before and during performing. The frequency of the rotation between the six reflective roles could not be determined because of the covert nature of reflection in Layer 3, but external changes were noted in this environment on an individual basis while discussing performance issues. It was notable, for instance, how S2 transformed into being highly vocal in this Layer, and also how T2 was unabashed to ask her peer group for help and advice. Individuals acknowledged that there were still

some on-going performance issues to investigate and improve. Despite this the extent to which pupils remained engaged and positive during each session was a testimony to their commitment to learning.

7.6 Outcomes and Implications: Layer 4

For instrumental pupils, practising is a necessary process and one that is not easily monitored by the teacher. By encouraging pupils to keep a written document of their practice each week, they provided evidence of their thinking on practice and engagement.

If we apply Claxton's (2008: 81) words to instrumental practice, they convey the wisdom that, 'it is the kind of learning you are practising that is important, not the subject-matter'. In the absence of teacher guidance, the maps attempted to facilitate a practical approach that encouraged pupils to carefully consider how they self-regulated their practice while at home. By encouraging pupils to explore the design and management of their own approach to practice each week, the maps assisted the pupil to become the *designer* who deliberately created and actively managed their learning (Claxton, 2008: 127).

Through their engagement with the mapping process, it was clear that no pupil had difficulty in expressing a personal agenda (Duckworth, 2006; Bamberger, 1991) in regard to what aspects they wanted to focus on during practice sessions. Areas pupils identified were common to violin development for this level and age, encompassing issues of control/accuracy, expressive playing and stage presence/visual presentation which feature throughout research on instrumental learning (Hewitt, 2011; Lehmann *et al.*, 2007; Burrack, 2002; Bergee & Cecconi-Roberts, 2002; Hallam, 2001a).

The maps revealed that pupils displayed a willingness to investigate strategies for building and manipulating material during their home practice through a range of approaches that they chose or designed, and then put into action. Pupils selected common or tested strategies and/or invented new ones for a single purpose. The maps also shed light on how pupils altered task-management strategies in order to explore deconstruction, reconstruction, monitoring and probing modes of learning. These

approaches were contiguous with other strategies demanding specific mental energy and effort.

By evaluating and reflecting on their strategies and work each week, pupils documented an image of their learning through a very personal and distinctive lens. For some it was a refractive lens focused on feelings and emotional content, while others used a lens focused on productivity. A number of pupils chose to continually adjust their lens, concentrating in turn on achievements, discoveries, their level of satisfaction, or projected goals.

Implied through pupils' written words is that they experienced a shift in consciousness by engaging with and participating in Layer 4, reminding me of Dewey's assertion that, 'every experience is a moving force. Its value can be judged only on the ground of what it moves towards and into' (p. 38). Pupils' written reflections implied that they were conscious of deliberately reflecting before, in, and on their actions over the weeks; that they were making connections in the present from what they did in the past came across clearly in their writings too. By remaining open to new ways of thinking coupled with purposeful investigation and self-regulation, progress-in-action seemed to be more visible while learning at home (Claxton, 2018, 2008; Claxton *et al.*, 2011).

7.7 Reflections on Layer 5

Layer 5 consisted of a public concert at the end of the project. Although collecting data on the day of the assessment was not permissible due to the music school's rules, pupils were asked to briefly discuss their feelings about the event during the final interview. Regardless of their perceived level of preparation, the majority of pupils stated that it was the judgemental and comparative elements of the assessment process that made them feel more nervous during the performance assessment than the public concert.

The public concert encouraged pupils to explore learning *how* to perform in front of the largest audience that this project offered, but also increased their knowledge *about* performance as they observed their peers on that same stage (Claxton, 2008; Elliot, 1995; Bamberger, 1991).

As was shown in Chapter 1, ideas on what is needed to become a competent violinist are not in short supply (Gruenberg, 1991; Gatward, 1984; Gerle, 1983; Whone, 1972; Galamian, 1964; Havas, 1961; Kinsey, 1954; Flesch, 1934; Auer, 1921), but a good pupil who commits themselves to studying these ideas does not necessarily become an outstanding performer. For that great mystery to happen many different variables in their preparation must come together with those extra sparks of communication. Put another way, the whole is clearly greater than the sum of the parts. My younger performers were at the beginning of a very long road, and with no guarantees.

Although the public performances were more or less successful in terms of our work together, the emotional uplifting and pride that was clearly felt by most in the room, including me, was tangible. The performance is of course the ultimate purpose of all the hard work, but I emphasise here that this project was concerned with learning processes, and that I looked at pupils' subjective perceptions of what it takes to make a performer, rather than the performance itself.

7.8 Developing Critical Awareness and a Rise in Autonomy

While the previous sections have addressed both of my research questions, two themes emerged from the data sets that pulled together all five Layers: developing critical awareness and rising autonomy. Although the underlying reasons for the emergence of these themes permeated all the data sets and have been described in detail, additional points need to be made.

Broadly speaking, the majority of the activities in this enquiry encouraged pupils to reflect-on-action, but each pupil's narrative implied that they had also become aware of reflecting-before-action, and reflecting-in-action. Since pupils claimed to have thought about specific things just prior to playing, it is highly likely that they were aware of having reflected-before-action. Although it is mere conjecture to claim that pupils were reflecting-in-action, I hope that the many samples of pupils explaining their reasoning, or describing advice for themselves or for their peer(s), has been convincing evidence that pupils had indeed experienced reflecting-in-action. Engaging in these types of reflexivity show learners who were willing to look at things in a more critical way.

I tried to show that the pupils were becoming emerging critics, that they were aware of working autonomously, and consciously asserted their agency. As I analysed the interview data I found that pupils' perceptions of engaging with five different Layers supported their explicit and/or implicit understanding of these themes. Interview comments were peppered with, 'when I was listening for...' and 'I try to...' or 'because I was thinking about...' suggesting that pupils were aware of exploring how to learn, of deciding what to do, how to do it, and why. The comments also implied that pupils were aware of utilising different roles to actively define and refine their individual perspectives, to develop their ability to analyse and reflect with greater acuity, to glean new ideas, to set goals and design ways of tackling them, and to learn with and from others. Such outcomes support findings that this age group's sense of ownership does increase by participating in performance evaluation activities (Burrack, 2002). In support, I refer back to Y5 who stated that she was aware of deliberately working 'in more detail' due to the mapping process, but also that she learned from talking about her performances in Layer 1, something she claimed to have never done before. And then there was V3 who said she had begun to give more thought to her physical gestures because of the advice from a peer, and that from having had frequent opportunities to perform in many different environments she experienced an increase in her level of confidence as a performer. Others were aware of considering new ideas because they had observed their peers' performances in Layers 2 and 3. An example was S2, who claimed to consciously think about these ideas when she was performing for others, but also when participating in Layers 1 and 4. Regardless of how talkative pupils were normally, many suggested that being encouraged to articulate their thinking improved their verbal skills generally, and moreover improved the clarity of their thoughts or observations. This was evident with the very articulate Z5, who explained that from observing and speaking about numerous performances she became aware of thinking 'more visually'.

This broad range of examples supports the themes of critical awareness and rising autonomy, and these are clearly linked and enabled by the fact that pupils were willing to ask questions. Duckworth (2006) eloquently states that 'what you do about what you don't know is, in the final analysis, what determines what you will know' (p.67), while Claxton (2018) posits that robust learning stems from the driving force of one's own sense of 'curiosity and necessity' (p. 19). In this regard, the fact that pupils felt

empowered to ask questions in these environments was significant because it signalled that they were attempting to do something about things they did not understand. It could be argued however, that pupils asked questions simply because I was continually asking them questions and modelling enquiry. If that is true, so be it, but I argue that my modelling of enquiry in conjunction with the FAP, practice mapping, and peer collaborative activities encouraged pupils to ponder new ways of being reflexive. This assertion carries some weight if we recall examples such as T2's moments of relentless questioning in Layer 1 (Snapshot 1, Chapter 4), and when Z5 implied in the final interview that the act of questioning itself breeds more questions. By recognising and acknowledging their own knowledge gaps, pupils used questions as springboards for creating new connections, and in doing so showed they were in fact becoming more autonomous.

Pupils attempted to make connections in different ways, strongly suggesting that they were asserting their agency and becoming more autonomous in their approach to learning. It will no doubt be apparent that across the data sets many pupils repeatedly commented on the same issues, regardless of the Layer. For example, R2 constantly mentioned bow control, whereas S2 and W3 often spoke about pitch accuracy and shifting. In fact, all ten pupils carried personal concerns and topics of interest into each different environment, and I interpreted this appropriation as a positive sign. Both Claxton and Duckworth support Bamberger's point, that truly understanding something 'requires looking *at* it, [and] letting it reflect back at you' (1991: 271). These pupils seemed to be saying that they were prepared to, and even needed to, explore personal issues of the learning game in different contexts in order to see what their engagement and participation with learning reflected back. Of particular interest were pupils such as S2 and T2 who entered the project with specific goals, but who after a term of working and monitoring these issues claimed that they intended to carry on and develop their investigation further. I don't view such outcomes as a sign that these pupils didn't 'get it', but that they were interested enough to develop their investigation in order to keep learning.

Duckworth (2006: 69-73) declares that meaningful learning cannot be rushed; to achieve 'depth and breath' of understanding pupils need to be given space and time to explore the complexities of *if*, *how*, and *why* something is so in order to experience the

process of learning. Pupils' articulated perceptions of their engagement indicated that the way in which we had manipulated our time to incorporate the exploration of learning in multiple environments had increased their awareness of being more critical and autonomous in their approach to learning, or what Claxton (2018) might call an increase in 'learning power' (p. 18). This newfound competence could lead to a benign syndrome of confidence building further competence, perhaps the very nature of autonomy.

Part Two

7.9 Notes on the Process

Reflecting back over this Action Research project, I believe that I gained just as much as my pupils; the teacher became the pupil, the pupil became the teacher. It was a privilege to journey across the different Layers with pupils individually, as pairs, and as an entire group. Their commitment and participation over the term resulted in a journey that expanded my perspective of learning and my role within it.

Undertaking qualitative research made me question what is most valuable in teaching and learning, and as teacher-researcher I am satisfied that my initial motives were successfully addressed through action research, my research questions, and the application of my methods. Choosing action research as a methodological approach allowed weekly cycles of enquiry within a larger one-cycle inquest. I feel that my research questions effectively opened an investigation that was both broad and focused, and that lead to practical and beneficial strategies for teaching and learning.

I am satisfied that the design and application of this approach to teaching and learning upheld the principles of student-centred and experiential learning. The nature of all five Layers promoted a democratic and holistic approach, which retained its integrity by sharing authority, and it was this that ultimately led to enhanced pupil autonomy.

7.9.1 Scheduling and special considerations

One concern when I initially scheduled and managed this approach was that it should not impinge on my normal teaching hours. It did not. The three Group Sessions of Layer 3 were the only extra hours to organise, but I deemed this negligible since I normally held extra technique workshops and class concerts throughout the year anyway.

In order that all five Layers could weave comfortably over the term (see Figure 4) and build towards the formal performances of Layer 5, I staggered but restricted the number in operation during any given week. The exception was the mapping of home practice during Layer 4, which ran for the majority of the time. Layer 1 started a few weeks prior to Layer 2 in order that pupils could adjust to the FAP process before engaging in this activity with a peer. As Layer 2 was created from joining two pupils' individual lessons, Layers 1 and 2 needed to occur on alternative weeks. At the beginning of the year I scheduled the lessons of pupils in the same or similar grades consecutively in order to avoid possible difficulties for them attending when Layer 2 commenced in the second term. I received full parental support in this regard. However, establishing pairs of pupils for Layer 2 became problematic with Qp's refusal to participate in this activity. This was overcome by forming a pair (U3, X4) and trio (T2, V3, W3) of pupils of no more than one grade level difference.

To give pupils the experience of performing for an increasing audience, yet retain the opportunity to revisit working with the FAP, I interchanged Layers 3 with Layers 1 and 2. However, the actuality of preparing for a performance entails many hours alone in a practice studio, so, in order to create the experience of authentic performance preparation, I deliberately scheduled the last of the Group Sessions as the only performance activity in the week after a two-week school holiday.

Layer 5 was the only one scheduled to operate during week fifteen because no lessons take place during the week of the school's performance assessments, and the following week usually involves discussing assessment results and forward planning.

As I mentioned in Chapter 4, a few pupils began exhibiting signs of FAP fatigue. This was overcome by taking the decision to introduce two free weeks (8 and 10) on either side of a week that included both Layer 2 and 3.

Special considerations were also given to the design and management of Layers 1, 2, and 4. As pupils undertook the mapping process of Layer 4 for the majority of the project, I deliberately kept it simple by asking pupils to focus only on one or two components of their practice. I did not feel it was either beneficial or practical to ask this age group to reflect and write about their entire weeks practice. Rather than examining the weekly lesson in its entirety (including such things as specific technical issues, or the teacher-pupil relationship) for Layers 1 and 2, I deliberately chose to focus only on performance. This decision was based on the belief that such attention would not only assist pupils to learn about performance, but that such a strategy would be useful in preparation for Layer 5. Positioning the FAP at the end of these lessons ensured that pupils were well warmed up, had the opportunity to test issues that may have been addressed earlier in the lesson, or re-examine work from earlier weeks. Moreover, since the FAP process encouraged a shift in our roles, there was a stronger probability that pupils would exit their lesson feeling a greater sense of agency.

7.9.2 Practicalities and reflections on FAP

In practical terms, adding the use of an audio-visual tool as part of the weekly lesson was a very straightforward process for Layers 1 and 2. My studio had a computer permanently installed with suitable software, a high specification microphone, and a set of speakers, therefore eliminating any setup time. However, peripatetic teachers, or those working from a private studio without easy access to this equipment, might consider these factors to be significant.

When presenting the data in Chapter 4, I tried to portray how audio-visual technology proved to be a useful tool for both teaching and learning (Mitchell & Benedict, 2017; Boucher *et al.*, 2017; Hatfield & Lemyre, 2016; Tsay, 2013). Although the entire digital recording was viewed at the start of each session, I observed that an unequivocal advantage to pupil reflexivity was the option to stop, repeat, or loop sections of the film repeatedly thereafter, because whether analysing as performer or participating-peer, there were instances when all parties needed multiple viewings before forming

responses. Although I never doubted the use of audio-visual recordings as a *fact checker*, the ease with which this technology allowed us to manoeuvre between different points in the films did seem to encourage pupils to investigate their films. However, when looping the film to pinpoint visual issues, it would have been useful to have slow motion and a zoom in/out function, neither of which was included in the software at the time. Having these options may have momentarily focused the collaborative discussions by strengthening the possibility that all participants were visually centred on the same issue.

There is research to show that more advanced students are able to independently assess digital recordings of their playing in a meaningful way (Boucher *et al.*, 2017; Hatfield & Lemyre 2016), but time constraints, and the lack of tested approaches appropriate for use by younger pupils, demanded that I facilitated pupil reflection during the FAP. One can only imagine that if left in a room unattended without my guidance or direction, a younger pupil might not assess their performance films in a useful way. Therefore, the use of video and my role as facilitator of the FAP was inextricably linked in both Layers 1 and 2. While the inclusion of FAP was never intended to be a panacea, this was an important environment for pupils to accumulate experience of performing and reflecting. I viewed the FAP as a modern approach to nurturing pupil ownership of learning within the violin lesson because the digital recording as *fact checker* established a new level of authority.

Using a digital recording for a detailed enquiry in such a tight time frame each week demanded careful consideration as to how and when I asked questions. The sprinkling of a few closed or leading questions across the interviews and FAP sessions were intended to alleviate the difficulties that most pupils displayed at some stage as they tried to reflect. These difficulties did not seem to be age or experience dependent. For example, when asked, ‘what types of things are you noticing?’ both the youngest and least experienced pupil (Qp) as well as the eldest and most experienced (Z5) responded with, ‘music?’ or ‘me?’ I interpreted such responses as an indication that no matter the age or experience, pupils encountered moments when they needed *things to think with*, and to be gently guided towards topics that were relevant (Jorgensen, 2011) to the research questions.

Early on in the project most pupils were uncomfortable manipulating the film themselves and directed me to locate specific points in the film, while some remained in need of my guidance until the very end of the project. There were many who gradually began manipulating the films themselves, and over time became increasingly curious to explore their films in more depth. Pupils also tended to direct their verbal responses to the computer screen, or to me, when questions pulled their attention away from the film. Rarely did pupils turn and direct their comments to each other in Layer 2. Trepidation at missing a visual observation if their attention was distracted may have been the overriding reason for such behaviour. However, I interpreted this visual fixation as a display of their willingness and interest to *practise* being reflective (Claxton, 2018: 25), and to make good use of the tools provided in Layers 1 and 2.

7.9.3 Reflections on managing the data sets

I reiterate that this approach did not create additional work for me as teacher, but as the researcher I did have to manage my time in order to read, create transcripts, keep journal entries, analyse the data and write the report.

As outlined in Chapter 3, all data underwent manual colour coding in the first instance as a means to familiarise myself with the data. It was the simplicity of pupils' language that made colour coding a practical step towards creating a basis for further analysis. Using Dedoose (a CAQDAS) for subsequent cycles of analysis proved to be a useful tool in tracking additional themes and sub-themes, and when searching within individual documents or entire data sets.

Using the six musical chairs as conceptual levers to untangle pupils' reflections in the first round of coding allowed me to present a quasi-quantitative overview of the *listener* and *observer* chairs in Chapter 4. This was a particular interest of mine as teacher-researcher because using an audio-visual tool for reflection was new to my teaching practice. As mentioned in Chapter 3, all quantitative charts were intended only to be a rudimentary attempt to illustrate these roles in operation and display the possibilities of capturing them.

7.9.4 Managing language difficulties

Throughout the entire data collecting process I gave careful consideration to pupils' constant use of the terms 'stuff' and 'like'. While not drawing attention to the natural way that pupils spoke, I addressed these moments by either asking pupils to clarify their meaning, or I simply repeated what they said in the hope that they would elaborate. Upon reflection, I was pleased that both of these tactics worked, and that as the project progressed these terms seemed to feature less often.

7.10 Potential Limitations and Future Considerations

Some of the limitations of the study were primarily due to the naturally occurring class size, grade level, and gender balance of pupils on my register at the time of the study. All eleven of my pupils within the range of Primary to Grade 5 were invited to participate, none of whom were in their first year of study. Since all ten pupils who agreed to participate were female, the obvious gender imbalance meant there were no considerations given to other gender issues. Since it was a small-scale study, the number of pupils representing each grade level was also limited. There were no representatives for Grade 1. Both Primary and Grade 4 were each represented by one pupil, Grades 2 and 3 by three pupils each, and Grade 5 by two pupils.

It could be considered a limitation that this project involved only one teaching practice and a single cohort of pupils. Permission from my employer to conduct the project on the school's premises made managing practical issues easier, such as health and safety regulations or use of equipment, however, it was only sanctioned as a professional development project for a single member of staff. Although it is my hope that outcomes from this project will benefit instrumental teachers across a range of studio settings, broader implications might result from studies involving a greater number of teaching studios, a range of instruments, and that include older and more advanced pupils.

Conducting the study for only one term might also be perceived as a limitation, but running it for the entire academic year would have substantially increased the amount of data; quite a challenge for one researcher. If extended beyond a year there would have been no guarantees that my register would contain a similar number or standard of pupils. As performing was a core element of this project, I considered that conducting

the project in the term leading up to the pupils' performance assessments and a public concert (Layer 5) might be optimum, since their repertoire would be more developed than in the previous term. However, running such a program for an entire academic year, or across a number of years, is of course another approach for further research.

In addition to exploring the time frame in this way, any one of the Layers could be expanded in multiple ways to further the investigation. Findings showed that pupils' ability to reflect on their own performances improved over the term, but considering that this was their first experience of using digital recording software as a tool for reflection, research might examine if there are better ways to use such technology, or if there is an optimum length of time in any one term or year to engage with the FAP. In particular, future research might explore and uncover factors that influence the interplay between pupils' visual and aural analyses. It might also be beneficial to explore ways of encouraging pupils to include constructive, corrective comments when giving feedback to their peers, or to investigate if their propensity or confidence to do so would increase with more experience or prior training. After all, they claimed to value peers' comments, yet only a few offered any form of corrective advice to their peers. This finding also suggests that it might be useful to investigate different methods for giving and receiving peer feedback. Furthermore, with pupils stating that they felt their learning had benefited from frequent opportunities to perform and observe their peers perform, finding ways to increase the number of such gatherings for Layer 3, or the number of pupils participating without overburdening the teacher, would be a valuable investigation. While the 90-minute sessions in Layer 3 were adequate for my group of ten participants, any future application may benefit from exploring different approaches to structuring group discussion, especially in relation to group size, in order to ensure that participants willing to comment have adequate time to express their opinions. Regarding the success of the mapping process for this age group, future research might seek ways to increase the return rate, consider whether electronic journaling is a viable or better alternative, or whether pupil engagement would be impacted if additional practice content were included.

7.11 Implications for Teaching and Learning: Next Steps

The outcomes of this research have had a positive impact on my own teaching and on my pupils' learning. I have continued to use similar interventions with subsequent cohorts of pupils, and these pupils have benefitted in similar ways to those who participated in the research project reported on here, particularly in relation to the development of autonomy and agency. I have changed and developed various aspects of the interventions, adapting to new developments in technology that allow pupils to record themselves using mobile phone devices and expanding the Practice Maps to cover further aspects of the lesson. My pupils have continued to enjoy working with their peers and seem to learn a lot from the process as well as appearing to appreciate being part of a wider learning community. I have found the list of 'focal points' identified by the pupils as a very useful 'checklist' for them to consider when giving feedback on their own performance and those of their peers. Promoting 'performance' and a culture of performing continues to underpin my pedagogical philosophy and methodology.

The outcomes of this research also have relevance beyond my own individual practice, within the wider instrumental teaching and learning community. As discussed above, the outcomes reveal insight into young pupils' perceptions of performance, their learning processes, and their attitudes to, and management of, practice strategies. Such insights can enhance teachers' understanding of the young instrumental learner and inform their pedagogical approaches. The research also presents ways of promoting collaborative student-centred learning contexts in which students 'learn how to learn'. The incorporation of some of Guy Claxton's key concepts for 'building learning power' also expand on many traditional approaches, making connections between instrumental music teaching and learning and the wider field of general education and broadening teachers' perspectives on their roles as music educators. The research provides a model of enquiry that could be used by other instrumental teachers working in a range of contexts with students of various ages and levels of development. The analytic framework provides teachers and students with six lenses of reflection and the range of interventions explored provides practical ways for teachers to promote, guide and develop reflection and other self-regulatory practices in their pupils' learning. The research also demonstrates the potential of peer-learning with younger students,

showing that they can engage with peers and that the peer-learning process can contribute to the musical development of school-aged instrumental students.

The research also has implications for instrumental teacher education and professional development. To date, this research has been well received at music education conferences and has been welcomed by instrumental teachers. I believe that, in the same way as pupils can be guided and facilitated in developing competencies in reflection and self-regulation, teachers can also be helped to develop the skills and understanding necessary for promoting and nurturing these attributes in their pupils. Therefore, I consider that this research has the potential to inform third-level pedagogical curricula along with workshops and professional development programmes for instrumental teachers.

In my own professional situation I have shared the outcomes of my research with colleagues, and I have found that my research has been particularly useful in the context of my own involvement in initial instrumental teacher education. I have noticed many of the novice teachers enrolled on my pedagogy modules adopting and exploring many of the concepts promoted within my research and applying some of the interventions within their own developing teaching practice in ways that suit their own studios. I believe that there is also potential for further research with colleagues in the development of a similar group action research project but involving a number of teachers (including other instruments) and selected groups of their pupils.

Further plans for the future involve the development of teacher education workshops beyond my own institution, focusing on a range of topics such as promoting student-centred learning, 'learning how to learn', action research as a means of professional development, developing the reflective violin student, promoting self-regulation and autonomy through developing practice strategies. Other plans for disseminating the outcomes of this research include presenting at further national and international music education conferences and publishing in music education journals and other scholarly publications. My objectives would be to disseminate the results of my research, not just within the violin teaching community, but across the wider instrumental music teaching fraternity and beyond, to a broad range of educational practitioners. A major focus of the dissemination process would be to promote ways of developing pupil autonomy and

agency and to highlight ways of nurturing and developing reflective practice with both pupils and teachers.

7.12 Final Words

While the findings and implications of this project are a considerable testimony to how this approach benefitted pupils' learning, this project also enriched my thinking on the importance of learning to learn and the role of reflection. Moreover, in the writing of this thesis I am now better able to articulate insights formulated from my substantial experience as a teacher. Facilitating my pupils as they explored five interventions that embraced performing, practising, and different tools for reflection, contributed considerably to my understanding of their developing lenses for learning. In particular, encouraging pupils to reflect sharpened my focus on what they felt was important to address in learning.

Modelling enquiry as the primary strategy to promote pupil reflection was an immensely liberating process. It elevated my awareness of how I was reflecting-in-action as a guide, collaborator, and corroborator with pupil reflection. By shadowing their reflexivity I found myself *listening, observing, and analysing* 'in more detail', to quote Y5, but I also remained open to the possibility of *advising* or *designing* my own steps going forward. This project revealed that, like the pupils, I still have much to learn. I found that our mutual observations, opinions or solutions were, not always, but often in agreement. While I learned the benefits of guiding pupils to reflect, I also observed how different environments empowered pupils to make their own discoveries, how the pupils were prepared to remain open to consider the views of others, and how they were unafraid to share and explain their ideas, assert their opinions, admit their confusion, or seek advice. Of considerable significance too was that pupils were aware of engaging their analytical lens while designing and undertaking their practice at home outside of my supervision.

As these observations accumulated and began indicating pupils' growing sense of empowerment, my own sense of empowerment increased from knowing that the changes I had introduced were impacting their learning in a positive way. These changes allowed us all to view the complexities of the learning process from many

different perspectives, without undermining pupils' confidence. It is perhaps Duckworth (2006: 118) who best describes how I view *change* and my role within it:

The way to move a person's thoughts and feelings is not by trying to excise them and replace them with other thoughts and feelings. Rather, it is to try to understand the persons' thoughts and feelings, and to work from there. It means having the person articulate his or her own thoughts in different areas and in different ways and see where they run into conflict with themselves. That usually means *acknowledging* complexity rather than replacing one simple way of looking at things with another simple way of looking at things – acknowledging the complexity and seeing where it leads.

Looking back, I am unclear at what point I was aware of being comfortable and at ease with facilitating pupil reflection of their films. The process of stepping into the role of facilitator at the end of these lessons certainly began to have an enjoyable, organic feel to it. This cycle of changing roles was something I looked forward to. However, transitioning to the role of facilitator did seem to be easier with some pupils. This observation did not appear to be linked with any pupil's playing ability or verbal skills, and left me wondering whether there are as many ways to facilitate learning, as there are pupils. Perhaps the beauty of the FAP is that it offers a range of possibilities for how it can be used and facilitated.

The ten participants engaged in this project with the same level of cooperation and cheerfulness that I have witnessed each week for years. I would hope that the excerpts included throughout this thesis have given a sense of these ten fun-spirited personalities, but also my sensitivity to how they reacted when reviewing and discussing their films; this was always my greatest concern: human being first, and violinist second. As mentioned earlier, it is often when pupils speak about things that *learning* takes place (Bamberger, 1991; Duckworth, 2006), and this was the very reason why so much of my facilitation involved encouraging pupils to put their thoughts into words. Although I have tried to show across the chapters that *moments of learning* can be witnessed by encouraging pupils to express their thoughts, I recognise that powerful learning also happens out of sight or in silence. I have no doubt that the quiet S2 and Y5 and the seemingly non-compliant R2 were learning, even if they were less vocal than Z5 or W3. As pupils grew accustomed to their new roles, I began to experience moments when my facilitatory role really did morph into one of onlooker to their emerging autonomy, and except for a very few occasions these were moments for celebration. However, in

closing I would like to relate a cautionary tale for consideration by those who may be interested in adopting a FAP approach. During the final interview when U3 was reflecting on her experiences of engaging with the audio-visual recordings, her eyes filled with tears as she said, ‘...it made me realise things’. By her own admission U3 had claimed that video had been useful, but encouraging her to explain why resulted in a powerful cathartic moment of learning that some might call *the penny dropping*. It most assuredly was a silent and uncomfortable acknowledgement of insight for U3, and one that was the result of significant critical reflection.

I admit that while the five Layers and FAP seemed to enable possibilities for reflective experiences that encouraged the habitual growth of useful connections, at no time did I observe that any pupil was completely satisfied with *every* aspect of their performances. But, such is Art. Throughout the project, pupils had commented on a mixture of successes and improvements during a single session, as well as errors or areas still needing development. Regardless of whether pupils commented that their films matched their performing intentions or not, there were more pupils at the end of every session who stated that they were generally pleased with their films than those who were not. I suggest that, because pupils expressed satisfaction with a performance film that by their own admission included errors or issues still needing development, they were experiencing learning on a deeper level. Perhaps this also implied that pupils were implicitly aware of learning as a *process* and not a *product* (Claxton, 2008), and just as if they were playing on a playground, they were enjoying the process.

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APPENDICES

Appendix A: Invitation to participate

Title of Project: Developing Musical Autonomy: A Multi-Layered Approach to Learning and Teaching

10-1-2011

Dear Parent/Guardian,

I would like to invite your child and seek your consent for him/her to participate in a research project I am undertaking as a postgraduate student at DIT Conservatory of Music and Drama under the direction of Dr. Mary Lennon. The project is centred in the area of performance preparation and focuses on developing pupil's awareness and promoting independent learning by positioning learning in the context of performance experiences. The project will be undertaken this academic year 2010-2011 and will require only a minimal addition to your child's existing workload.

The project will focus on developing pupil awareness of performance issues through promoting and facilitating critical reflection. Collecting data will involve your child sitting interviews, keeping weekly written practice journals (maps), being recorded performing most weeks (in different contexts), and providing feedback in regards to their own performances and those of their peers. Participants will hold the right to refuse participating at any time during the study, or to provide written or audiovisual data.

Participation will remain strictly confidential. You or your daughter/son's names will not be attached to any collected data. Participants will be referred to as their initials in all written material, with any use of names edited from all audio or visual data. All data will be held securely by me, the sole guardian and custodian. Data from the project will be used in presenting and reporting the research in academic context. Findings from the project may be used in future educational contexts by myself, such as instrumental teaching courses, workshops, or student lessons. You and your daughter/son are welcome to discontinue participation in the study at any time, should you wish to do so.

If you are willing to consent to your child's participation you will be asked to sign the form (below) indicating that you agree to(participants name) participating in the study. Participant's verbal consent will be sought after a detailed explanation of the study. If you have any questions or require further clarification on any of the issues outlined above please don't hesitate to contact me. You may also contact my advisor for the project, Dr. Mary Lennon at the DIT Conservatory of Music and Drama (mary.lennon@dit.ie).

I look forward to hearing from you.

Yours sincerely,

Leslie-Gail Ellis

Mobile: 086-1030569

Email: lgellis@gofree.indigo.ie

Appendix B: Consent form

Parental Consent Form		
Have you been fully informed/read the information sheet about this study?	YES	NO
Have you had an opportunity to ask questions and discuss this study?	YES	NO
Have you received satisfactory answers to all your questions?	YES	NO
Have you received enough information about this study and any associated health and safety implications if applicable?	YES	NO
Do you understand that you are free to withdraw from this study? <ul style="list-style-type: none">• at any time• without giving a reason for withdrawing• without affecting your future relationship with the Institute	YES	NO
Do you agree to take part in this study the results of which are likely to be published?	YES	NO
Have you been informed that this consent form shall be kept in the confidence of the researcher?	YES	NO
Do you consent to having a series of interviews, performances, and shared lessons videotaped for the purpose of studying pupil responses, awareness and feedback?	YES	NO
Do you agree to the use of audio/visual excerpts to be shown in other music education contexts such as instrumental teaching courses, or student lessons?	YES	NO
Signed _____	Date _____	
Name (in block letters) _____		
Signature of Researcher _____	Date _____	

Appendix C: Interview schedule

Interview A

Personal details

- Age, years of study, other instruments
- What type of music do you listen to? Do you ever listen to classical music?
- Other than your own ensemble concerts, do you attend classical music concerts? How many concerts would you attend per year?
- Can you remember a concert that you particularly enjoyed? What made it enjoyable?

Practice background

- How many days a week do you practise and for how long do you think you practise for each day?
- Who decides when you practise?
- What do you do when you practise? Do you practise the same way every day?
- Does anyone help you practise? if so, what do they do and how does that make you feel?
- What is the most important part of your practise? What is the most enjoyable part of your practice?
- Do you like practising? Why or why not?

Performance background

- Can you talk about how you feel when performing your violin?
- Do you feel different when performing in an ensemble than when performing as solo violinist? How?
- When you are performing, what are you good at?
- Is there anything you would like to improve? What are they?
- When you perform what kinds of things do you think about? or What do you pay most attention to?
- Do you like performing? If so, why? If not, why not?
- Have you seen or ever heard a recording of your self play the violin? If so, can you talk about how did it make you feel?
- If you have not seen a recording of yourself, would you like to?
- Do you think you can learn from watching other pupils perform? What type of things might you learn? (How would that help?)
- Do you think comments about your performances from your peers would be helpful? How?
- Would you be able to comment on your peer's performances?
- What do you expect of yourself as Performer?
- How do you know when you are ready to give a performance?

Interview B

Practicing

- Are you thinking differently about practising? If so, in what way?

Performing

- What have you learned so far about performance?
- Are you thinking differently about performance now? In what way?
- Are you noticing improvement? if so, Can you tell me what is changing?
- Are you thinking differently when you watch and listen to others? In what way?
- Are peer comments influencing the way you perform or practice? In what way?

Interview C

Practice

- Talk to me about what are you learning about practising?
- Are you pleased with how you are practising? Is it working well?
- Are you thinking differently when you are practising? If so, why is it changing?
- Has the amount of time you spent practising changed? If so, how?
- Do you keep performing in mind when you are practising?
- Have the Maps made a difference to your practising? In what way?

Performance

- Do you think you are performing better? why?
- Talk to me about the things that may or may not be improving in your performances (film comparison).
- What are you learning about performance preparation? and What types of things are you paying attention to when you perform?
- Talk to me about your Group B performance: goal setting; delivery control; feeling as performer
- Video: Do you think you have learned more from listening or watching your films?

Interview D

Learning

- Talk to me about what have you learned this term?
- Talk to me about the activity (Layer) you have learned or benefited from the most and why?
- Talk to me about the activity (Layer) you enjoyed the most and why?

Probe pupils' experience of each interventions

- Talk about your experience of the FAP in your individual lesson (Individual Enquiry: Layer 1).
- Talk about your experience of the shared lessons. (Peer Collaborative Sessions: Layer 2.
- Talk about your experience of the Group Sessions (Layer 3).
- Talk about your experience of mapping your practice each week. (Layer 4).
- Talk about your experience of the Celebratory Concert for the public. (Layer 5)

Specific to Layer 4: Probing topic of learning about Practising

- Has your practice changed? How has it changed?
- Are you better able to plan your practice? Why?
- Were you successful in meeting your practice and performance aims?
- How did this make you feel? What made this happen?

Probe Performing, Video, and FAP

- View first and last film:
 - What types of things do you notice?
 - How do you feel seeing your final concert film?
 - Are you happy with the Performer you are today? Why?
 - What are your current strengths?
 - How are you thinking when you perform? Are you aware of thinking differently when you are playing? How so?

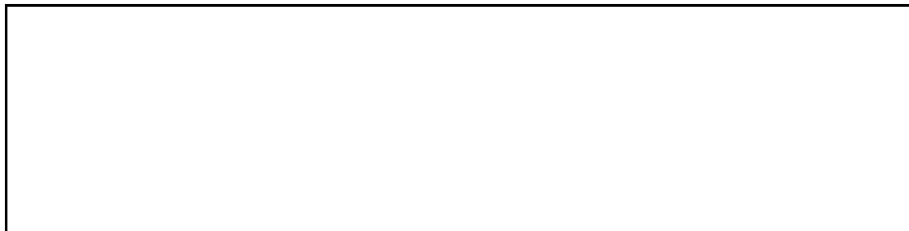
General

- Compared to the beginning of the term, do you think you are listening in a different way? if so, how?
- What were you aiming for in your practice/performance [learning]?
- Is your improvement this term what you expected? What did you expect?
- Are there things you have learned this year that you will carry into next year?
- What areas would you like to explore in the future?
- Talk about being asked so many questions over the term. Has it made you question things?
- Do you feel you are better able to talk/discuss about your performances and playing?
- Are you happy with the Performer you are today? Why?
- Why do you play the violin?

Appendix D: Practice map samples

Name.....Date..... Week.....Title.....

Focus



Plan of work



Result: Reflection – Assessment - Evaluation



Name T2 Date March Week Title Caprice

Focus

use full bows on every long note

Plan of work

Use a mirror
Stop at the the end of every long note to see where I am in the bow.

Result: Reflection - Assessment - Evaluation

Both methods helped and made me focus a lot on my bow and my bow hold. I was much aware of my locked elbow as well when I was using the mirror.

Appendix E: School's assessment criteria

Organised and run solely by the school, pupils' performance assessments were independent of this study, however, being positioned at the very end of the calendar year made it possible to include these assessments as the pupils' penultimate performance opportunity.

The performance assessments took place in teaching studios similar or identical to the one used for weekly individual lessons. The only people present in the assessment room were the pupil, accompanist and the three violin string staff who made up the assessment panel.

The length of time given by the school per assessment varies according to grade level, Primary and Grade 1 receiving an average of ten minutes, Grades 2, 3 and 4 twelve to fifteen minutes, and so on. It is normal for one accompanist to be assigned to an entire grade level. Pupils are allocated a brief warm up time with their accompanist just prior to the assessment time, and for efficiency, the accompanist exits the assessment after the accompanied pieces are completed. The violin assessments ask pupils to present:

- One concerto movement with piano accompaniment
- One contrasting short work with piano accompaniment
- One technical study
- One short work [unaccompanied] chosen by panel from a list of three works prepared by the pupil.
- A series of set scales and arpeggios
- Sight reading

Appendix F: Public concert program

End of Term Celebratory Concert - May 29, 2011

Guest accompanist: S. O'Brien

Page Turner/Stage Manager: K. Murphy

R2

Donkey Doodle – Kroll
March Militaire – Mendelssohn

Y5

Movement 3 – concerto in D major Op. 15 – Seitz
Chanson de Matin Op. 15 no. 2 – Elgar

W3

Autumn Song – Grieg
Clowns – Kabalevsky

T2

Movement 2 – B minor Concertino – Rieding
Caprice – Manhire

Qp

Minuet – Carse
At Dusk – Carse

X4

Chason Triste – Tchaikovsky
Movement 1 –A minor Concerto – Vivaldi

U3

Autumn Song – Grieg
Clowns – Kabalevsky

Z5

Tempo di Minuetto – Kreisler/Pugnani
Sicilienne – Paradis

V3

Movement 3 – Concertino in D major – Kuchler
Spanish Tanze – Bohm

S2

Movement 1 – concerto in D major – Kuchler
Humoreske – Dvorak

