



**CLARISSA GOMES  
FOLETTTO**

**A COMUNICAÇÃO DE INSTRUÇÕES NO ENSINO E  
APRENDIZAGEM DO INSTRUMENTO: O USO DE  
PISTAS PEDAGÓGICAS EM AULAS DE VIOLINO**

**INSTRUCTIONAL COMMUNICATION IN ONE-TO-  
ONE INSTRUMENTAL LESSONS: THE USE OF  
TEACHING CUES IN VIOLIN TUITION**





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CUES IN VIOLIN TUITION**

Tese apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Doutor em Música realizada sob a orientação científica da Doutora Sara Carvalho Aires Pereira, Professora Auxiliar do Departamento de Comunicação e Arte da Universidade de Aveiro e co-orientação da Professora Doutora Andrea Creech, *Reader of Music Education* no *University College of London/Institute of Education* e da Professora Doutora Daniela da Costa Coimbra, Professora Adjunta da Escola Superior de Música, Artes e Espetáculo, Instituto Politécnico do Porto.

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Dedico este trabalho a todos os professores de instrumento.

*I dedicate this work to all instrumental teachers.*



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## palavras-chave

ensino individual do instrumento, comunicação de instruções, comunicação otimizada, pistas pedagógicas, violino.

## resumo

A qualidade da instrução expressa por professores de instrumento tem vindo a ser apontada como um dos fatores que distingue professores experientes de professores menos experientes. Um dos desafios do professor de instrumento é abordar conteúdos complexos, que envolvem um vocabulário específico, e que ao serem comunicados de forma clara e efetiva podem ser posteriormente compreendidos e lembrados pelo aluno. Assim, a partir do estudo de pistas pedagógicas, o objectivo desta investigação é compreender o processo de comunicação no ensino individual do instrumento. Para atingir este propósito foi conduzido um estudo de caso, exploratório, focado na comunicação estabelecida entre professor e aluno. Primeiro foi realizado um estudo piloto que guiou a construção do protocolo do estudo de caso principal. Depois foi realizado o estudo de caso principal que envolveu a observação de dezasseis aulas individuais de violino e a realização de doze entrevistas semiestruturadas. Os participantes foram quatro professores (idades entre os 41 e 62 anos) e oito alunos (idades entre os 9 e 15 anos). Duas aulas sequenciais foram filmadas e foi conduzida uma entrevista no final da segunda aula. Vinte e oito pistas pedagógicas foram selecionadas a partir das observações, das filmagens e das notas de campo. Uma análise temática possibilitou a identificação de: (i) elementos contextuais; (ii) responsabilidades profissionais percebidas pelos professores; (iii) estratégias de comunicação e (iv) percepções dos estudantes sobre a comunicação em sala de aula. Relativamente às pistas pedagógicas selecionadas foram identificadas o seu uso e eficácia. Os resultados principais sugerem que, na comunicação de instruções os professores desenvolvem competências específicas para expressar ideias musicais. Estas ideias são baseadas no conhecimento que têm sobre as preferências dos alunos, e a capacidade de serem flexíveis e de combinar diferentes estratégias. Os professores comunicam através de instruções, e usam as pistas pedagógicas com a função de aconselhar, resolver problemas e enfatizar um determinado conteúdo. As pistas pedagógicas foram usadas na abordagem de competências técnicas, auditivas, interpretativas e de apresentação. De uma forma geral, a comunicação destas pistas foi eficaz quando utilizada com a função de enfatizar algum conteúdo importante. Mais, a eficácia desta comunicação foi feita através do uso de diferentes estratégias: (i) metáforas; (ii) demonstração; (iii) contato/modelagem física, e (iv) incentivar o aluno a tocar livremente. Estes resultados refletem uma tendência comum encontrada na literatura, que sugere que a comunicação de instruções pode ser também otimizada quando professor e aluno negociam e partilham conceitos e significados durante as aulas de instrumento. Embora a otimização da comunicação de instruções tenha sido o enfoque principal desta tese, a contribuição final passa pela aprendizagem significativa do aluno, resultando numa experiência de ensino e aprendizagem positiva e agradável.



**keywords**

one-to-one instrumental lessons, instructional communication, optimized communication, teaching cues, violin

**abstract**

The quality of the teacher's instructions has been identified in studies as one of several factors that distinguish expert teachers from their less expert counterparts. One of the teacher's challenges when teaching an instrument is to approach a complex content (that involves a specific vocabulary) using effective and clear communication which can be understood and recalled by the student later. Therefore, this thesis aims to understand, through the study of *teaching cues*, the process of instructional communication in one-to-one instrumental lessons. In order to reach the research aim, an exploratory case study into the communicative relationship established between violin teacher and student was conducted. Firstly, a pilot study guided the building of the case study protocol. Then, the main exploratory case study involved the observation of sixteen one-to-one violin lessons and twelve semi-structured interviews. The participants were four teachers (aged between 41 and 62) and eight violin students (aged between 9 and 15). Two sequential lessons were videotaped, and after the first lesson a semi-structured interview was conducted with teachers and students separately. Based on the video observations and on the field notes, twenty-eight *teaching cues* were selected. A thematic analysis enabled the researcher to identify: (i) contextual elements; (ii) teachers' perceived professional responsibilities; (iii) teachers' strategies to convey information; and (iv) students' perceptions regarding instructional communication. Concerning the selected *teaching cues*, their use and effectiveness in communication were identified. The main findings suggested that in instructional communication teachers develop specific skills to convey musical ideas based on their awareness of students' preferences, while trying to be flexible and combining different strategies. They use instructions to convey the message and *teaching cues* with the intention *advising*, *problem solving* and *emphasizing* a pedagogical content. *Teaching cues* were used to approach technical, aural, interpretative and presentation skills. Overall, *teaching cues* were communicated effectively when teachers conveyed information by emphasizing important aspects in the communication. In addition, such effective communication was achieved through different strategies: (i) *using metaphors*; (ii) *demonstrating*; (iii) *physical modelling*; and (iv) *encouraging students to play freely*. These results reflect a common trend in the existing literature that suggests that instructional communication is optimized when teachers and students negotiate and share the concepts and meanings during lessons. Although the optimization of communication was the main point highlighted in this study, the final goal is the students' meaningful learning and, consequently, their contribution to a more positive and enjoyable teaching and learning experience.



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## INTRODUCTION

### Thematic presentation

Unlike most musicians, I started ‘teaching’ violin before I had a formal violin lesson. My first contact with learning an instrument was with the piano, which was when I was seven years old. Some time passed after my first piano class until my younger sister, at the age of three, started to learn violin by the Suzuki Method<sup>1</sup>. At that moment, I assumed the position of ‘parent’, according to the Suzuki’s tripartite model, and thus my journey teaching a musical instrument started. My responsibilities with my sister included all activities concerning violin practice. In order to help her to learn new pieces, I had to use different strategies such as demonstrations and metaphors and sometimes even I played a given passage on her small violin in order to demonstrate a point. This experience was the main reason I gave up the piano and started to learn the violin.

My first formal experience as a violin teacher started quite early, after only six years of violin practice. Ever since then, I have realized how difficult it is to make instructions clear to students. Such difficulty encouraged me to attend several teacher-training courses in order to improve my teaching skills. Despite my willingness to develop such skills, it was only in recent years that my interest in understanding the process of communication in one-to-one instrumental lessons has started to arise. Such interest emerged from those teacher-training courses as well as from my experience in teaching violin. In my career it was not uncommon to listen to my peers to try to find out answers to the following questions: ‘How do you teach vibrato to your students?’, ‘How do you approach the shifting?’ or even discussion as ‘Why, for some students, do I need to repeat some instructions so many times?’ and ‘Why, sometimes, do the students not remember what I have said in the last lesson?’ Such discussions seemed to emerge from an apparent need to find the “best” strategy for teaching students; I had felt the same needs many years earlier. The scenario described so far is reported here in order to illustrate how my journey shaped the definition of the research topic for the present thesis:

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<sup>1</sup> In the Suzuki Method, the parents are one of the central parts of the pupil’s learning, so he or she

*instructional communication* in one-to-one violin tuition. Instructional communication as a research topic is based on the interface between communication and instruction (Lane, 2013). Its interest concerns the influence of communication on the teaching and learning process. The focus of this topic is based on the message conveyed by the teacher as well as the understanding of such a message by the student.

### **Rationale**

The rationale for conducting research on this topic is based on the importance given to instructional communication in one-to-one instrumental lessons (Duffy & Healey, 2013; Duke, 2014; S. Hallam, 2006; Lennon & Reed, 2012; Mills, 2007). Such importance attributed to instructional communication resides on a common scenario of instrumental lessons where teachers need to use technical vocabulary in order to explain and demonstrate a skill. Sometimes, technical vocabulary contains many words applied to concepts totally unrelated to the technical concept meanings (e.g. when a violin teacher is explaining about the bow pressure or the contact point) (Novak, 2010). If the instruction is too complex, students may become confused; they might not remember all the details involved (Petrakis & Konukman, 2001). Following this line of thought, one of the teacher's challenges while teaching an instrument, mainly in early stages of learning, is to approach complex content (shaped by an specific vocabulary) using effective, creative and clear communication, which can be understood and recalled by the student later. Based on this, it seems of paramount importance to understand the process of instructional communication in one-to-one instrumental lesson.

Despite this need, studies focused on this topic are still scarce in instrumental pedagogy (Duffy & Healey, 2014). The focus of previous studies is based on the interactions established between teachers and students (Burwell, 2010; S. Hallam, 2006; Rosenshine, Froehlich, & Fakhouri, 2002). These studies highlighted that teachers mostly focused their talk on technical issues; critical thinking was scarcely promoted and low proportions of time were dedicated to student talk or asking questions (Hepler, 1986; Schmidt, 1989; Young, Burwell, & Pickup, 2003). Notwithstanding such results, there is still a lack of research on the content



conveyed in an instructional setting. In addition, the meanings behind instruction, as well as students' understanding of such meanings, are other topics that few have discussed.

In fields other than music there has been a concern to find means to improve instructional communication. Such studies explored the concept of *retrieval cues*, which are recognized as stimuli, e.g. pictures, objects, gestures or words that assist with information retrieval from long-term memory (Baddeley, 1999; Gleitman, Gross, & Reisberg, 2010). Retrieval cues have been used in sports education as a pedagogical tool which helps teachers to give instructions. This tool was refined and designated as *teaching cues* (Petrakis & Konukman, 2001) and/or *learning cues*<sup>2</sup> (Judith Rink, 1993). In physical education field, teaching cues were identified as a means to assist athletes in improving their attention, comprehension and information retention (Petrakis & Konukman, 2001; Rink, 1993).

Given the interpersonal and communicative features of instrumental teaching and learning, it seems reasonable to consider the applicability of teaching cues in this context. The crossover between sports pedagogy and music has been further discussed. The apparent similarities between these two areas have been approached by other authors who explored the process of skill acquisition and the development of the expertise paradigm (e.g. Ericsson, 1996; Ericsson, Charness, Feltovich, & Hoffman, 2006; Williamon, 1999). Such similarities can also be perceptible in educational settings. Despite this, research on the use of teaching cues as a means by which to optimize instructional communication in instrumental teaching and learning is almost non-existent. Thus, it is not possible to recognize either the potential use of such a tool in instrumental teaching or how it can optimize the communication process.

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<sup>2</sup> This study will adopt only the terminology 'teaching cues'

### **Aims, research questions and study design**

The aim of this research is to understand, through the study of teaching cues, the process of instructional communication in one-to-one instrumental lessons. The main research questions are:

- # How has instructional communication been used by teachers in one-to-one instrumental lessons?
- # What could be recognized as a teaching cue in one-to-one instrumental lessons and how is it being used in instructional communication?
- # How can teaching cues be communicated effectively in instructional communication in one-to-one instrumental lessons?
- # Can teaching cues optimize instructional communication in one-to-one instrumental lessons?

In order to answer these questions this study adopted an exploratory case study. According to Robson (2011), a case study allows “an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence” (Robson, 2011, p. 136). Moreover, a case study can be a powerful research tool, especially when the “boundaries between phenomenon and context are not clearly evident” (Yin, 2009, p. 18).

The exploratory purpose behind the present case study is based on the lack of understating regarding instructional communication and teaching cues in instrumental teaching and learning. According to Stebbins (2001), “researchers explore when they have little or no scientific knowledge about the group, process, activity or situation they want to examine, but nevertheless have reason to believe it contains elements worth discovering” (Stebbins, 2001, p. 6). On the other hand, Yin (2009) argues that an exploratory study should be “preceded by statements about what is to be explored, the purpose of the exploration and the criteria by which the exploration will be judged successful” (Yin, 2009, p. 37). In order to match such premises, a pilot case study was designed. It was assumed that such a

study could provide conceptual and methodological perspectives which could inform the exploration of the topic addressed.

### **Research context**

The research context of this study is one-to-one teaching at the primary and secondary school levels (i.e. students aged 5-16). One-to-one instrumental teaching has mostly followed the master-apprentice model (Creech & Gaunt, 2012). Such a model is characterized by one-way communication from teacher to student (Lehmann, Sloboda, & Woody, 2007; Young et al., 2003). Since this model is still a core activity in western classical instrumental teaching and learning (Creech & Gaunt, 2012), the quality of teacher's instructions has been recognized as a key factor which distinguishes expert teachers from their less-expert counterparts (Colprit, 2000; Duke & Henninger, 2002). This perspective of effective teaching also emphasizes specific skills which typically are conveyed by an expert teacher through verbal instruction (Sloboda, 2000). Following this line of thought, Davidson (2002) has identified five basic performance skills which are explored in instrumental teaching and learning: (i) structure, notation and reading skills (i.e. developing a knowledge base for the rules of musical structure); (ii) aural skills (i.e. developing good intonation and tone quality on the instrument); (iii) technical and motor skills (i.e. training the body to automatize the note-playing process so that fluency and agility can be achieved); (iv) expressive skills (i.e. how to manipulate structural rules to create emotional content in music); and (v) presentation skills (i.e. how to perform in a confident manner on stage).

Likewise, learning a string instrument requires specific skills which have been underlined by several pedagogues (e.g. sensory motor control to ensure the intonation; bow articulation; and coordination of movements of the left hand and the right hand (Guettler & Hallam, 2002)). Such skills have been approached in the main violin textbooks and research, which concentrate on two main issues: (i) mechanical issues – posture and range of motion (Fischer, 1998; Forcada-Delgado, 2014; Kempter, 2003; Rasamimanana & Bevilacqua, 2008; Topper, 2002); and (ii) technical issues – which include vibrato (Geringer, MacLeod, & Allen, 2010; Geringer, MacLeod, & Ellis, 2014; MacLeod, 2008), tone production (Collins,

2009; Hamann, Frost, & Wieters, 2002; Hamman, Lauver, & Asher, 2006; Taylor, 2006), and intonation (Foletto, 2011; Gerling, 2009).

As this study focuses on violin teaching, Table A was conceptualized to give an overview of the main mechanical skills approached by violin teachers (Fischer, 1998; Forcada-Delgado, 2014; Kempter, 2003; Rasamimanana & Bevilacqua, 2008; Topper, 2002). Such skills are here divided into two main common problems: (i) postural problems and (ii) range of motion problems (Kempter, 2003). The same table (Table A) also presents a description of the nature of such problems (i.e. tendency).

**Table A** The main mechanical issues of violin playing presented in the literature (Fischer, 1998; Kempter, 2003; Rasamimanana & Bevilacqua, 2008; Topper, 2002)

	The common problems	Tendency
<b>POSTURAL</b>	Feet placement and body balance	(i) Distance between feet bigger than the hips width; (ii) tendency not to share the body weight between both legs
	Knee and low back position	Leaving the knee locked and rigid, exaggerating the lumbar curve
	Angles of the head and the violin	(i) Tilting the head to the right or to the left (the head needs to float upwards to keep balanced on top of the spine); (ii) Elevating the right shoulder to compensate for the absence or misplacement of the shoulder rest; (iii) Straining the neck to hold the violin; and (iv) Letting the violin weight fall down or the opposite
	Left hand position on the instrument	(i) Flexing the wrist forward; (ii) inclining the hand to the right; (iii) the tendency to leave no space between the fingerboard and the hand
	Thumb conception in left hand	Tensioning the thumb when putting the fingers on the fingerboard
	Holding the bow	(i) Keeping the thumb strained; (ii) stretching the little finger
<b>RANGE OF MOTION</b>	Angle of the left elbow	Leaving the elbow static on the string crossing
	Angle of the right arm and wrist	The ulnar deviation in the right wrist
	Finger movements	The tendency to hold the finger straight
	Finger pressure on the strings	Using excessive tension when pressing the string with the fingers
	Bow distribution and tilt	(i) Moving all the arm in simple strokes (ii) playing using mostly the tip of the bow; (iii) the tilt of the bow not being altered
	Flexibility of the right hand fingers	Moving just the second and first joints, changing the tilt of the bow.
	Tone production	Many difficulties finding the balance between contact point, pressure and speed.

Concerning technical issues, the literature has distinguished demands for right and left hand (Collins, 2009; Foletto, 2011; Geringer et al., 2010, 2014; Gerling, 2009; Hamann et al., 2002; Hamman et al., 2006; MacLeod, 2008; Taylor, 2006). Some

of the technical demands for right hand comprise: thumb position; bow change; bow stroke (e.g., *legato*, *detaché*, *martelé*, *staccato*, *staccato volant*, *spiccato*, *sautillé*, *ricochet-staccato*, *tremolo* and *arpeggio*); flexibility; string changes; tone production and bow distribution. Technical demands for left hand comprise: intonation; shifting; finger positions and actions (pressure and speed); vibrato; scales; double stops; chords. Table B presents some of the common technical problems in violin teaching and learning. The same table (Table B) also presents a description of the nature of such problems (i.e. tendency).

**Table B** The main technical issues of violin playing presented in the literature (Fischer, 1997; Galamian, 1962; Kempter, 2003)

	The common problems	Tendency
RIGHT HAND	Change of the bow	Not changing the bowing smoothly and unnoticeably
	Bow strokes	Being in the wrong part of the bow to execute the stroke
	Double stops and chords	Inadequate balance between the pressure, bow contact point and speed
LEFT HAND	Intonation	Inadequate hand posture and inadequate distance between fingers. Low sense of touch in combination with low guidance of the ear
	Shifting	Poor flexibility of the thumb
	Vibrato	Inadequate speed and motion
	Double stops and chords	Unnecessary tension in the whole hand

Regardless of the pedagogical approach implemented by the teacher, such mechanical and technical issues seem to be a core element in violin tuition. These issues provided a useful framework, which informed the presentation of the results in Section 3 and 4.

## Research Challenges

Learning an instrument is a process that could be difficult and strenuous, due to the physical, mental and emotional effort needed (McPherson & Zimmerman, 2002). Such features have attracted the interest of several authors so that research on one-to-one instrumental lessons has increased during the last three decades (Burwell, 2010; Creech & Gaunt, 2012; Lennon & Reed, 2012; Rostvall & West, 2003).

According to Burwell (2010), individual differences, historical traditions and current practices of specialist instruments were considered to be the main variables that shape the current paradigm in instrumental lessons. Despite this, investigations in this field have faced several challenges. In particular, challenges concerning the nature of such field and methodological approaches adopted have been discussed.

The context of one-to-one instrumental lessons reflects a scenario where individual teachers and students are isolated from researchers (Burwell, 2005). Some authors described individual lessons as “something of a ‘secret garden’ compared with the scrutiny given to classroom behaviour in schools” (Young et al., 2003, p. 144). The dyad of teacher and student can demonstrate the complexity of human interactions and cultural evolution, including “the use of language, symbol systems, tools and many aspects of human psychology” (Kennell, 2002, p. 243). Moreover, challenges such as the nonverbal nature of the artistry, teachers’ blindness concerning professional issues, the skills involved and the variety of existing teachers’ approaches to instrumental lessons are some of the reasons that constrain the study of this phenomenon (Burwell, 2005; Kennell, 2002).

The majority of research in one-to-one lessons has relied on observation and videotaped recorded lessons. Despite the advantages of such data collection tools, researchers must deal with the mismatch between time consuming and analysis (i.e. the interval of time and the temporal unit of analysis) (Kennell, 2002). Moreover, there are also some boundaries regarding the pedagogical environment, which have constrained data collection in one-to-one instrumental lessons. In

particular, the nature of the instructions adopted in one-to-one lessons, which involves at least two actors (i.e. teacher and student), has challenged researchers (e.g. Burwell, 2012; Burwell, Young, & Pickup, 2004). Kennell (2002) complains of the closed relationship established between teachers and students. The author questions how one-to-one instruction in music could be studied in such a way that the observations do not affect the phenomenon itself. In fact, concerns to preserve naturalness in such a field have shaped the methodological and conceptual approaches adopted by other authors (e.g. Burwell, 2010; Hultberg, 2005; Kostka, 1984). This naturalness was also a concern in the present thesis so that participants were observed in a natural and common environment. In addition, strategies such as minimal interaction with the participants and an unobtrusive position of the researcher in the room were used.

### **Thesis structure**

This thesis is organized into five main thematic sections preceded by a general introduction. Each section has an introduction followed by two chapters and finished with a summary. The first section '*Background*,' divided into two chapters, aims to present the concept of instructional communication in one-to-one instrumental studies. Chapter 1 presents an overview of the process of instructional communication, effectiveness and the role of teaching cues in this process. Chapter 2 brings a discussion on the existing paradigm of communication in one-to-one instrumental lessons, presenting existing research on effective communication, strategies, the role of feedback and pedagogical vocabulary.

The second section, '*Exploratory case study*,' includes two chapters (i.e. Chapters 3 and 4), where the research methods are presented and described. Chapter 3 is dedicated to the pilot study, which aims to provide conceptual and methodological insights to the case study. The methodological procedures behind the main case study, ethical considerations and also issues of validity and reliability are outlined in Chapter 4.

The results of the main case study are described in two sections (i.e. Section 3 and 4). Section 3, '*Results: Perspectives on instructional communication*,' includes two



chapters, 6 and 7. Each chapter presents corroborating interviews on the process of instructional communication in one-to-one instrumental lessons. While Chapter 6 is dedicated to teachers' perspectives, Chapter 7 is dedicated to students' perceptions.

Section 4, '*Results: Teaching cues - Meanings & effectiveness*', includes two chapters which the meanings and the use of teaching cues and the effective communication of teaching cues are discussed. Chapter 7 presents the meanings behind the teaching cues studied, while Chapter 8 analyses the features of teaching cues effectively communicated.

Finally, Section 5, '*Discussion & conclusion*', includes Chapter 9 and Chapter 10. Chapter 9 maps out the process of instructional communication in one-to-one instrumental lessons. Building on such process, a hypothetical model for optimized instructional communication is presented. Finally, Chapter 10 presents the main conclusions, a summary of the research questions addressed, limitations of the study, pedagogical implications, contribution to knowledge and suggestions for future research and dissemination.



# SECTION 1

## BACKGROUND

### CHAPTER 1

Instructional communication: process, effectiveness & the  
role of teaching cues

### CHAPTER 2

Instructional communication in instrumental lessons

## INTRODUCTION

Section one presents the theoretical background that informed this research. Such a section corresponds to a *conceptual literature review* (Jesson, Matheson, & Lacey, 2011) which aimed to “synthesise areas of conceptual knowledge that contribute to a better understanding of the issues” (Jesson et al., 2011, p. 76).

This section is divided into two chapters. In Chapter 1, theoretical perspectives regarding instructional communication are discussed. This chapter starts with a brief overview of interpersonal communication, followed by the presentation of the process of instructional communication. Moreover, Chapter 1 presents general models, main studies, findings and perspectives on communication effectiveness. Finally, the concept of teaching cues as a tool to improve instructional communication is discussed.

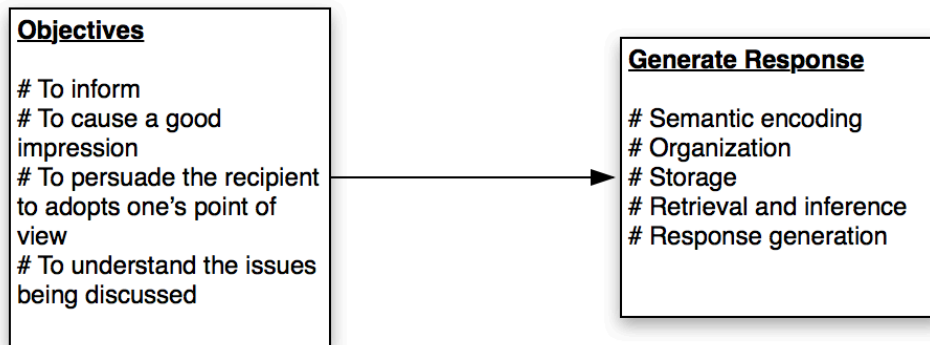
Chapter 2 presents previous research on instructional communication in one-to-one instrumental lessons. Initially, general perspectives on communication in one-to-one instrumental lessons are presented. In particular, teacher and student interactions, effective communication and strategies, the role of feedback and pedagogical vocabulary are further discussed in this chapter.

## CHAPTER 1: INSTRUCTIONAL COMMUNICATION: PROCESS, EFFECTIVENESS AND THE ROLE OF TEACHING CUES

### 1.1 THE PROCESS OF INSTRUCTIONAL COMMUNICATION

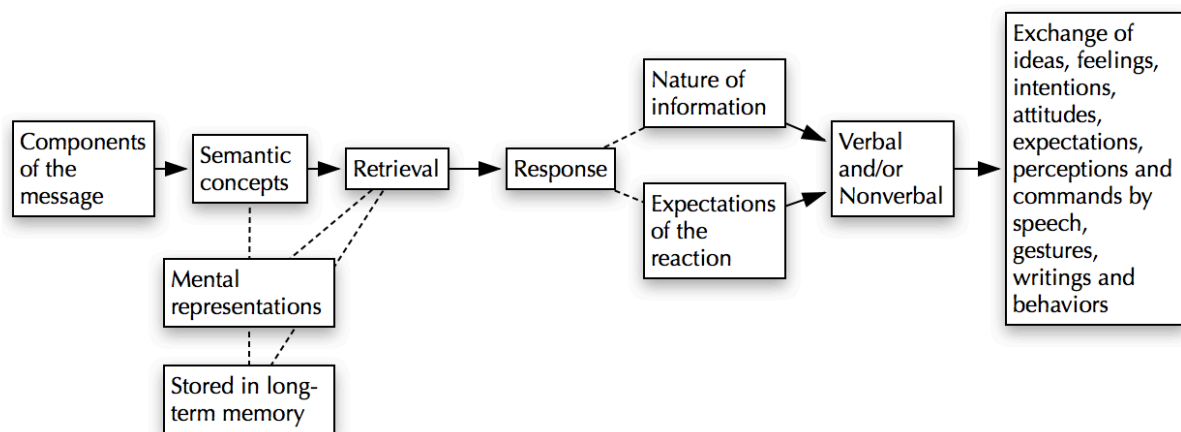
Instructional communication is a process through which teachers and students “stimulate meanings in the minds of each other using verbal and nonverbal messages” (Mottet & Beebe, 2006, p. 149). Such a communicational process is a particular type of interpersonal communication. This means that “one participant in a social interaction receives a verbal or nonverbal communication from another, interprets its meaning, construes its implications, and then decides how, if at all, to respond to it” (Wyer & Gruenfeld, 1995, p. 7).

According to Wyer & Gruenfeld (1995), interpersonal communication is based on different objectives, which in turn shape the generated response (Figure 1.1). Regardless of the objectives behind such instruction the response can be generated through five cognitive steps (see Figure 1.1): (i) *semantic encoding* – concerns the interpretation of the messages, taking into account previously acquired concepts; (ii) *organization* – structuring of several aspects into a schema; (iii) *storage* – organization of such schema in long-term memory; (iv) *retrieval and inference* – retrieval of information that determines the effects of the messages; and (v) *response generation* – decision concerning the use of verbal or nonverbal ‘language’ to communicating thoughts or feelings that one wishes to convey (Wyer & Gruenfeld, 1995).



**Figure 1.1** Interpersonal communication – examples of objectives and generated response. Conceptualized from Wyer and Gruenfeld (1995).

Figure 1.2. Illustrates how the five cognitive steps described above interact with each other in order to generate a response. During this process (see Figure 1.2) a given message is interpreted, taking into account acquired semantic concepts. Such concepts are organized into mental schemas, which are previously associated with formed representations (Wyer & Gruenfeld, 1995). In order to generate a response, one can retrieve such stored representations. The decision of how to respond is often guided by both the nature of the information to be communicated and the expectations of the receiver's reaction (Wyer & Greenfield 1995). In addition, when a response is selected, one decides what communication mode (i.e. verbal or nonverbal) should be used to convey it. In such a case, the information conveyed could involve the exchange of ideas, feelings, intentions, attitudes, expectations, perceptions and commands by speech, gestures, writings and behaviours (Leathers & Eaves, 2008).



**Figure 1.2** Process to generate a response. Conceptualized based on Leathers & Eaves (2008) and Wyer & Gruenfeld (1995).

Founded in such theoretical assumptions, instructional communication has been analysed taking into account three main components. Each component requires a particular focus in the analysis (Mottet & Beebe, 2006):

- # The learner – affectively, behaviourally, and cognitively learning;
- # The instructor - skills and strategies necessary for effective instruction;
- # The meanings – the meaning exchanged in verbal and nonverbal communication as well as mediated messages between and among teachers and students.

Based on these components, two theoretical approaches (i.e. *relational* and *rhetorical*) have influenced the research in instructional communication. Relational approach assumes teachers and students share information and ideas, producing common meanings and understandings through a positive relationship. The final aim of such process is generating simultaneous learning (Mottet & Beebe, 2006). While relational approach considers both, teachers and students as source and receivers of information, rhetorical approach assumes that teacher is the person primarily responsible for creating messages. This approach considers that teachers select and stimulate meanings in students' minds. Such a linear process accepts that the teacher is the primary source of information while student is the receiver. In fact, this perspective is being recognized as a teacher-controlled model

(McCroskey, Valencic, & Richmond, 2004; Mottet & Beebe, 2006; Waldeck, Kearney, & Plax, 2001). According to McCroskey et al. (2004), rhetorical approach “is considered to be the ‘traditional’ approach to instruction and is widely employed throughout the world” (McCroskey et al., 2004, p. 198).

Based on the premise of rhetorical approach, a *General Model of Instructional Communication* grounded on cognitive and communicational elements (McCroskey et al. 2004; Mottet & Beebe, 2006) has been broadly discussed. In this model, six essential components of instructional communication process were identified. Such elements are summarized in Table 1.1.

**Table 1.1** Components of the general model of instructional communication (McCroskey et al., 2004)

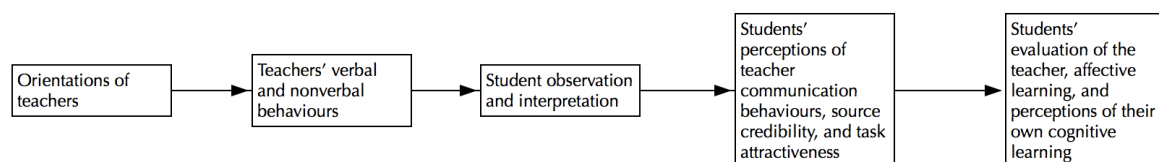
<b>Essentials components</b>	<b>Description</b>
<i>Teachers</i>	Personality, experience, expertise, temperament, intelligence and content knowledge
<i>Teachers’ verbal and nonverbal behaviours</i>	The particular way that each individual teacher can communicate. Individual teachers tend to have consistent communication behaviour patterns which are observable by students
<i>Students</i>	Students’ intelligence, prior learning, personality, temperament, gender and socio-cultural background
<i>Students’ perceptions of the teacher</i>	Students’ perceptions about the teacher’s verbal and nonverbal communication behaviours
<i>Instructional outcomes</i>	Primary outcomes: learning cognitive, affective, and/or psychomotor; and secondary outcomes: student evaluations of the teacher. Such outcomes are the central concern of the instructional communication model
<i>Instructional environment</i>	The nature of the institution and classroom, the culture of the institution, the level of instruction and other relevant transitory factors

According to this theoretical approach, all these components are important to understanding instructional communication. Such components interact in a linear



process as illustrated in Figure 1.3. According to McCroskey et al. (2004) this linear model suggests a causal pattern where:

- i. Teachers' backgrounds and orientations are associated with their verbal and nonverbal behaviours;
- ii. Teachers' verbal and nonverbal behaviours are observable by students;
- iii. The observation and interpretation of these behaviours are shaped by students' perceptions of the teacher's credibility and task attractiveness;
- iv. Students' perceptions of teacher communication behaviours, credibility, and task attractiveness shape students' evaluation of the teacher, affective learning, and perceptions of their own cognitive learning.



**Figure 1.3** Linear model of instructional communication. Adapted from (McCroskey et al., 2004).

Although this perspective has been further discussed, Walton (2014) criticized the weaknesses of the General Model of Instructional Communication, arguing that communication is not a unilateral process where the information is passed from one mind to another. This perspective based on the relational approach, recognizes that students are not passive agents (Walton, 2014). However, most instructional contexts are still based on the model described above, despite the growing interest in collaborative learning (Myers, 2010; Preiss & Wheelless, 2014; Walton, 2014). Thus, this scenario does not contribute to negotiation of concepts and meanings in teaching and learning environments (Novak, 2010). The model proposed by McCroskey et al. (2004) can be considered an example of a “banking” metaphor of education, which was further discussed and critiqued by Freire (1970). Such a type of education becomes an act of positing, in which students are depositories while teachers are the depositors (Freire, 1970).

The two approaches here discussed (i.e. relational and rhetorical) informed studies focussed on different topics regarding instructional communication (see Myers, 2010). Such topics of interest were summarized by Waldeck et al. (2001) who analysed 186 studies through a systematic literature review. The author distributed the analysed studies into six categories, as shown in Table 1.2.

**Table 1.2** Focus of recent instructional communication research (Waldeck et al. 2001).

<b>Focus of studies</b>	<b>% of studies</b>
Student communication	42%
Teacher communication	31%
Mass media effects on children	10%
Pedagogical methods/tech use	10%
Classroom management	3.7%
Teacher-student interaction	3.7%

Waldeck et al. (2001) suggests that most of the research conducted before 2001 has isolated teachers' and students' behaviours. Based on such a conclusion, the author argues that future investigations must explore teachers' and students' interactions as well as student-to-student interactions and the role of technology in instruction (Waldeck et al., 2001). In fact, this perspective seemed to have being considered in the current literature. Recently, Preiss and Wheelless (2014) highlighted some goals behind existing researches: "to teach how to use communication technology as well as theorize about the ways it is used" (Preiss & Wheelless, 2014, p. 322)

## **1.2 EFFECTIVENESS**

Effective communication has been defined according to the degree of comprehension achieved by the receiver (Stone, Singletary, & Richmond, 1999). In this sense, the communicator must choose the proper strategy in order to convey information. This perspective is championed by the *theory of Communication Competence* proposed by Spitzberg and Cupach (1984), which suggests that the

communicator has an important role in such effectiveness. The authors describe a model that includes three main components: (i) knowledge of communication behaviour, (ii) skill (i.e. the ability to employ such behaviour) and (iii) motivation (i.e. the desire to communicate effectively) (Spitzberg & Cupach, 1984). Following this line of thought, Shannon and Weaver (1949) argues that effectiveness is related to the achievement of a desired behaviour by the communicator. Thus, effectiveness seems closely interrelated with the interpretation of meaning by the receiver, taking into account the intended meaning of the sender. The accuracy in transmitting information through a set of symbols seems to play an important role in such communicational process (Shannon & Weaver, 1949).

Even though the role of communicator has been widely championed by the theory of communication competence, existing perspectives concerning effectiveness seem also to emphasize another aspect: the levels of understanding achieved. According to Stone et al. (1999), “even when a person is motivated to listen, circumstances and internal or external noise can interfere with the communication process” (Stone et al., 1999, p. 93). The receiver’s ability to select information is broadly explored by the *Selectivity theory* (DeFleur, 1970). This theory has been used in sports as a theoretical framework to analyse students’ and athletes’ retention of information during sports sessions (Januário, 2014). Five selectivity processes are proposed in this theory: (I) *selective exposure*; (II) *selective attention*; (III) *selective perception*; (IV) *selective retention*; and (V) *selective recall* (DeFleur, Kearney, & Plax, 1993).

The first selectivity process (i.e. *selective exposure*) “refers to a person’s conscious or unconscious choice to receive messages from a specific source” (Stone et al., 1999, p. 94). According to the same authors, five factors are part of *selective exposure* (i) utility; (ii) enlightened self-interest; (iii) proximity; (iv) involvement; and (v) consistent and reinforcing (see Table 1.3).

**Table 1.3** The Factors of selective exposure (Stone et al., 1999)

<p><i>(i) Utility</i></p> <p>Content that seems useful or interesting is more likely to be selected for exposure than content that seems less useful</p>
<p><i>(ii) Enlightened self-interest</i></p> <p>People generally pay more attention to beneficial or advantageous information</p>
<p><i>(iii) Proximity</i></p> <p>Information that is immediately available or close to a person is most likely to be selected for exposure</p>
<p><i>(iv) Involvement</i></p> <p>The more important a topic is to a person, the more exposure the person will seek (...);</p>
<p><i>(v) Consistent and reinforcing</i></p> <p>People allow exposure to information that is consistent with and reinforces their views. They “tune out” sources of information that is inconsistent with or not reinforcing their attitudes, beliefs and values</p>

The second selectivity process (i.e. *selective attention*) concerns when the receivers are not able to control the messages that they are exposed to. However, when receivers are exposed to some information, they have the option to select which aspect they want to pay attention to. Five factors contribute to defining the choice of such an aspect: (i) attention span; (ii) novelty; (iii) concreteness; (iv) size; and (v) duration (see Table 1.4). According to Webster (2010), “the more novel, concrete, notably large or small, and of moderate size a message is the more someone will choose to relinquish attentional resources to the message/source” (Webster, 2010, p. 420).

**Table 1.4** Factors of selective attention (Stone et al., 1999)

<p><i>(i) Attention span</i></p> <p>The amount of time a person can spend attending to one thing before having to shift to something else</p>
<p><i>(ii) Novelty</i></p> <p>The extent to which something is new/unusual</p>
<p><i>(iii) Concreteness</i></p> <p>The extent to which messages/ ideas are concrete as opposed to abstract and relate to the life or experience of the receiver</p>
<p><i>(iv) Size</i></p> <p>The extent to which something is bigger, and sometimes smaller, than other things [e.g. messages] surrounding it</p>
<p><i>(v) Duration</i></p> <p>The extent to which messages are moderate in duration as opposed to excessively long or short</p>

The third selectivity process (i.e. *selective perception*) is based on people's different interpretations of the same content, according to psychological characteristics, social background and relationships. The selective perception concerns the process of attributing meaning to messages. Five factors seem to shape this process: (i) puzzling messages; (ii) absence of message redundancy; (iii) absence of receiver schema; (iv) early experiences; (v) assumptions and biases (see Table 1.5).

**Table 1.5** Factors of selective perception (Stone et al., 1999)

<p><i>(i) Puzzling messages</i></p> <p>Messages are often ambiguous, uncertain, imprecise and open to misinterpretation (...) Confusion can be avoided by encouraging people to ask clarifying questions, not using too many complex words, and not using abstract terms or language above the receiver's level of knowledge</p>
<p><i>(ii) Absence of message redundancy</i></p> <p>Redundancy enables receivers to have a second or third opportunity to comprehend the intended meaning of a source's message. Single messages are far more likely to be misunderstood than multiple messages aimed to stimulate the equivalent meaning</p>
<p><i>(iii) Absence of receiver schema</i></p> <p>Receivers learn by assigning information into categories known as schema. A source must help the receiver create schema for new ideas</p>
<p><i>(iv) Early experiences</i></p> <p>Sources and receivers know the world through their past or early experiences. This means constantly learning and relearning concepts, language and meaning</p>
<p><i>(v) Assumptions and biases</i></p> <p>An assumption is a guess, conjecture or hypothesis about how another person will react or communicate. A bias is a preconception, opinion or evaluation about another person. A source's message may be perceived in a way that is consistent with the receivers' assumption of bias, not in the way the source intended</p>

The fourth selective process (i.e. *selective retention*) concerns the selection of information, which may be stored in long-term memory or not. Five factors seem to affect the selective retention: (i) absence of highlighting; (ii) absence of redundancy; (iii) absence of schema; (iv) absence of tangible application; (v) primacy and recency principles (see Table 1.6).

**Table 1.6** Factors of selective retention (Stone et al., 1999)

<p><i>(i) Absence of highlighting</i></p> <p>Lack of highlighting can result in the information being lost. Often students do not know what teachers expect, so students attempt to store too much information or simply forget it all. Educators can be very good at highlighting relevant information. This is done by handing out learning objectives, speaking articulately, writing on the board, giving significant facts and terms to know, and by reemphasizing significant content points for each unit</p>
<p><i>(ii) Absence of redundancy</i></p> <p>Lack of redundancy lowers the opportunity for a variety of ways to learn and retain material. Redundancy assumes that the more a person hears or sees information, the more likely the person is to recall it</p>
<p><i>(iii) Absence of schema</i></p> <p>The lack of a schema often explains why people do not save or store information</p>
<p><i>(iv) Absence of tangible application</i></p> <p>For people to store and then recall information, it must have real, concrete applications</p>
<p><i>(v) Primacy and recency principles</i></p> <p>Generally, information given first in a message ‘primacy principle’ and information given last ‘recency principle’ are the most recalled items of information</p>

According to the authors, selective retention can be improved when the communicator emphasizes the information conveyed, using different terms, examples and reviewing ideas informed (Stone et al., 1999). In addition, the communicator needs to help the receiver to construct a schema or a mental image where the latter can save and retrieve new information with a clear and practical application of the content (Stone et al., 1999; Webster, 2010). According to Webster (2010) the main content, which needs to be deeper memorized, must be presented at the beginning of the communication process or at the end:

“The more emphasis given a message, the more the message is repeated, the more obvious its application to real world problems and situations, and the more its most important content is placed at its inception and closing, the better the chance the message will be retained” (Webster, 2010, p. 421).

The last selectivity process (i.e. *selective recall*) considers that the time spent on remembering information varies for each person. The selective recall is the “successful retrieval of information” (Stone et al., 1999, p. 99). However, the

achievement of information retrieval depends on all other processes previously presented. According to Stone et al. (1999),

If a receiver never had selective exposure to information, then the information cannot be recalled. If a receiver paid little attention to the information, then the information may not be recalled or may be recalled incorrectly. If the receiver had a different perception about the information than the source intended, selective perception may distort the message. If a receiver does not have or cannot create a schema for incoming information, then the information may be lost. If a receiver had little or no retention of information, then recall of the information is almost impossible (Stone et al., 1999, p. 99).

Based on all assumptions described so far, one can argue that communicating content in a clear, simple and appropriate way, considering the receiver's background and helping them to create a schema, is the basis of effective communication (Stone et al., 1999). Following this line of thought, the Selectivity theory might be a powerful framework to optimize instructional communication. Such theory may facilitate the identification of possible barriers, which may constrain student retrieval and learning.

### 1.3 THE ROLE OF TEACHING CUES

The instructional process has been considered a challenge because of the number of interacting factors involved. This process requires the use of several instructional techniques (Lee & Solmon, 1992). The interest in these techniques has motivated some authors (Konukman & Petrakis, 2001; Masser, 1993; Judith Rink, 1993) to investigate new pedagogical approaches. Particularly, a considerable body of research has emerged on this topic, mainly in physical education. In such an area, a concern while teaching a given skill is to demonstrate its critical elements, giving a clear image of the correct movement (Konukman & Petrakis, 2001). The search for achieving this aim has motivated researchers to explore the concept of *verbal cues*. Research on this type of cue, which is recognized as a means to help students to focus their attention on key elements of motor skills, emerged in the 1990s (Masser, 1993). The theoretical bases of verbal cues were shaped by notions of attention and information processing (Landin, 1994). According to Landin (1994), teachers might give students a clear cognitive understanding of what they are trying to communicate through the use of verbal



cues. The intended outcomes can be achieved by selecting the suitable cue (McCullagh, Stiehl, & Weiss, 1990).

Several terminologies can be found in the literature to refer to verbal cues, such as *verbal coding*, *verbal rehearsal*, *critical cues*, *performer self-cueing*, *self-talk*, *learning cue* and *teaching cue*. Rink (1993) proposed that such concepts designate approaches which help teachers to communicate instructions. Following this line of thought, the author used the concept learning cue, which is defined as “a verbalized word or phrase that identifies and communicates to a performer the critical features of a movement skill or task” (Rink, 1993, p. 88). Learning cue is used to improve teaching, alleviating overload of information in the instructional process. Such a concept is classified taking into account two main aspects: who starts the action (i.e. teacher or student) or the typology of the skill (i.e. cues for closed or open skills) (see Table 1.7).

**Table 1.7** Classification of learning cue by Konukman and Petrakis (2001)

<p><i>(i) Teacher-initiated or student-initiated</i></p> <p>Teacher-initiated cues - teacher uses words that focus the students' attention on the critical elements of the skill.</p> <p>Student-initiated cues (or self-cues) - students give themselves cues in a process often referred to as 'self-talk'.</p>
<p><i>(ii) Cues for closed or open skills</i></p> <p>Cues for closed skills<sup>3</sup> - create a visual picture of the critical elements of the correct movement.</p> <p>Cues for open skills<sup>4</sup> - focus on movement responses in a changing environment.</p>

Some authors have proposed the name teaching cues instead of learning cue (Henkel, 2002; Konukman & Petrakis, 2001)<sup>5</sup>. Despite this new nomenclature focus on the teacher, its description matches the same features described by Rink (1993).

<sup>3</sup> “A closed skill occurs in a self-paced, stationary environment wherein the student tries to achieve a consistent movement pattern.” (Konukman & Petrakis, 2001, p. 38)

<sup>4</sup> “Open skills are used in unpredictable environments where in the learner must adapt to changing conditions.” (Konukman & Petrakis, 2001, p. 38)

<sup>5</sup> In order to avoid misunderstandings, this thesis adopted teaching cues to refer to all kinds of cues discussed in the physical education area.

Henkel (2002) infers that teaching cues can be expressed verbally, visually and/or kinaesthetically. The same author argues that visual and/or kinaesthetic cues are most used when verbal cues have limited value (Henkel, 2002; Landin, 1994; Lee & Solmon, 1992); for example on a soccer field where the teacher is too far away from the students, a teacher could remind the students to drag their rear foot by modelling the movement (Henkel, 2002). In addition, the use of teaching cues with modeling strategy have demonstrated improvement in the learning of practical tasks (e.g. dance routines, sport skills) (Henkel, 2002; Landin, 1994; McCullagh et al., 1990; Judith Rink, 1993).

The successful use of teaching cues depends on how teachers select such a tool. Some authors have indicated two main objectives which seem to shape such selection (Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993): (i) guiding the focus during the performance and (ii) giving a clear picture of the skill. Moreover, three other aspects may also take into account when a teaching cue is selected: (i) to be accurate; (ii) to be essential to the task presented; and (iii) to be appropriate to the age and stage of student (Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993).

In consonance with such objectives and factors, the literature has recommended five questions which can guide teachers' conscious or unconscious selection of teaching cues: (i) What are the critical elements of the task? (ii) Are the cues accurate? (iii) Are the cues few in number? (iv) Are memory aids used? and (v) Are the cues appropriate to the students' age and stage of learning? (Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993). This selection is also dependent upon accumulated professional and tacit knowledge (Landin, 1994). Furthermore, teachers must give clear explanations of the relationships between the cues and the approached skill (Henkel, 2002; Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993).

Concerning its role, the literature emphasizes that the utilization of teaching cues may improve the focus of attention, comprehension and retention of information (Henkel, 2002; Konukman & Petrakis, 2001; Lorson, 2003). Teaching cues were also effective when associated with the accuracy of the response, since there is

emphasis on structural features of the movement that leads to a cognitive representation of the task (Landin, 1994, p. 302). Moreover, when teaching cues were used to connect new ideas to previously learned ideas, the retention process was enhanced (Henkel, 2002).

In addition to its pedagogical role discussed above, this pedagogical tool may also affect the memorization processes. Following this line of thought, teaching cues has been recognized as a particular type of *retrieval cue*. Such a concept is defined as a stimulus which assists the recovery of information in long-term memory (Baddeley, 1999; Gleitman et al., 2010). It is common sense among psychologists that memorization can involve three different aspects - encoding, store and retrieval (Baddeley, 1999; Gleitman et al., 2010). In order to improve the retrieval process, an effective access of stored information is required. This access might be facilitated through the use of retrieval cues.

The use of teaching cues with retrieval purposes has been investigated as a means by which to optimize children's memorization. The external cues used in such studies were pictures (e.g. photos) (Aschermann, Dannenberg, & Schulz, 1998; Ritter, Kaprove, Fitch, & Flavell, 1973; Roebbers & Beuscher, 2004) or objects (e.g. toys) (Meacham & Colombo, 2001). According to the authors, the results increased the confidence in using cues in home or school settings in order to facilitate children's remembering and meaningful learning (Karpicke, Lehman, & Aue, 2014). The relationship between meaningful learning and memorization has been also discussed by Novak (2010). The author proposes a "theory of education for human beings" that established the distinction between meaningful learning and memorization. Novak also designates memorization as rote learning:

Rote learning may be useful on occasions, such as when we memorize a poem, the score for a piece of music, or multiplication tables. But the real value of rote learning comes when we also move to understand the meaning of what we have memorized and it is meaning that confers power to our learning. The person who simply plays the notes he or she has memorized is, at best, a technician, whereas the artist understands and interprets the meaning of the music intended by the composer. The good teacher helps to move the learner beyond rote learning by negotiating meanings with the learner (Novak, 2010, pp. 18–19).

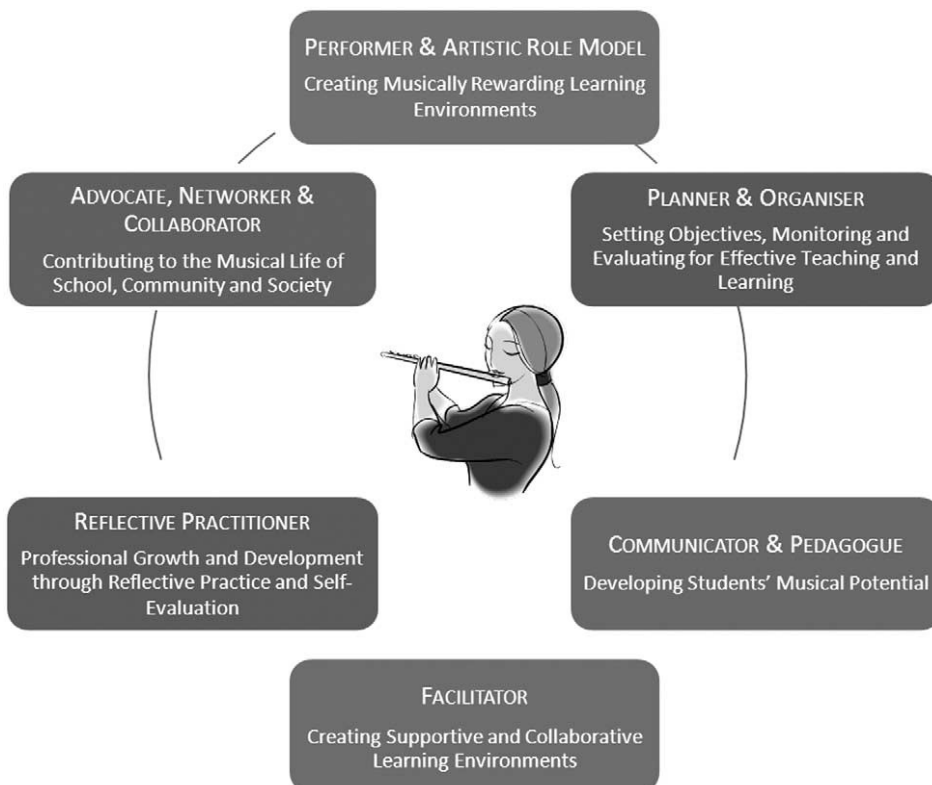
The idea of negotiating meanings between teacher and student, that is the core element of Novak's theory of education, is based on principles of constructivist

theories (Piaget, 1967; Vygotsky, 1978). In constructivism every individual constructs their own understanding of the world by reflecting on their experiences (Stapleton, 2001). The central point of this philosophy is the idea that the learner is active in the process rather than a passive receiver of information from others (Bruner, 1961). Based on this perspective, Novak (2010) suggests that meaningful learning happens when the learner relates new information to prior knowledge (Novak, 2010). Following this line of thought, one can infer that Novak's theory and teaching cues may also be close concepts. This means the use of cues might be useful when teachers consider the learner's prior knowledge, stimulating the latter to connect such skills to previously acquired concepts. In summary, a possible way to optimize instructional communication in one-to-one instrumental lessons may involve the negotiation of concepts and meanings behind the adopted cues.

## CHAPTER 2: INSTRUCTIONAL COMMUNICATION IN INSTRUMENTAL LESSONS

### 2.1 COMMUNICATION IN ONE-TO-ONE INSTRUMENTAL INSTRUCTION

To communicate and express ideas about musical meaning has been established by the *'Polifonia' working group for instrumental and vocal teacher training in Europe (2007-2010)* as one of six instrumental/vocal teacher roles (Figure 2.1) (Lennon & Reed, 2012). This particular role (i.e. *teacher as communicator and pedagogue: developing students' musical potential*) concerns the development of pedagogical skills, which are required to assist students to develop their artistry (Lennon & Reed, 2012).



**Figure 2.1** Instrumental/vocal teacher roles

[Drawn from: Lennon, M., & Reed, G. (2012). Instrumental and vocal teacher education: competences, roles and curricula. *Music Education Research*, 14(3), 285–308]

Findings from Lennon and Reed (2012), highlight the importance of choosing pedagogical strategies and approaches to communicate effectively the ideas intended (Lennon & Reed, 2012). According to the authors, instrumental/vocal

teachers need to develop eleven competences to communicate effectively with their students (Table 2.1). The authors discuss these competences, from the creation of educative learning situations to the use of technology as an aid to instrumental/vocal teaching and learning (see Table 2.1).

**Table 2.1** Required components to communicate effectively with students (Lennon and Reed 2012, 297).

(i) Create educative learning situations that engage students in musically meaningful ways that expand and develop their musical skills, knowledge, understanding and imagination
(ii) Communicate effectively with individuals and groups, using language in creative and imaginative ways in promoting student understanding and responsiveness
(iii) Verbalise, articulate and explain technical, musical, theoretical and artistic concepts and skills, using imagery, analogy, questioning and discussion as pedagogical tools
(iv) Musically demonstrate technical, musical and artistic concepts and skills
(vi) Use constructive feedback strategies in creative ways and, where appropriate, incorporate peer learning into the process
(vii) Use a variety of methods, resources and materials appropriate to the needs and learning styles of students, to nurture and develop students' technical and interpretative abilities, alongside their reading, aural and performance skills, and their creativity and imagination
(viii) Facilitate the development of good habits in relation to technique and posture in a way that enables students to use their bodies in an efficient and healthy way
(ix) Help students develop effective and appropriate practice and rehearsal strategies
(x) Incorporate improvisation and composition in the teaching and learning process
(xi) Use technology creatively as an aid to instrumental/vocal teaching and learning where appropriate

Another aspect that seems to shape effectiveness in instrumental/vocal teaching and learning is the relationship between teacher and students (Hallam, 1998; Manturzevska, 1990; Sloboda & Howe, 1991; Sosniak, 1990). According to Lehmann et al. (2007), teacher and student interactions can be observed and analysed through the systematization presented in this context. Yarbrough and Price (1989) have identified three sequential patterns of instruction in one-to-one lessons, namely: (i) teacher presentation of a task; (ii) student response and

engagement with the task; and (iii) teacher feedback (i.e. related to the student response). According to the authors, the ability to complete these three sequential patterns of instruction characterize effective teaching (Yarbrough & Price, 1989).

The main body of research that investigates interactions between teacher and student has led mainly observational studies focused on behavioural components of instrumental teaching and learning (Burwell, 2010; S. Hallam, 2006; Rosenshine et al., 2002). One of the main contributions of such studies has been the categorization of common behaviours in instrumental lessons. Table 2.2 shows some examples of the main categories identified by different authors.

**Table 2.2** Behaviours categories in one-to-one instrumental lessons based on the literature

<b>Hepler (1986)</b>	<b>Siebenaler (1997)</b>	<b>Burwell (2010)</b>	<b>Creech (2012)</b>	<b>Zhukov (2012)</b>	<b>Simones et al. (2015)</b>
Teacher and student behaviours	Teacher behaviours	Teacher and student behaviours	Teacher and student behaviours	Teacher and student behaviours	Teacher behaviours
Student Performance in medium	Clap/Sing Play	Spatial behaviour	Pupil play (tuning, playing alone and accompanied)	Verbal behaviour	Giving information
Teacher conceptual statements	Play/Talk	Performance behaviour (rehearsal, preparation, practice, exercise, piano)	Teacher talk (direct, diagnose, attributional and non-attributional feedback)	Teacher joke	Giving advice
Teacher Unclassified Lesson-Related Statements	General Directive	Verbal behaviour (information, elicitation, coaching, feedback)	Teacher scaffolding (model with playing or singing, play along, hands-on practical help, accompany pupil)	Student joke	Giving practice suggestions
Teacher Technical Statements	Specific Directive			Teacher disappointment	Asking questions
Teacher Performance in Medium	Questions			Teacher excuse	Giving feedback
Teacher Vocal Performance Outside of Medium	Music Talk			Teacher sympathy	Demonstrating
Teacher Positive Vocal Appraisal	Specific Approval			Teacher social	Modelling
Teacher Body, Movement Appraisal	General Approval			Student social	Listening/ observing
Teacher Negative Vocal Appraisal	Specific Disapproval				
Teacher Expressive Statements	General Disapproval		Teacher questioning (open question, seek agreement, check understanding)	Non-verbal behaviour	
Teacher Conceptual Questions	Approval Mistake		Pupil talk (agree, disagree, contribute own idea, self-assess, choose what to play)	Deceit	
Inactive Off-Task	Disapproval Mistake			Doubt	
Teacher Unclassified Lesson-Related Questions	Off-Task			Dominance	
Student Unclassified Lesson-Related Statements	Inactive			Restraint	
				Evaluation	
				Boredom	
				Courting	
				Interest	



The table above describes two main categories: (i) teacher's patterns of interaction and (ii) teacher and student's patterns of interactions. Among the categories presented is possible to identify different approaches used by the authors to analyse the same object. While some approaches have focused on detailed behaviours (e.g. Zhukov 2012), others have been more generalised in their approaches (e.g. Burwell 2010). Despite the differences between terminologies used, it was possible to observe four main broad behaviours in one-to-one instrumental interactions (Burwell, 2010; Creech, 2012; Hepler, 1986; Siebenaler, 1997; Simones, Schroeder, & Rodger, 2015; Zhukov, 2012):

- # Student bodily action - tuning, playing alone and accompanied, performing
- # Student verbal action - agree, disagree, contribute with their own idea, self-assess, choosing what to play, student joke, student excuse and student talking on non-musical matters
- # Teacher hands-on - modelling, scaffolding, demonstrating, accompany pupil, listening/ observing, performing, vocal performance, teacher body movement
- # Teacher verbal action - giving direction, problem solving, advice, coaching, music talk, teacher conceptual statements, teacher technical statements, attributional and non-attributional feedback, teacher joke, teacher disappointment, teacher sympathy, teacher questioning and giving practice suggestions.

The main findings of such investigations report a scenario where teachers mostly talk, technique is often emphasized and questioning represents a small proportion of time (Burwell, 2010; Creech, 2012; S. Hallam, 2006; Hepler, 1986; Siebenaler, 1997; Simones et al., 2015; Zhukov, 2012). Furthermore, these studies emphasize that students' activity in the lessons is mainly about playing.

The scenario described above motivated research on verbal and non-verbal communication in instrumental teaching and learning. Four different modes of teacher verbal and non-verbal communication were identified by (Kennell, 1992):

(i) verbal/declarative statements (e.g. *that phrase is forte!*); (ii) verbal/commands (e.g. *play that section forte for me*); (iii) verbal/questions (e.g. *what does forte mean?*); and (iv) nonverbal/gestures (e.g. accented fist gesture in the air). Kennell (1992) found that teachers have used declarative statement and nonverbal gesture when they assumed that the student understood the musical concept, or even when the student had acquired the required skill to perform the task (Kennell, 1992). Moreover, teachers used questions when they assumed that the student did not understand the concept. Finally, commands were used when teachers needed to verify whether the students were able to execute a specific skill or not (Kennell, 1992).

Apart from the perspectives championed by Kennell (1992), other authors have explored verbal and non-verbal communication in one-to-one instrumental lessons (e.g. Duffy, 2015; Rostvall & West, 2003). Particularly, Rostvall and West (2003) conducted research on the content of teachers' verbal communication. The authors recognized five different educational functions behind speech and music during the lessons, namely: (i) testing/inquiring; (ii) instructional; (iii) analytical; (iv) accompanying; and (v) expressive functions. In such study, the authors explored how different patterns of interaction affect students' opportunities to learn. The main findings suggests teachers rarely play during the lessons, and interaction is distributed asymmetrically (Rostvall & West, 2003). According to the authors, such findings affect negatively the opportunities of students to learn (Rostvall & West, 2003).

The role of nonverbal communication in instrumental teaching has been also considerably discussed (Carlin, 1997; Gipson, 1978; Hepler, 1986; Highlen & Hill, 1984; Kurkul, 2007; Levasseur, 1994; O'Neill, 1993; Simones et al., 2015). Researchers identified that nonverbal behaviour has an important role in teaching expressivity in music performance. According to Highlen and Hill (1984) "nonverbal behaviour is a primary mean of expressing or communicating emotions (...) [and] give clues to a person's attempts at concealing emotions" (Highlen & Hill, 1984, p. 368). Nonverbal communication in one-to-one instruction was systematically observed. Table 2.3 brings together the main categories recognized by some authors. Based on previous established categories (Gipson 1978; Hepler,

1986; O'Neill, 1993; Levasseur, 1994; Carlin, 1997), Kurkul (2007) have summarized three main categories of non-verbal communication (see Table 2.3), namely: (i) Kinesics (eye contact, facial expression, hand gestures and body orientation); (ii) Proxemics (physical distance, touching); and (iii) Paralanguage (silence and voice quality). Recently a new categorization was established by Simones et al. (2015) who classify nonverbal communication in two groups (see Table 2.3): (i) spontaneous co-verbal gestures and (ii) spontaneous co-musical gestures (Simones et al., 2015). According to Simones et al. (2015), teachers use both spontaneous co-verbal and co-musical gestures simultaneously. In some cases this use may also be independent of the desired outcome (Simones et al., 2015, p. 117).

**Table 2.3** Nonverbal behaviour categories in one-to-one instrumental lessons based on the literature

<b>Gipson (1978)</b>	<b>Hepler (1986)</b>	<b>O'Neill (1993)</b>	<b>Levasseur (1994)</b>	<b>Carlin (1997)</b>	<b>Kurkul (2007)</b>	<b>Simones et al. (2015)</b>
1. Teacher musical directing	1. Performance in medium	1. Voice tone – friendly	1. Facial expressions and eyes	1. Instructing	1. Kinesics (Eye contact, Facial expression, Hand gestures, Body orientation)	1. Spontaneous co-verbal gestures (McNeill, 1992, 2005) - Deictic, Iconic, Metaphoric, Co-verbal Beats
2. Physical responding	2. Performance outside of medium	2. Facial expression – friendly	2. Expressive movement	2. Coaching	2. Proxemics (Physical distance, Touching)	2. Spontaneous co-musical gestures (present authors) - Musical Beats, Conducting Style, Playing Piano, Mimic, Touch
3. Physical initiating	3. Body movement	3. Physical contact – gentle	3. Posture	3. Demonstrating	3. Paralanguage (Silence, Voice quality)	
4. Physical requesting-performance	4. Analysis	4. Eye looking at student's eyes/ face	4. Touch	4. Playing		
5. Musical responding	5. Positive non-verbal appraisal	5. Voice tone – unfriendly, tense, angry	5. Duration and pacing	5. Other		
6. Musical initiating	6. Negative non-verbal appraisal	6. facial expression – unfriendly, angry	6. Space			
7. Musical requesting-performance		7. Physical contact – authoritarian, rough				
8. Student/teacher musical response						
9. Student musical response/teacher conducting						

The perspectives discussed here highlight that research on pedagogical communication has increased with growing interest into instrumental teaching effectiveness. Several authors presented here have emphasized the premise that “good communication” is a *sine qua non* element of effective teaching (Carlin, 1997; Colpritt, 2000; Duke & Henninger, 2002; Kurkul, 2007; MacGilchrist, Reed, & Myers, 1997; Siebenaler, 1997). In the same line of thought, the quality of a teacher’s communication has been highlighted as a key factor that distinguishes expert teachers from novice teachers (Colpritt, 2000; Duke & Henninger, 2002). According to Siebenaler (1997), effective teachers change behaviours more frequently and are more efficient in their verbalizations (Siebenaler, 1997).

## 2.2 EFFECTIVE COMMUNICATION

Effective communication in one-to-one instrumental lessons is being characterized taking into account the clarity of verbal instructions and explanations of concepts, which are delivered without unnecessary interjections or asides (Lehmann et al., 2007, p. 195). Such characteristics have been highlighted in studies that investigated the differences between experienced and novice teachers. In such studies, expert teachers were recognized as those who spent a short time talking (Duke, 1999; Goolsby, 1996, 1999; Tait, 1992). According to Lehmann et al. (2007), “excessive talking is almost an epidemic among novice or ineffective music teachers” (Lehmann et al., 2007, p. 195). Also, efficient teachers focus on specific priorities in their verbal instructions to students, namely: tone quality, intonation, style, and expression, while novice teachers address technique predominantly (Goolsby, 1997, 1999; Lehmann et al., 2007; Young et al., 2003).

## 2.3 STRATEGIES TO COMMUNICATE EFFECTIVELY

Several strategies to communicate effectively can be found in the literature. Such strategies were mainly identified in studies on music expressivity. Tait (1992) suggests that such strategies are shaped by vocabulary choice and usage. Among the strategies discussed, Karlsson and Juslin (2008) highlighted the importance of metaphors. Other authors identified modelling and emphasizing emotion felt as

effective strategies to communicate musical ideas around expressivity (Arrais & Rodrigues, 2007; Barten, 1998; Brenner & Strand, 2013; Froehlich & Cattley, 1991; Gabrielson & Juslin, 1996; Juslin, 2003; Karlsson & Juslin, 2008; Laukka, 2003; Persson, 1996; Sloboda, 1996; Watson, 2008; Woody, 1999, 2000).

Asides from the studies on expressivity in musical performance, other strategies to communicate effectively were recognized by Wood et al. (1976), namely: (i) marking critical features – this strategy emphasizes certain features of the task that are relevant; (ii) demonstration – this strategy exemplifies solutions to a task (e.g. listen to this); and (iii) frustration control – this strategy is characterized by the ways that teachers communicate to reduce student anxiety (e.g. I know this is hard, but just do your best) (for review see Kennell, 1992). Such strategies were identified as a distinguishing feature among expert teachers.

## **2.4 THE ROLE OF FEEDBACK IN INSTRUMENTAL TEACHING AND LEARNING**

Teacher feedback is being accepted as a crucial component of effective instruction in many disciplines (Duke & Henninger, 2002). Research on teacher and student interaction emphasizes the key role of feedback in instrumental and vocal teaching (Burwell, 2005; Duke & Henninger, 2002; H Gaunt, 2008, 2011; Krivenski, 2012; Presland, 2005; Young et al., 2003; Zhukov, 2008). According to Duke (2014), teacher feedback serves two purposes: provide information and motivate behaviours. According to the author, feedback may inform the “learner the quality or accuracy of his/her work and impel him/her to take action or refrain from certain behaviour in the future” (Duke, 2014, p. 128). In addition, Duke (2014) explains that feedback may vary from indications of correctness and accuracy to informative descriptions concerning the quality of performance.

The relationship between the quality of teacher feedback and teaching effectiveness has been also addressed in the literature. Duke and Henninger (2002) observed that expert teachers provided more accurate feedback than their less expert counterparts. Such difference was identified in terms of quantity, content and specificity. The most common particular feedback assignments used by expert teachers were to make detailed references to tone quality, intonation,

expression, phrasing or articulation (Colpritt, 2000; Duke & Henninger, 2002). In order to provide effective feedback, teachers need to give guidance to students on how to close the gap between the current and desired levels of performance in relation to a task (Sadler, 1989). In addition, other authors have argued that praise combined with physical prompts might be a positive and sustained form of corrective feedback in instrumental lessons (Salzberg & Salzberg, 1981).

Some authors defend the view that effective learning can happen when teachers combine evaluative and descriptive types of feedback (Eyers & Hill, 2004; McPhail, 2010). The nature of teachers' feedback is often reported in the literature as verbal (e.g. giving directions; asking questions; providing information; giving positive, negative, or neutral feedback; writing on the score; and off-task comments) and non-verbal (e.g. playing alongside the student; modelling; imitating the student's performance; making hand gestures; smiling, laughing, nodding, shaking, facial expression; and conducting or tapping the pulse) (Benson & Fung, 2005; Burwell, 2010; Hamond, 2013; Siebenaler, 1997; Speer, 1994; Welch, Howard, Himonides, & Brereton, 2005). Although positive feedback can benefit younger students (Duke, 1999; Lehmann et al., 2007), Duke and Henninger (2002) found that expressed criticism in lessons can also be useful.

Despite the growing interest in effective forms of feedback, little research has explored students' understanding of teachers' instructions. Burwell (2010) argues that effective communication between teacher and student depends on a shared understanding. However, there is evidence that suggests that sometimes students do not understand the meanings of teachers' instructions (Burwell et al., 2004). Following the same line of thought, Woody (2002) defends students' need first to acquire the specific vocabulary and internalise the patterns to understand teachers' feedback. The author also posits that students must be involved in such processes, which may encourage them to express their ideas in the lessons (Burwell, 2010; Burwell et al., 2004; Woody, 2002, 2006).

## 2.5 PEDAGOGICAL VOCABULARY

Music teachers use a specific pedagogical vocabulary in order to explain and demonstrate a skill (Welch et al., 2005). Such vocabulary refers to the verbal language behind teacher-student discourse (Duffy, 2015; Kennell, 2002). According to Kennell (2002), teacher discourse in one-to-one lessons is spontaneous and directed to the specific student. However, such discourse is shaped by the student's level and the skill approached. The nature of this teacher-student discourse is a feature that distinguishes one-to-one lessons from master class or group lessons (Kennell, 2002).

Tait and Haack (1984) suggest three kinds of useful vocabulary in teaching music: professional, experiential, and behavioural (thinking, feeling and sharing). In such vocabulary Lehmann et al. (2007) distinguished verbal language distributed in two main categories: (i) metaphorical language; and (ii) procedural language. The first category (i.e. metaphorical language) is mostly explored when expressiveness is the focus (Lehmann et al., 2007, p. 195). Wood (2002) suggests teachers have a repertoire of metaphorical language to help students to develop their expressive performances. Such language may depend to "some extent on the cultural traditions behind the instrument and musical style studied" (Burwell, 2010, p. 73). Sometimes, owing to cultural differences, inappropriate use of this type of vocabulary may frustrate the student, who may not understand the meaning behind the words used by the teacher (Lehmann et al., 2007). The second category (i.e. procedural language) concerns the use of verbal language focused on concrete musical sound properties. This category addresses elements such as: note duration, tempo, intonation, dynamics, and articulation (Lehmann et al., 2007). Such a kind of verbal language can be more useful when approaching technical and expressive aspects of performance (Lehmann et al., 2007).

In violin teaching, metaphors are often used in teaching technical and motor skills. A common example is "making the rabbit" or "making the dog", which are used to teach metaphorically how to hold the bow (e.g. Sprunger, 2012). Particularly, Suzuki teachers have used metaphorical language to illustrate postural issues to student beginners. Some examples include: (i) "pancake wrist" - left wrist flexed to



forward (Kempster, 2003; Sprunger, 2012); (ii) “the square of the arm” or “L” – used to explain that right arm position should make a  $90^{\circ}$  angle between the bow and the hand (Kempster, 2003; Sprunger, 2012).

Concerning the pedagogical vocabulary used by string teachers, Havas (1973) highlighted the ways in which language can be interpreted differently by the students (Table 2.4). According to the author “a word which may make all the difference to one player may not have any meaning at all to another” (Havas, 1973, p. 93). Despite this apparent concern, Havas (1973) has identified a set of common words that create similar reactions in most players. She considers that these words can also influence a student’s affective state. Havas’s vocabulary is divided into two categories: (i) words that arouse tension and anxiety and (ii) words that create ease and flexibility (Table 2.4). Havas (1973) also suggests words that create a sense of harmonious activities and minimize stage fright, for example: ‘move’, ‘flow’, ‘give’, ‘love’ and ‘pulse’ (Havas, 1973).

**Table 2.4** Havas's vocabulary (Havas, 1973)

Categories	Words used by teachers	Meaning	Possible consequences
<b>WORDS THAT AROUSE TENSION AND ANXIETY</b>	<b>Hold, grip and holding on</b>	Relate to the violin hold and bow grip or to "holding on" to something, most often to a note, especially when it is a long note.	The static image of these words creates a tendency to press with the chin into the chin rest, or holding the bow with the fingers, stiffening the arm through a long stroke.
	<b>Push and pull</b>	Create the image of finger movement of the bow	By its proximity to the string disturbs the sound and the flow of the rhythmic pulse.
	<b>Stretch</b>	Refers to the left-hand finger action, mostly to the fourth finger	May cause tensions in the hand, thumb and wrist, especially at string crossing.
	<b>Hit and press</b>	To hit or press the finger on the string or the bow on the string	Cause stiffness in both hands
	<b>Jump</b>	Refers to shifts	Creates the image of an endless fingerboard with all the anxieties concerning intonation
	<b>Vibrato</b>	Refers to do the effect of vibrato on a determined note	Students press the strings with their fingers more than they should
<b>WORDS THAT CREATE EASE AND FLEXIBILITY</b>	<b>Rest, nestle and cradle</b>	Referring to the violin hold	
	<b>Soft, satin and silk</b>	Referring to its texture	Creates an instant response of release
	<b>Swing, slide, fan, and spread</b>	Relate to left hand action	
	<b>Open, close, fly</b>	Concerning the bow arm	

Alongside the examples presented here, many words can be used to express musical and technical ideas to help students to overcome their challenges. However, such words are not an isolated element in instrumental lessons. Teachers must be aware of the particularities involved in such vocabulary in order to attain a multidimensional grasp of the music (Davidson, 1989). Such particularities are addressed in the next sections.

## SECTION 1 SUMMARY

This section (i.e. Chapter 1 and Chapter 2) presented the theoretical background that informed this research. This background was built on a multidisciplinary literature review that covered the general process of instructional communication (Chapter 1) and this process in one-to-one instrumental lessons (Chapter 2). These topics were approached taking into account the aim of this research: to understand, through the study of teaching cues, the process of instructional communication in one-to-one instrumental lessons.

Chapter 1 suggested that instructional communication is a process through which teachers and students stimulate meanings in the minds of each other using verbal and nonverbal messages. Such a communicational process is a particular type of interpersonal communication based on the message conveyed by the teacher as well as the understanding of such a message by the student. The insights presented also suggested that instructional communication can be effectively used by the expression of clear, simple and appropriate information, considering the receiver's background and helping them to create a schema. In the literature, effective communication has been interrelated with the interpretation of meaning by the receiver, taking into account the intended meaning of the sender. Existing perspectives concerning effectiveness seem also to emphasize the receiver's ability to select information. In order to achieve such effectiveness the literature here discussed suggested the use of teaching cues. In

### CHAPTER 1

Instructional communication: process, effectiveness & the role of teaching cues

### CHAPTER 2

Instructional communication in instrumental lessons

physical education literature, teaching cues are considered to be a verbalized word or phrase that identifies and communicates the critical features of a movement, skill or task. In addition, teaching cues have been used to improve teaching, alleviating overload of information in the instructional process. Overall, the studies reviewed here suggested that the utilization of teaching cues in educational settings might improve the focus of attention, comprehension and retention of information in students. All the evidence presented in Chapter 1 concerning the process of instructional communication, effectiveness and the role of teaching cues brought to light general foundations to inform the four research questions addressed in this thesis (How has instructional communication been used by teachers in one-to-one instrumental lessons? What could be recognized as a teaching cue in one-to-one instrumental lessons and how is it being used in instructional communication? How can teaching cues be communicated effectively in instructional communication in one-to-one instrumental lessons? Can teaching cues optimize instructional communication in one-to-one instrumental lessons?)

The literature review presented in Chapter 2 explored the communication in one-to-one instrumental lessons. Overall, the studies reported a scenario where teachers mostly talk, technique is often emphasized and questioning represents a small proportion of time. Furthermore, students' activity in the lessons is mainly playing. Concerning the content communicated in instrumental lessons, the literature outlined that instrumental teachers used a specific pedagogical vocabulary in order to explain and demonstrate a skill. Some strategies for communicating this vocabulary effectively were highlighted in the literature (i.e. metaphors; modelling; emphasizing emotion felt; marking critical features; demonstration; and frustration control). Finally, the literature also suggested that sometimes students do not understand the meanings of teachers' instructions. Some authors asserted that students must be involved in the communication processes, which may encourage them to express their ideas in the lessons. All this evidence informed two research questions addressed in this research: (i) how has instructional communication been used by teachers in one-to-one instrumental lessons? (ii) how can teaching cues be communicated effectively in instructional communication in one-to-one instrumental lessons?

The theoretical background presented in this section indicated few studies focused on instructional communication in one-to-one instrumental lessons. Notwithstanding, there is still a lack of research on the meanings behind instruction, as well as students' understanding of such meanings. In addition, research on the use of teaching cues as a means by which to optimize instructional communication in instrumental teaching and learning is almost non-existent. Thus, it is not possible to recognize either the potential use of such a tool in instrumental teaching or how it can optimize the communication process. The next section '*Exploratory case study*' is dedicated to present the methodological approach of this research. This section included two chapters (i.e. Chapters 3 and 4). Chapter 3 is dedicated to the pilot study, which aimed to provide conceptual and methodological insights into the main case study. Chapter 4 is dedicated to presenting the methodological procedures behind the main case study.

# SECTION 2

## EXPLORATORY CASE STUDY

### CHAPTER 3

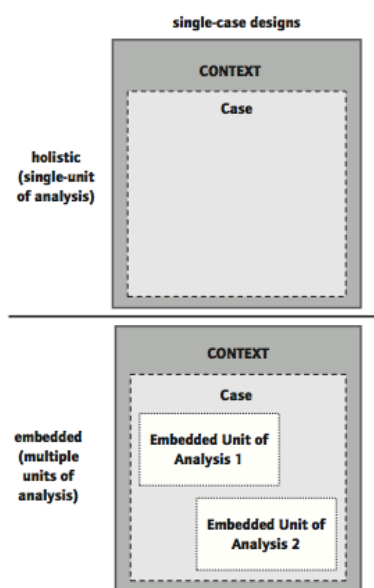
Pilot study

### CHAPTER 4

Main study

## INTRODUCTION

This second section includes two chapters (i.e. Chapters 3 and 4), where the research methods are presented and described. Several authors have used case studies as a research method to investigate issues concerning instrumental teaching and learning (Brenner & Strand, 2013; Burwell, 2010; H Gaunt, 2005; Gholson, 1998; Gustafson, 1986; Lisboa, 2008; Nerland, 2007; Persson, 1996; Young et al., 2003). Similarly, case study has been used as a research strategy by researchers, who investigate the establishment of retrieval cues by performers (e.g. Chaffin, Ginsborg, & Nicholson, 2006; Chaffin, Imreh, & Crawford, 2002; Chaffin, Lisboa, Logan, & Begosh, 2010).



**Figure 3.1** Basic types of single-case designs for case studies

[Drawn from Yin, Robert (2009) *Case Study Research: Design and Methods*. 4th ed. Vol. 5. Applied Social Research Methods Series. California: Sage Publication

Yin (2009) distinguished two possible designs to case study: *single-case design* or *multiple case designs*. The single-case designs can be *holistic* (single-unit of analysis) or *embedded* (multiple units of analysis) (Figure 3.1). Following this perspective, this research is grounded on an *embedded single-case study* in the communicative relationship established between violin teacher and student. Each participant teacher with his or her student constitutes a unit of analysis. The rationale for choosing such a case is based on the *representative or typical* case (Yin, 2009), which provides a suitable context for answering the research questions. This approach allowed the research “to capture the circumstances and conditions of an everyday or commonplace situation” (Yin, 2009, p. 48).



A pilot study guided the building of the case study protocol. Moreover, the pilot study was adopted to recognize and identify the use of teaching cues in one-to-one violin lessons. This decision assumed that such study would provide material to understand what should be explored and consequently postulate methodological insights to refining the main case study. According to Yin (2009), the pilot case study can contribute in the development of relevant questions and on the refinement of a data collection plan. Maxwell (1996) assumes that one of the advantages of conducting pilot studies is the “understanding of meaning that these phenomena and events have for those actors who are involved in them, and the perspectives that inform their actions” (Maxwell, 1996, pp. 79–80).

The first chapter of this section (i.e. Chapter 3) presents the pilot case study which informed the methodological protocol adopted in the main case study presented in Chapter 4.



## CHAPTER 3: PILOT STUDY

### 3.1 METHOD

The present pilot study was adopted as a means by which to gain conceptual and methodological insight which informed the main study. Concerning the conceptual insights, this study aimed to identify what could be recognized as a teaching cue in one-to-one violin teaching, how teaching cues would be used by violin teachers and its function in such a context. Concerning the methodological insights, the aim was to build a protocol to inform data collection and analysis.

#### 3.1.1 Participants

All participants were selected by *convenience*, which according to Yin (2009) can be the main criteria for selecting a pilot case or cases. The first step adopted to select the sample was identifying an institution where the study could be conducted. In order to find such an institution, two Portuguese Music Conservatoires were contacted. Firstly, a formal meeting with the Head of each institution was appointed in order to introduce the research project and its implications. Leaflet information<sup>6</sup> was delivered to the Head of each Conservatoire, clarifying the topics discussed in the meeting. Both Heads allowed the research to be conducted in their Conservatoires, but they did not ensure that the violin teachers would accept to take part in the study.

After this first contact, a new meeting with the violin teachers was promoted (i.e. three teachers in each institution). During the meetings, the teachers had the opportunity to ask questions concerning any doubts they had about their participation. The research project, as well as the main objectives of the research, was further explained. Also, leaflet information and a consent form<sup>7</sup> were delivered to each teacher (see section 3.2 for more details).

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<sup>6</sup> Appendix 1

<sup>7</sup> Appendix 1

Only two teachers based in the same school agreed to take part in this investigation. They were two female violin teachers, aged, 28 and 32; both teachers had a degree (BMus) and respectively 6 and 10 years of teaching experience. Each one was responsible for selecting and inviting two violin students of different levels. Such students should be aged between 6 and 15 years old.

The students who were finally selected (aged between 11 and 13) were studying at levels II, III and IV of the Portuguese Music grading system. Table 3.1 gives a summary of the participants. In this Table, the abbreviation *tch* means teachers and *std* means students.

**Table 3.1** Summary of the participants in the pilot study

Tch code	Tch gender	Tch age	Tch Years of experience	Std code	Std gender	Std age	Std grade	Years of study violin	Weekly practice	Venue
T1	F	28	6	S1	F	11	II	2	4 times, 50 min	Portuguese Music Conservatoire
				S2	F	13	IV	7	6 times, 45 min	
T2	F	32	10	S3	F	12	II	4	2 times, 3 h	
				S4	F	12	III	3	4 times, 15 min	

### 3.1.2 Data collection

Three sequential lessons with each student were videotaped in the spring term of 2012. Teachers were responsible for handling the video camera (Sony Digital Handycam DCR-TRV14E); they were asked to place it where student and teacher could be captured on film. The recording sections started four lessons before the lessons selected for the analyses. This procedure was adopted to minimize the “observer” effect, (i.e. the video camera) (Robson, 2011). In order to organize the video recording material, a schedule was given to the teachers to be filled up at the end of each lesson. This schedule brought such information as teacher-student names and the number of the lesson videotaped.

At the end of the last lesson videotaped, a semi-structured interview was conducted separately with each participant as a complement to the video data, in order to characterize the participants and recognize teachers' and students' perceptions (see Table 3.2).

**Table 3.2** Content of the interviews

Teachers' interview	Student's interview
Personal information (e.g. qualifications and years of experience);	Personal information (e.g. age; years of playing violin; and grade of learning);
Lessons information (e.g. students' difficulties; instructions for students' practice; and the need for repetition of information);	Individual practice information (e.g. time of weekly practice; main difficulties during the practice; and individual or accompanied practice);
Students' information (e.g. individual evaluation of each student).	Lessons and teacher information (e.g. students' preferences about the lesson; the main difficulties in the lesson; and the understanding of teacher instruction).

The final material consists of twelve videotaped one-to-one violin lesson (i.e. around 9 hours of video recording - 45 minutes each lesson), and six semi-structured interviews (i.e. around 92 minutes of audio recording).

### 3.1.3 Data analysis

Data analysis has mainly focused on the video recordings, so that interviews were used to complement video analysis and characterizing the participants. Video analysis was based on the perspective of structured observation proposed by Robson (2011). The data analysis process was conducted with the aid of the software *WebQDA*<sup>8</sup> (*Web Qualitative Data Analysis*). Four steps formed the basis for the analysis of the video recordings:

<sup>8</sup>The webQDA is a software that supports the analysis of qualitative data in a collaborative and distributed environment ([www.webqda.com](http://www.webqda.com))

## (I) SELECTION

Only segments where each student was playing the same music in the three lessons were selected from the video recordings (an average of 22 minutes for each segment). The total time of the lessons analysed was 267 minutes.

## (II) TRANSCRIPTION

The transcription of the videos was based on four observed elements, and entered on the transcription charts of the multimodal communication proposed by Rostvall and West (2003), namely: time code, musical events, teacher and student talk, other events (e.g. gestures, facial expression, posture, physical distance, physical contact, silence and joking). The videos were transcribed directly into the software *WebQDA* (Web Qualitative Data Analysis).

## (III) STRUCTURED OBSERVATION OF THE VIDEOS

Two steps were adopted in order to analyse the selected segments:

## (a) First step - identify teaching cues

The selected segments were repeatedly observed with the aim of identifying the information summarized, based on the objectives and features of teaching cues proposed by Petrakis and Konukman (2001) and Rink (1993):

- # Guide the focus during the performance;
- # Give a clear picture of the skill;
- # Be accurate;
- # Essential to the task presented.

## (b) Second step – codification

A coding scheme with predetermined categories was created based on:

- # *Performance Skills* (Davidson, 2002) - structure, notation and reading skills; aural skills; technical and motor skills; expressive skills; and presentation skills;

- # Multimodal communication (Kurkul, 2007) - verbal communication (i.e. teacher talk) and non-verbal communication (i.e. physical distance, musical and facial expression, gesture, physical contact);
- # Sequential units of teaching (Yarbrough & Price, 1989) - teacher presentation of a task; student response and engagement with the task; and teacher feedback (i.e. related to the student response).

All information summarized and identified as teaching cue was coded in such categories.

#### (IV) INTERPRETATION

The interpretation was based on the triangulation of performance skills, multimodal communication, sequential units of teaching and teaching cues identified.

### **3.2 ETHICAL ISSUES**

Participants were invited to take part in the study as volunteers. Before accepting this invitation, the participants were given the opportunity to discuss any issues concerning the research. All participants were informed about the research aims and strategies used to collect data. Such information was provided through the leaflet and further discussed in the formal meeting. Particularly, it was made clear that at any time teachers would be evaluated. Moreover, the anonymity of the participants was guaranteed, so that image use was restricted only to academic and scientific purposes. Before data collection started, the teachers and the students' parents signed a consent form accepting the conditions of taking part in the study, allowing the use of students' images only to academic and scientific purposes.

### **3.3 RESULTS**

Data analysis revealed three main groups of results: (i) identifying and classifying teaching cues; (ii) the use of teaching cues in one-to-one violin lessons; and (iii) functions of teaching cues in one-to-one violin lessons.

### 3.3.1 Identifying and classifying teaching cues

A set of teaching cues used by participant teachers in the violin lessons was identified. Table 3.3 shows all teaching cues recognised.

**Table 3.3** Set of teaching cues found in the violin lessons<sup>9</sup>

Verbal teaching cues	Non-verbal teaching cues
Lift your elbow	Teacher plays in the piano F and C and they play together
Open your hand	Teacher starts to clap the fingers on the strings and does not say anything
Lift your arm	Taratarataritatara (teacher did some gestures with hands)
Look your bow	The teacher pressed the bow against the string
Look the first finger	The teacher does a barrier with the bow for the student does not cross the fingerboard
Press your left hand?	Teacher corrects the elbow height
Lift the violin	Teacher did catch onto the student's hand and corrected her fingers
More bow	Teacher felt the student's left elbow and wrist
Bring down your arm	Teacher comes over and gives a scare to the student to indicate the <i>forte</i>
Mind the thumb	Teacher snaps her fingers in a pause.
Relax the thumb	Teacher does big movements with the arms
This isn't Captain Hook	
Like a slide	
Bring closer	
Prepare the finger	
Turn the hand	
Feet	
Impact, sonorous	
Saves the bow	
The steps	
A wheel, a Propeller that is all the time running	
Change the frame	
I need to be scared	

Teaching cues were classified, taking into account specific performance skills approached in the lesson. Such classification considered the aims behind the summarized instruction. The next table (Table 3.4) illustrates how the identified teaching cues were coded.

<sup>9</sup> The original data are in the Portuguese language



**Table 3.4** Coding example of a verbal cue.

<b>Teaching cue</b>	Feet
<b>Lesson Description</b>	The teacher was trying to help the student to perform a Concertino. The student received the indication to be freer and allow her body to move. However, the student was leaving her feet closer, thus the student was facing troubles with body balance. Teacher talked about the weight on the feet, emphasizing body balance. After some minutes the teacher said "feet." This word was used as a cue to remember body balance.
<b>Code</b>	Teacher talk   Presentation skill

Table 3.5 shows all the selected verbal teaching cues coded into each performance skill.

**Table 3.5** The use of verbal teaching cues according to performance skills

<b>Performance Skills</b>	<b>Teacher's Talk</b>
<b>Technical and Motor skills</b>	Lift your elbow Open your hand Lift your arm Look at your bow Look at the first finger Press your left hand? Lift the violin More bow Bring down your arm Mind the thumb Relax the thumb This isn't Captain Hook Like a slide Bring closer Prepare the finger Turn the hand
<b>Expressive Skills</b>	Save the bow The steps A wheel, a Propeller that is turning all the time Change the frame I need to be scared
<b>Presentation skills</b>	Feet Impact, sonorous
<b>Aural</b>	_____
<b>Structure</b>	_____
<b>Notation and reading</b>	Note the time signature

Nonverbal cues emerged when technical and/or motor skills and expressive skills were approached. In such codification, the prominent element of the instruction was coded. The Table 3.6 exemplifies such codification:

**Table 3.6** Coding example of a nonverbal cue

<b>Teaching cue</b>	Teacher does not say anything while tapping her fingers on the strings
<b>Description</b>	The teacher was trying to correct left hand rhythm and intonation. She asked the student to tap the finger on the string. After this, the teacher gives other instructions. They start to play and at the end she “tapped her fingers on the string without saying anything.
<b>Code</b>	Musical communication   Technical and Motor skill

Table 3.7 shows all the selected teaching cues coded into performance skills in nonverbal communication.

**Table 3.7** The use of nonverbal teaching cues according to performance skills

Performance skills	Physical Distance	Musical	Facial expression	Gesture	Physical contact
<b>Technical and Motor skills</b>		Teacher does not say anything while tapping her fingers on the strings and Teacher just plays		Tarataratararitara (teacher did some gestures with hands) Teacher pressed the bow against the string Teacher creates a barrier with the bow so that student does not cross the fingerboard	Teacher corrects the elbow height Teacher caught on the student's hand to correct her fingers Teacher felt the student's left elbow and wrist
<b>Expressive Skills</b>	Teacher comes over and gives a scare to the student to indicate the <i>forte</i>	Teacher snaps her fingers in a pause.		Teacher does big movements with the arms	
<b>Presentation skills</b>					
<b>Aural</b>		Teacher plays on the piano F and C and they play together			
<b>Structure</b>					
<b>Notation and reading</b>					

### 3.3.2 The use of teaching cues in one-to-one violin lessons

Data analysis revealed most teaching cues were introduced to the student after a detailed explanation of the content. Sometimes, the teaching cue was explicit included in the explanation. The following two excerpts presented in Table 3.8 exemplify the use of teaching cues in the lessons observed. In order to clarify the reading, teaching cues are highlighted in bold.

**Table 3.8** Examples of verbal and nonverbal teaching cue.

<i>Verbal teaching cue</i>	<i>Nonverbal teaching cue</i>
T1: I don't like your bowing. The problem here is that you spend so much time going to the A string from the E string. You did like the A string is here but the E string is here [teacher demonstrate on the violin].	T2: You need to pay attention! if you play too on the top of the [contact] point you will lose the tone. Ok? When you are doing the sixteenth, Could you use more the wrist?
T1: They are close aren't they?	[Teacher plays, after the student plays and while <b>the teacher does a barrier with the bow for the student does not cross the fingerboard</b> ]
S2: Yeah! They are!	T2: Go S3, the last line!
T1: So, will you avoid leaving your arm down? Ok, 3 and ... [teacher hold on the student bow and then they play together (...)]	[the teacher continues doing the barrier with the bow](...)
T1: They [the strings] are close! Can you see? Look at your arm, it almost doesn't move.	T2: Ok, I still don't like it. I think you are able to do much better with the bow.
S2: But my arm is tied in!	S3: With the bow?
T1: This is because you overdid it. You need to have a contact. The secret is to approximate the bow on the string, <b>like a slide</b> , not as steps.	T2: You put your bow in that way; I want you put in this way [teacher shows]. You need to move off your violin. If you move off your violin, your bow will be more upright.
S2: yeah!	[ <b>teacher does a barrier with the bow for the student does not cross the fingerboard</b> ]
(...)	T2: Yes, great!
T1: Can you Try again?	
After student play, teacher asked: Is it a <b>slide</b> ?	

In the data set it was possible to observe the recurrent use of the teaching cues selected. Generally, the cues analysed were used more than once during the selected video extract. Overall, data analysis demonstrates that most teaching cues were used in verbal communication, particularly when teachers focused on aspects such as technical and/or motor skills. The matrix coding presented in Table 3.9 illustrates this result. The numbers in the table correspond to frequencies of codes.

**Table 3.9** Teaching cues in verbal communication

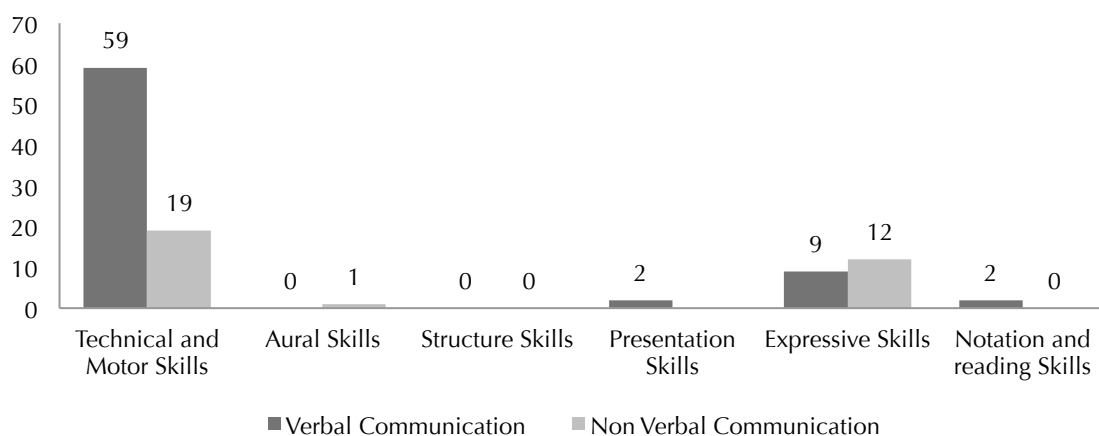
<b>Performance skills</b>	
Technical and Motor	59
Aural	0
Structure	0
Presentation	2
Expressive	9
Notation and reading	2

In relation to nonverbal cues, the results indicate that the use of these cues was more recurrent in musical, gestural and physical communication. Such findings are illustrated in Table 3.10. As in Table 3.9, the numbers in Table 3.10 correspond to frequencies of codes.

**Table 3.10** Teaching cues in Nonverbal Communication

Performance skills	Physical distance	Musical	Facial expression	Gesture	Physical contact
Aural	0	1	0	0	0
Structure	0	0	0	0	0
Presentation	0	0	0	0	0
Technical and Motor	1	3	0	5	10
Expressive	1	6	0	5	0
Notation and reading	0	0	0	0	0

Figure 3.2 summarizes the use of verbal and nonverbal teaching cues taking into account the performance skills approached. The numbers presented in the figure indicates the use of teaching cues in the lessons observed.



**Figure 3.2** The teaching cues use in verbal and nonverbal communication

### 3.3.3 Functions of teaching cues in one-to-one violin lessons

Overall, data analysis suggests that teaching cues were mostly used as a means to minimize overload of information. Although some summarized information was identified in the lessons, the overload of information was also identified in several moments. The next excerpt from Teacher 1's interview exemplifies the overload of information in a teacher's talk. In addition, the use of some technical concepts seemed not to be appropriate to the background of the student, who clearly demonstrates doubt. This finding suggests that teaching cues were not deep explored.

T1: I would like to listen to the part where you use the fourth finger.

S1: I don't know this part yet.

T1: You need to put your third finger higher [teacher demonstrates].

[Student plays]

T1: You have placed the fourth finger well but the third was down. Could you play from here, from this C please and then prepare the fourth finger; don't forget ok? And look, don't touch on the wrong string and control the range of motion of the bow. S1: Here, is it right or wrong? [The student is hesitant about where the bow should be]

T1: It is up-bow! Please, correct the left hand! Could you do: A, B, C, just to check the intonation?

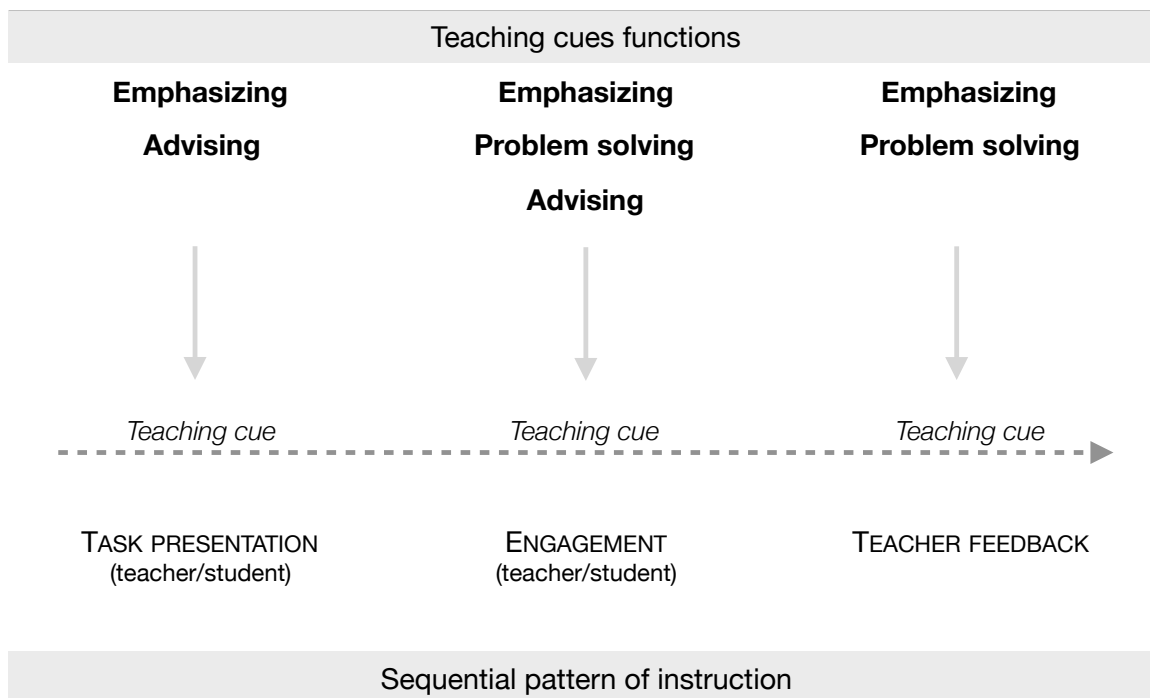
[Student plays]

T1: But with a decent tone!

(Teacher 1 and Student 1's lesson)

Data analysis revealed that teaching cues were used for three main functions (Figure 3.3): (i) *advising*; (ii) *problem solving*; and (iii) *emphasizing*. Such functions were identified in the sequential units of teaching in one-to-one instrumental lessons, based on Yarbrough and Price (1989). Teachers used cues to advise students before they engaged with the task, or even during the task itself (e.g. 'lift the violin', 'lift your elbow', 'look your bow' and 'look the first finger'). During the task teachers diagnosed a specific problem and used cues to solve this problem. In addition, teachers used cues to solve a specific problem after the student performed a task (i.e. teacher feedback). The cues used with the function problem solving have frequently been conveyed through metaphors (e.g. 'Captain Hook', 'like a slide' and 'the steps'). Finally, teachers used cues to emphasize some technical or interpretative aspect. Such emphasis was explored through nonverbal communication throughout the performance of the task (e.g. 'teacher does big movements with the arms' and 'teacher is correcting the elbow height'). All the

functions identified in the lesson and described before are represented in Figure 3.3.



**Figure 3.3** Functions of teaching cues

This figure shows the teaching cues acting according to their functions in the sequential patterns of instruction established by Yarbrough and Price (1989) (i.e. task presentation; engagement and teacher feedback).

### 3.4 DISCUSSION

The pilot case study aimed to identify what can be recognized as a teaching cue in one-to-one violin teaching. Moreover, the use of such a pedagogical tool, as well as its function, was also addressed. The positive results achieved from areas other than music (Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993) motivated the exploration of such a tool as a means by which to optimize teacher and student communication in instrumental lessons.

The methodological strategy adopted here allowed a deep observation of teaching actions in one-to-one violin lessons, confirming that such a strategy could be a

useful means by which to gain relevant insights, despite being time-consuming (Brenner & Strand, 2013; Burwell, 2010; H Gaunt, 2005; Gholson, 1998; Gustafson, 1986; Nerland, 2007; Persson, 1996; Young et al., 2003). While video observation made it possible to distinguish the use of the summarized information (i.e. teaching cues) in instructional communication, data analysis provided a clear framework in which to understand such a tool.

Once teaching cues were identified, the two research questions addressed here could be answered. Concerning the first question (i.e. What can be recognized as a teaching cue in one-to-one violin teaching?), data analysis revealed in one-to-one instrumental lessons that teaching cues were summarized information in a teacher's instructions used to alleviate the overload of information. These results corroborate the findings from physical education where teaching cues have been explored (Konukman & Petrakis, 2001; Landin, 1994; Judith Rink, 1993). Four main characteristics proposed by these authors were taken into account in such identification (i.e. guide the focus during the performance; give a clear picture of the skill; be accurate; and be essential to the task presented). On the other hand, data analysis highlighted that teachers and learners might not be conscious that certain specific words or gestures they use may alleviate the overload of information.

Concerning the second question addressed here (i.e. How are teaching cues used by violin teachers, and what are their function in such a context?), the outcomes illustrate that teaching cues were present in both a teacher's verbal and nonverbal instructions. During the lessons observed, teaching cues were introduced after a detailed explanation of the content. The analysis verified that most teaching cues were verbalized. Particularly, such verbalization occurred when teachers focused on aspects related to technical and/or motor skills. Such findings corroborate previous studies which indicate that teachers' talk, mainly on technical skills, is the main behaviour in the lesson (Hallam, 2006; Tait, 1992; Kostka, 1984; Hepler, 1986; Thompsom, 1984).

Taking into account the framework of performance skills proposed by Davidson (2002), it was possible to identify different typologies of teaching cues usage,



namely: (i) structural teaching cues; (ii) aural teaching cues; (iii) technical teaching cues; (iv) interpretative teaching cues; and (v) presentation teaching cues. Moreover, the present study identified that the use of teaching cues followed specific functions, namely: (i) advising; (ii) problem solving; and (iii) emphasizing. Given the results presented here, it seems rather evident that the role of teaching cues in one-to-one instructional communication must be explored further. This pedagogical tool might be a useful means by which to reduce the existing gap between teachers' instructions and students' understanding (Lehmann et al., 2007). Despite its preliminary nature, this pilot study provided data that can contribute to such an exploration, which is described in the following chapter.

### **3.5 CONTRIBUTION TO CONCEPTUAL AND METHODOLOGICAL ISSUES**

Alongside the interest in identifying teaching cues in one-to-one instrumental lessons, as well as its use, the pilot study also aimed to build a protocol to inform data collection and analysis. Concerning the object of research (i.e. teaching cues), the pilot study clarified important features regarding this concept in one-to-one instrumental lessons, as described above. In such a context, teaching cues were considered to be multimodal summarized information, which informs critical features involved in the development of performance skills. Such pieces of information were classified taking into account their typology and function. The typology was defined based on the nature of the skill approached (i.e. structural teaching cues; aural teaching cues; technical teaching cues; interpretative teaching cues; and presentation teaching cues). The function was defined according to the aim to convey information behind the instruction. Such functions were classified as advising, problem solving and emphasizing specific information concerning the skills. In addition, the pilot study brought evidence that such teaching cues might be used to alleviate the overload of information and consequently optimize the instructional communication in one-to-one instrumental lessons.

Concerning the methodological interest, four main issues were tested through data collection and analysis. Such issues concerned: (i) sample definition; (ii) material and data collection; (iii) data analysis; and (iv) perspective. Concerning sample definition, it was clear the number of teachers involved limited the results

presented here. The observations of a larger sample of teachers could allow the identification of new examples of teaching cues, providing a scenario for observation of different patterns of interactions between students and teachers. In addition, the literature suggests that expert teachers change their behaviour more frequently, and such behaviour was considered a key factor in distinguishing teachers' communication effectiveness (Colpritt, 2000; Duke & Henninger, 2002; Siebenaler, 1997). Therefore, teachers with more years of experience than the previous participants could provide rich data in the exploration of the process of instructional communication in one-to-one instrumental lessons.

Concerning the second issue (i.e. material and data collection), the data set has generated a large quantity of data, (i.e. many hours of video recordings) which were difficult to handle owing to the qualitative analysis. Other authors have experienced such a scenario in previous studies (e.g. Kurkul, 2007). Later approaches to the same phenomenon could concentrate on fewer lessons than those analysed here. Concerning data collection, the strategy adopted (i.e. video recording without the presence of the researcher in order to minimize any unnatural teacher and student interaction) did not allow a full recognition of all patterns of interaction between teacher and student. At some moments, some instructions were inaudible, or at least the teacher was not always in view of the camera so that nonverbal communication could not be captured. For this reason some potential teaching cues could not be analysed. In order to solve such an issue, "live observations" in instrumental lessons had to be conducted in order to optimize data collection and facilitate data analysis.

Regarding the data analysis, the interviews showed that they had a rich value in the understanding of teachers' perceptions about the instructional communication. However, this source of evidence was not further explored and consequently scrutinized through data analysis. A systematic strategy to analyse the interviews needs to be further established. In the same line of thought, students' interviews must be explored in order to recognize students' perceptions and understandings regarding instructional communication. Concerning this perspective, the importance of exploring students' understanding has also been indicated by other authors (e.g. Lehmann et al., 2007). However, the pilot study has focused only on

teacher perspectives, without exploring the other side. This issue need to be further explored.

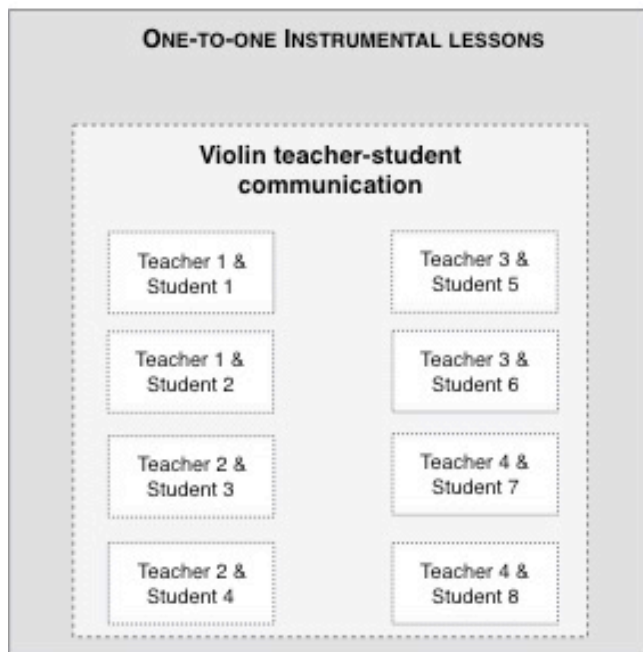


## CHAPTER 4: CASE STUDY: EXPLORING THE INSTRUCTIONAL COMMUNICATION IN ONE-TO-ONE INSTRUMENTAL LESSONS

### 4.1. INTRODUCTION

Following the findings discussed in the last chapter, an *exploratory embedded single-case study* (Yin, 2009) on instructional communication in one-to-one instrumental lessons was designed. According to Robson (2011), “studies of events, roles and relationships” might be considered a case. In the present thesis the communicative relationship established between violin teacher and student was defined as the being the case. The exploratory purpose behind the present case study is based on the lack of understanding regarding teaching cues and instructional communication in instrumental teaching and learning.

As discussed previously in the introduction of this section and according to Yin (2009), the case analysed in this thesis was considered as an embedded single case because the multiple units of analysis, (i.e. each participant teacher with his or her student constitute a unit of analysis). Figure 4.1 illustrates the case study design. In this figure, each teacher-student pair corresponds to a unit of analysis. In the same figure, the box named as “one-to-one instrumental lesson” corresponds to the context behind the case while the box named as “violin teacher-student communication” illustrate the case analysed (i.e. communicative relationship between teacher and student) (Yin, 2009).



**Figure 4.1** Case study design  
[Based on Yin (2009)]

## 4.2 METHOD

### 4.2.1 Participants

#### SELECTION OF THE PARTICIPANTS

Based on the methodological contributions from the pilot study and the flexible nature of the research, the participants were defined by a non-probability sample (Cohen, Manion, & Morrison, 2007). This approach to select the participants is adequate to studies where the sample aims to represent itself rather than to seek generalizability (Cohen et al., 2007). As highlighted in the pilot study, teachers with many years of experience and also with different profiles and backgrounds could allow the identification of a broad scope of interaction patterns.

According to Miles and Huberman (1984), the triangulation of data in qualitative researches can be benefited by a combination of different sampling strategies. Because of this, two different sampling strategies were used to select the

participants: *purposive sampling* and *convenience sampling* (Cohen et al., 2007). According to the authors, the purposive sampling strategy requires that “researchers handpick the cases to be included in the sample on the basis of their judgement of their typicality or possession of the particular characteristics being sought” (Cohen et al., 2007, pp. 114–115). In many cases purposive sampling has been used in order to select people who are specialists in a particular topic (Ball, 1990; Cohen et al., 2007). In this case, the teachers were selected based on four main stated criteria: (i) violin teachers; (ii) having a minimum of ten years of teaching experience; (iii) teaching one-to-one lessons; (iv) preferentially from different venues (i.e. conservatories, a private studio etc.).

Six violin teachers with ten or more years of teaching experience from different venues in London, UK were contacted by email individually or by their institutions. Of the six teachers contacted, four agreed to take part in this study. This number reached the initial expectations concerning the minimum of participant teachers (i.e. four teachers). After acceptance, all the teachers were asked to invite two students to participate. The convenience sampling strategy which “involves choosing the nearest individuals to serve as respondents or those who happen to be available and accessible at the time,” (Cohen et al., 2007, pp. 113–114) were used to select the violin students. In this case, the violin students selected had to be aged between 6 to 15 years old. The final participants were four teachers (aged between 41 and 62) and 8 violin students (aged between 9 and 15). Table 4.2 describes details of each teacher and their students. In order to guarantee anonymity, participant names have been changed to pseudonyms.

**Table 4.1** Summary of the participants<sup>10</sup>

<b>Teacher code</b>	Age	Qualifications	Positions	Years of teaching violin	Venue	<b>Pupil code</b>	Pupil age	Pupil ABRSM Grade	Years of study violin	Weekly practice
<b>T1 David</b>	62	BMus, ARCM, AGSM, PGCE	String tutor	16	Junior Conservatoire	<b>S1 Alice</b>	10	6	6	6 and 7 times, 45 min
						<b>S2 Ellen</b>	12	3	9	4 and 5 times, 1/2 hour
<b>T2 Alexander</b>	41	PGAP	Violin tutor	10	Saturday music service provision	<b>S3 Bruno</b>	14	7	6	6 and 7 times, 3 hours
						<b>S4 Lucy</b>	11	5	5	2 and 3 times, 20 min
<b>T3 Edgar</b>	42	BMus, PhD	Director and violin teacher	24	Private studio	<b>S5 Patricia</b>	9	5	4	6 and 7 times, 1 hour
						<b>S6 Eva</b>	9	5	6	4 and 5 times, 1 hour
<b>T4 Diana</b>	52	AGSM	Violin tutor	30	Saturday music service provision	<b>S7 Vanessa</b>	15	4	9	4 and 5 times, 20 min
						<b>S8 Benjamin</b>	14	6	7	2 and 3 times, 25 min

## PARTICIPANTS DESCRIPTION - TEACHERS

Participant teachers formed a diverse group regarding their pedagogical experience and ages. Their age range was between 41 and 62 years old. Teaching experience varied between 10 and 30 years. Such experience included orchestra player, composer, conductor, teacher trainer and lecturer. Two of the teachers taught in the same venue (i.e. Saturday music service provision<sup>11</sup>) while two others taught at junior conservatoires and a private studio. Two teachers were British

<sup>10</sup> ABRSM is the exam board of the Royal Schools of Music which is charity committed to supporting and inspiring people to progress with music. ABRSM's core activity is the provision of graded exams, assessments and diplomas. (<http://gb.abrsm.org>)

<sup>11</sup> According to Rogers and Hallam (2010), "music services provide a range of services in schools and specialist centres. This includes the provision of instrumental and vocal tuition, ensembles, choirs and bands, advice and guidance for schools and professional development for teachers" (2010, p. 279).



while two others came from other European countries. Teachers' demographics are illustrated in Table 4.2.

**Table 4.2** The demographics of teachers

Number of teachers participants	4
Teacher age range	41-62
Number of female teachers	1
Number of male teachers	3
Years of teaching violin	10-30

A more detailed description of each teacher will be given in the next paragraphs.

### **Teacher 1 - David<sup>12</sup>**

David has a Bachelor in Music and a Postgraduate Certificate in Education. Despite being the oldest participant (62 years old), he has sixteen years of teaching experience. Beyond his experience as violin teacher, David has also been for many years an orchestral player and composer. Currently, he is a string tutor in a junior conservatoire and in an independent school, both in London. For the purpose of this study, David's lessons were observed at a Junior Conservatoire. In this institution, such programmes as group music lessons, individual lessons and theory are offered for children and young people.

### **Teacher 2 - Alexander**

Alexander, who does not have a British background, is 41 years old and has taught the violin for 10 years. He has a Postgraduate Certificate in Academic Practice. Alexander teaches the violin in a private studio, in a junior conservatoire, in a state school and in a Saturday music service provision. Moreover, he has 7 years' experience playing in orchestras and also as a conductor. His lessons were

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<sup>12</sup> In order to guarantee anonymity, participant names have been changed to pseudonyms

observed in a Saturday music centre in London for children and teenagers aged between 8 and 18 years old who already play an instrument.

### **Teacher 3 - Edgar**

Edgar, who does not have a British background, is a violin teacher who has spent many years in teacher training and violin pedagogy. He is 42 years old and his experience as a violin teacher started 24 years ago. He is the owner of a private studio where he teaches the violin. Moreover, Edgar is a tutor at Higher Education level in his native country. He frequently hosts and organises lectures and teacher training sessions in violin pedagogy and instrumental teaching. Edgar has completed a PhD in violin pedagogy. His lessons were observed in his private studio.

### **Teacher 4 - Diana**

The only female participant teacher is Diana, a violin tutor at a Saturday music service provision. She is 52 years old and has a long career as a violin teacher, (i.e. 30 years). She has an AGCM qualification (Associate of the Guildhall School of Music). Her lessons were observed in a Saturday music centre in London for children and teenagers aged between 8 and 18 years old who already play an instrument.

#### **PARTICIPANTS DESCRIPTIONS – STUDENTS**

Likewise, participant students constituted a diverse group. Such diversity is exemplified by the differences in terms of ages, years of studying violin and grades. Students' demographics are described in Table 4.3 and a more detailed description of each student will be given in the next paragraphs.

**Table 4.3** The demographics of the students

Number of pupils participants	8
Pupil age range	9-15
Number of female pupils	6
Number of male pupils	2
Pupil grade	3-7
Years of studying violin	4-9
Weekly practice range	2-7 times 25min - 3hours

**Student 1 - Alice**

Alice is ten years old and she has been studying the violin at a junior conservatoire for six years. She is studying grade 6 and usually spends 45 minutes 6 or 7 times a week practising the violin. She had an active verbal participation in the observed violin lessons. Each violin lesson observation was of 30 minutes' duration.

**Student 2 - Ellen**

Ellen is a twelve year old violin student, who is preparing for grade 3 at a junior conservatoire. She started to study the violin nine years ago. Usually she spends 30 minutes 4 or 5 times a week practising the violin. According to her teacher, Ellen is dyslexic and is very shy. Because of her shyness, in the first moments of the observations Ellen was a little bit uncomfortable with my presence as observer. In order to overcome this challenge, the teacher had an important role to keep the student in a comfortable and natural environment. Ellen said that she considered it helpful for her practice when the teacher demonstrated a specific task or issue. Each of her observed violin lessons had 30 minutes' duration.

**Student 3 - Bruno**

Bruno is fourteen years old and started studying the violin six years ago. He is studying grade 7 at a Saturday music service provision. Apparently, he is the student who spends the most time practising the violin: 3 hours per day, 6 or 7 times per week.

His main characteristic as observed in the lessons was the desire to play everything fast. This was one of the main topics approached during his lessons by his teacher. As Bruno is studying grade 7, his focus is on technical and interpretative skills in his practice. He is a student who answered all the questions immediately after being asked, transmitting security in his answers and demonstrating that he knows what he needs to do. Each violin lesson observed was of one hour's duration.

#### **Student 4 - Lucy**

Lucy is eleven years old and she started to play the violin five years ago. Currently she is at grade 5 level in a Saturday music service provision. Usually she spends two or three times a week practising for twenty minutes per day. In the observed lessons, her teacher made annotations of new tasks in her notebook. During the two lessons observed, Lucy's father was always present. His position as observer seemed not to affect the normal course of the lesson. Each violin lesson observed was of 30 minutes' duration.

#### **Student 5 - Patricia**

Patricia is nine years old and is studying grade 5 at a private studio. She started to study the violin four years ago. Usually she spends one hour per day practising, six or seven days per week. Her father was present during the two lessons observed and was a very active presence. The teacher gave him an indication of what should be practised at home. The father participated by asking questions during the lesson. In the interview Patricia appeared to be very shy. She was almost monosyllabic in her answers, and in some cases she answered just "yes" or "no". Each violin lesson observed was of one hour's duration.

#### **Student 6 - Eva**

Eva is a nine year old violin student who is currently studying grade 5 at a private studio. She started to play the violin six years ago. Currently she spends one hour, four or five times per week, in her violin practice. Her mother, who is also a violin student, was present during the lessons observed. She seemed to be an active parent who asked the teacher in the middle of the lesson about doubts and also

made some comments about the pupil's performance. Each violin lesson observed was of one hour's duration.

#### **Student 7 - Vanessa**

Vanessa is the oldest student. She is fifteen years old and is studying grade 4 at a Saturday music service provision. She started to play the violin nine years ago and she usually spends twenty minutes, four or five days a week practising the violin. Each of her violin lessons observed was of 30 minutes' duration.

#### **Student 8 - Benjamin**

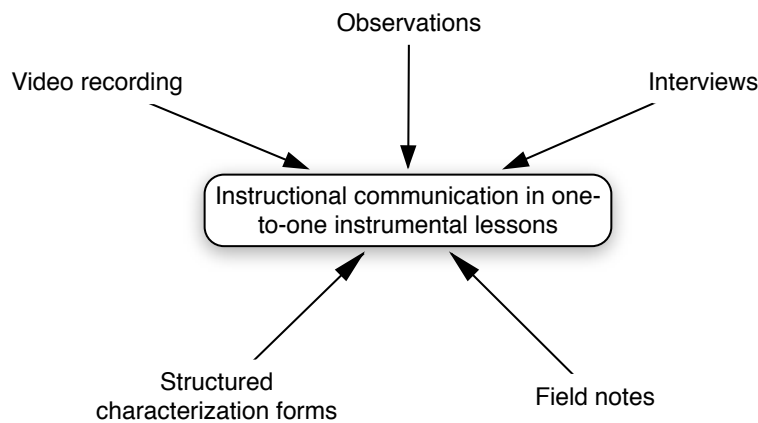
Benjamin is fourteen years old and is studying grade 6 at a Saturday music service provision. He started to play the violin seven years ago and currently spends twenty-five minutes, two or three times per week practising. During the lessons observed he seemed to be unfocused. When the teacher was talking to him, he was looking at other things and sometimes he started to play while the teacher was talking. Benjamin usually based his practice on a workbook written by his teacher, where the most important points worked on during the lessons and some instructions for homework were written down. Each violin lesson observed was of 30 minutes' duration.

#### **4.2.3 Data collection<sup>13</sup>**

This *exploratory single-case* study relied on multiple sources of evidence, such as: observations, field notes, video recordings, interviews and structured characterization forms (see Figure 4.2). According to Yin (2009), the use of multiple sources of evidence allows the development of an accurate triangulation and increases the reliability of the entire case study.

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<sup>13</sup> Data Collection took place in London during an Erasmus exchange at Institute of Education, University College of London, UK.



**Figure 4.2** Sources of evidence in the exploratory case study

#### OBSERVATION AND FIELD NOTES

Each student was observed in two sequential lessons. The observational approach adopted was *unstructured observations* (Robson, 2011). This strategy allowed me to gather ‘live’ data from naturally occurring social situations (Cohen et al., 2007, p. 396). My position during the observations was an *observer-as-participant* (Robson, 2011). In this position I did not take part in the activity but my status as researcher was known by the participants (Robson, 2011). This condition allowed me to be in the natural teacher and student environment without taking part in the lessons. The observations were scheduled following the regular time, place and habitual content of the lessons. In order to minimize methodological problems associated with observational studies, strategies of minimal interaction with the participants and an unobtrusive position of the researcher in the room were used.

During the lessons observed, a total of twenty pages of field notes were written down. The notes were written as “jotted notes” (Bryman, 2012), which consists in a very brief notes to jog one’s memory. The main function of the field notes was to identify potential teaching cues to be used in the script of the interview. Beyond the teaching cues, the content, topics discussed, activities and a self-reflection on the key issues approached during the lesson were also written.

#### VIDEO RECORDING

In order to complement observations, the lessons were also videotaped. Video recording is recognized as a means of reducing the dependence on initial interpretations (Cohen et al., 2007). Thus, a pocket-sized video camera, which allowed discrete and quiet recording (Panasonic HM-TA1 mobile camera), was used to video record the lessons. The camera was placed in a position that captured both student and teacher. A total of 16 violin lessons were observed and videotaped. Each lesson lasted between 30 minutes to 1 hour of duration. The content of the lessons varied, taking into account the teachers and students involved. As explained before, the setting of the lessons was diverse, including a teacher's home studio, Saturday music service provision and junior conservatoire.

#### CHARACTERIZATIONS FORMS

Before observation started, each participant filled in a characterization form which was used to get information on their background. The information asked of the teachers was: (i) name; (ii) age; (iii) gender; (iv) qualifications; (v) positions; (vi) years of teaching violin; and (vii) venue (i.e. Private studio, Junior Conservatoire, State School, Independent school, Saturday music service provision, Other). Similarly, students were asked about their (i) name; (ii) age; (iii) gender; (iv) actual grade; (v) years of study violin; and (vi) time spent per week in individual practice. The original characterization form can be seen in Appendix 3.

#### INTERVIEWS

The interview model adopted was the *focused interview* (Merton, Fiske, & Kendall, 1990). According to Yin (2009), this type of interview is conducted for a short period of time, following a certain set of questions. The main purpose is to “corroborate certain facts that you already think have been established” (Yin, 2009, p. 107).

Thus, a focused interview was conducted separately with each participant (i.e. teachers and students) in order to understand his or her intentions and perceptions concerning instructional communication. Also, the selected teaching

cues were introduced in the topics during the interviews. In order to make the questions clear, teaching cues were referred to as instructions. These instructions (i.e. teaching cues) were selected between the first and the second lessons. This selection was grounded in the observation of the video recording, guided by the field notes.

All interviews were transcribed with the aid of the software *F5 Transcript, version 2.2*<sup>14</sup>, which is a tool that assists in the manual conversion of human speech into a textual transcript. Posteriorly, a proficient English speaker revised all the sentences with the original audio. This procedure was adopted as a means of correcting eventual misunderstandings regarding the English language. The script adopted in the interviews is described in the next paragraphs.

#### a) Teachers' interviews

The script of teachers' interviews was based on three main topics: (i) perceptions about communication between teachers and students; (ii) common vocabulary; and (iii) intentions behind the selected summarized instructions. The script was composed of five main questions:

1. Can you just talk about how you give feedback in the lessons? How do you communicate your musical ideas?
2. Do you have some repertoire of feedback that you can use with all students? Can you give me some examples?
3. Now, we are going to talk about particular examples that I have picked up from the observations. What was your intention in saying (teaching cue)? (three or four examples)
4. Do you think the last instructions are commonly used by you with other students, or are they individual examples?
5. Apart from the above-mentioned instructions, do you remember other instructions that you have used with other students? At what moments did you use them?

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<sup>14</sup> F5 Transcript <http://www.audiotranskription.de/english/f4.htm>



Despite this structure, each teacher had a personalized script. The questions 3 and 4 were based on particular teaching cues selected in the first lesson observed. Teachers' interviews were conducted at the end of all lessons observed. Each interview did not take longer than fifteen minutes. Owing to issues of availability, one interview was conducted by email.

#### b) Students' interviews

As interviewing children could be challenging (Einarsdóttir, 2007; Vasquez, 2000) mainly because they can be more vulnerable to relationships with the adult researcher than other groups (Einarsdóttir, 2007), researchers recommended that the children should be engaged in some activity during the interview (Cappello, 2005; Einarsdóttir, 2007; Parkinson, 2001). In addition, Vasquez (2000) suggests that at the start of an interview with children, the researcher needs to facilitate the child's well-being, helping him/her to feel comfortable and relaxed and also giving a clear explanation of why the interview is taking place (Vasquez, 2000). Based on these perspectives, this study adopted the children's drawings as a strategy to start the interview with the students. This strategy also allowed the researcher to acquire information about the children's views and experiences in learning violin (Einarsdóttir, 2007). According to Einarsdóttir (2007), drawings are visual data that can suggest how children view things. The main advantages of using drawings in research with children is that "they provide a non-verbal expression, and the children are active and creative while they draw" (Einarsdóttir, 2007, p. 201).

According to Creech (2010), "a methodological approach that incorporates pupils' visual representations of their learning environments places pupil perceptions at the centre of enquiry and offers the potential for a deeper understanding of how that environment is experienced by the learner" (Creech, 2010, p. 399). However, several disadvantages of children's drawings have been pointed out, such as that they can copy the drawings of others and they can refuse to draw because they do not like to draw (Einarsdóttir, 2007).

Thus, a pre-formulated frame<sup>15</sup> was given to each child before start the interview. The indication given in this frame was: “Please, draw here how you learn violin from your teacher”. Amongst eight students, only three agreed to do the drawings; they were students Alice, Patricia and Eva.

Students’ interviews followed the structure adopted with teachers. Such interviews were also based on three main topics: (i) perceptions about the violin lesson; (ii) student recall; (iii) meanings of instructions. The script was composed of five main questions:

1. Can you show me the drawing<sup>16</sup> that you have done? Can you explain to me what you drew here? What does it mean?
2. Now, we are going to talk about your lesson from last week. What were the most important things that your teacher told you to remember in your practice? What else do you remember from your last lesson?
3. When your teacher says (teaching cue), what does it mean? (Three examples from each student)
4. In a normal week, how many times do you practise at home? How long is your practice?
5. Do you find it helpful for your practice, for example, when your teacher in the lessons says (teaching cue)? Do you remember this at home? Do you have more examples like the last one that can be helpful in your practice?

The student interview was also personalized. The teaching cues asked in question 3 were collected in the first lesson observed. Such cues were the same as previously asked in the teachers’ interviews. All the interviews were carried out at the end of the second lesson<sup>17</sup>.

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<sup>15</sup> Appendix 5

<sup>16</sup> Appendix 5

<sup>17</sup> Following ethical procedures, the interviews were conduct always with the accompaniment of a parent or a member of the staff of the institution. At no time I was alone with the student.

#### 4.2.4 Data analysis

The sources of evidence analysed included: (i) sixteen video recordings of one-to-one violin lessons (two sequential lessons with each student), approximately twelve hours; (ii) transcription of twelve interviews, approximately eight hours; (iii) field notes and (iv) twelve participants' characterization forms. The framework of instructional communication guided such analysis. Particularly, three elements were considered in this process (Myers, 2010): the student; the teacher; and the meanings. The analysis strategy adopted followed four steps: (i) selection of teaching cues; (ii) exploration of instructional communication/thematic analysis; (iii) exploration of teaching cues meanings/comparative analysis; and (iv) triangulation. The next paragraphs describe each step.

##### SELECTION OF TEACHING CUES

The process of analysis began during the observations, with the selection of instructions that were later analysed. The potential teaching cues were selected taking into account the characteristics discussed in the pilot study, namely:

- # Summarized instruction which can alleviate information overload
- # Used to guide the focus during the development of skills
- # Preceded by a detailed explanation of content

All potential teaching cues were noted down during the observation of the first lesson in the field notebook. The selection occurred between the first and the second lessons when all the previous potential teaching cues identified were observed again in the video recording. During this process, the characteristics described above were used to confirm whether the instruction could be considered a teaching cue or not. The video was a fundamental tool to reproduce the real moment where the instructions were used during the lesson.

##### EXPLORING INSTRUCTIONAL COMMUNICATION: THEMATIC ANALYSIS

Perceptions of instructional communication were explored through interviews. In order to understand such perceptions a *thematic code analysis* (Braun & Clarke,

2006; Robson, 2011) was conducted with the aid of software package *NVivo 10*<sup>18</sup>. This approach allowed a flexible interaction with the data so that it was used to identify emergent themes in the interviews. According to Braun and Clarke (2006), “through its theoretical freedom, thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data” (Braun & Clarke, 2006, p. 78). Such an approach can be realistic, reporting experiences, meanings and the participant’s reality (Robson, 2011).

Some authors have established systematic phases to be followed in thematic analysis. Braun and Clarke (2006) have identified six phases in this process, which are described in Table 4.4. Robson (2011) has identified five phases also illustrated in the same table.

**Table 4.4** Phases of thematic analysis: Braun and Clarke (2006); Robson (2011)

<b>Braun and Clarke (2006)</b>	<b>Robson (2011)</b>
Familiarizing yourself with your data	Familiarizing yourself with your data
Generating initial codes	Generating initial codes
Searching for themes	Identifying themes
Reviewing themes	Constructing thematic networks
Defining and naming themes	Integration and interpretation
Producing the report	

According to Patton (1990), it is important to recognize that guidelines in thematic analysis are not rules. They must be applied in such a way as to fit the research questions and data. Following this line of thought, this research mixed and adapted both approaches described above. Therefore, the analysis followed seven main steps:

1. Familiarizing yourself with your data

The familiarization began during data collection when the interview script was being built. During the transcription of such interviews, data were being read and re-read so that initial ideas were being noted down.

<sup>18</sup> <http://www.qsrinternational.com>

## 2. Generating initial codes

This phase included systematic work through the entire data set. Such work consisted of generating initial codes from relevant data, based on ideas previously noted. Following the perspectives proposed by Braun and Clarke (2006), all relevant information was coded, including contextual issues. Moreover, individual extracts of data were coded in different codes. Finally, a total of 66 descriptive and interpretative codes emerged (i.e. 51 from teachers and 15 from students).

## 3. Searching and identifying themes

All 66 emergent codes were collated into potential themes taking into account the techniques recommended by Ryan and Bernard (2000): (i) repetitions; (ii) similarities and differences; (iii) linguistic connectors; and (iv) theory-related material.

## 4. Reviewing themes

This phase involved two levels of refinement in accordance with Braun and Clarke (2011): (i) checking whether the themes are coherent together - they should be clear and have identifiable distinctions between themes; and (ii) considering the validity of individual themes in relation to the data set. During the reviewing process, some candidate themes were grouped or some extensive themes were broken down into new themes or subthemes (e.g. strategies to convey information were broken down into eight different strategies).

## 5. Defining and naming themes

This phase is intended to name and describe all the final names previously refined.

## 6. Constructing thematic networks

A thematic network was developed to illustrate the interaction between the final themes. The final thematic network is presented in Chapter 5 and 6.

## 7. Interpretation/producing the final report:

The final report presented in section 3 describes the final analysis of the data set. In such a report, selected extracts of each theme are presented following an interpretative narrative.

### EXPLORING THE MEANINGS OF TEACHING CUES: COMPARATIVE ANALYSIS

In order to explore the teaching cues meanings of the selected teaching cues used by teachers in the lessons observed, comparative analysis (Bazeley, 2013) was carried out. Teachers' intentions and students' understandings were compared in order to verify potentiality and effectiveness of the selected teaching cues. Inspired on Bazeley (2013), the comparative analysis was conducted taking into account the following steps:

1. Familiarizing with data – first transcriptions and observations of video recordings;
2. Codification – information coded regarding each teacher intention and student answer was generated. This process was facilitated by NVivo 10;
3. Classification - each code was classified according to attributes and values (more details in Chapter 8);
4. Comparison of meanings - a comparative table was created in order to relate teachers' intention and students' understandings with the classifications.

The findings regarding meanings and effectiveness of the teaching cues explored through the comparative analysis are presented in section 4, Chapter 7 and 8.

### TRIANGULATION

Finally, the findings from both thematic and comparative analysis were triangulated with the video recordings. This process allowed understanding of the challenges and the benefits regarding the use of teaching cues in instructional communication. Also, this process allowed crossing information about the participants' discourses and the context of the lesson.

Selected segments of the video-recordings were transcribed using the software *F5 Transcript, version 2.2*<sup>19</sup>. These segments consisted of the moments of the lessons when the participant teachers were using the selected teaching cues. The transcription considered the following behaviours: (i) teacher speaking; (ii) student speaking; (iii) student and/or teacher playing; and (iv) tasks context. A narrative of the transcription was constructed to give a clear idea of the context that surrounded each instruction. The findings of the triangulation are presented in section 4, Chapter 7 and 8.

### 4.3. ETHICAL CONSIDERATIONS

Ethical revision and approval<sup>20</sup> for conducting the main study was obtained from *Faculty Research Ethics Committee* at Institute of Education, University College of London in 12/04/2013. The main ethical consideration behind this research was safeguarding children and adolescents during data collection and analysis. The *British Education Research Association professional code* (BERA) has defined the basis for such ethical revision.

Participants were invited to take part in this research voluntarily. Each participant was informed about the research aims and methods of data collection and analysis. All issues concerning their participation was informed through a leaflet<sup>21</sup> sent by email. Also, simple information sheets, designed for children, have been included. Particularly, the content of those sheets was repeated verbally (i.e. in child-friendly language) before lesson observations and interviews. Contact information and details were provided to all participants, who could ask questions or explain their concerns regarding to the research.

A written consent form was sought from teachers, parents and students<sup>22</sup>. They had the option to agree or not to participate in the research, as well as allowing or not the video and audio recording and the use of this data in future. Additionally,

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<sup>19</sup> F5 Transcript <http://www.audiotranskription.de/english/f4.htm>

<sup>20</sup> Appendix 2

<sup>21</sup> Appendix 3

<sup>22</sup> Appendix 2

they could allow or not the use of images in conferences or academic presentations with the face covered. All participants were free to withdraw from the research at any time with no risk of adverse consequences. Also, they could say when they did not want to answer some questions in the interview or when they did not want to draw the picture (i.e. children). In such cases, all decisions were respected.

I was not intending to interfere in the normal course of the lessons, so that all lessons were scheduled according to the availability of the participants. Careful attention was given to signs of 'assent' from the children and if there was any reason to believe a child was not comfortable with the research observation or interview I drew it to a close immediately. The children were interviewed in the presence of a parent or a member of the staff of the institution. I was not alone with a student at any time.

Pseudonyms were used in the transcription in order to preserve the anonymity of each participant. All data analysed was stored safely and securely according to the following conditions: (i) selected segments of the video, audio recordings, interview and video transcripts were stored in encrypted files on my computer, which were password protected and accessed only by agreed members of the team (e.g. supervisors and co-supervisors); (ii) identifiable digital data (i.e. participants' characterization forms and consent forms) was encrypted in separate files (i.e. password protected and saved only in my computer) (iii) printed data (i.e. drawings, participants' characterization forms and consent forms) was kept with me in a database folder.

#### **4.4. VALIDITY AND RELIABILITY**

According to Yin (2009), it is possible to judge the quality of a qualitative study design by taking into account its credibility, transferability, confirmability and dependability. These terms, which were proposed by Guba & Lincoln (1994), have been applied in qualitative research as equivalents for reliability and validity, which are commonly associated with positivist paradigms (Bryman, 2012). Credibility, which in a quantitative paradigm is related to internal validity concerns guaranteeing that the investigation is being done according to the canons



of good practice (Bryman, 2012). Data triangulation is a technique recommended to ensure credibility in qualitative studies (Bryman, 2012). Transferability, that is related to external validity, concerns the applicability of the findings to other settings (Guba & Lincoln, 1994; Yin, 2009). Dependability, associated with reliability, demonstrates that all the research process is being consistently recorded in order to be assessed by peers (Guba & Lincoln). Finally, confirmability, which is related to objectivity, represents research honesty (Guba & Lincoln, 1994). In qualitative research this means that any research should be driven by ethical concerns (Bryman, 2012).

This study has used several tactics regarding credibility, transferability, confirmability and data dependability. To construct validity a multiple sources of evidence were collected, establishing a chain of evidence (i.e. participants' interviews, lesson observations, video recordings, field notes and structured characterization forms). All examples of evidence were used in data triangulation so that all codes and themes were in the last instance refined and revised until they become consistent. The validity of such themes was considered, taking into account all of the dataset, reflecting the accuracy of the thematic map. Moreover, the present study included two external readers, others than the supervisors. The first one reviewed all the transcriptions of the interviews and video lessons while the second one provided consistent feedback concerning the analysis. To minimize the errors and biases in this research, a case study protocol was developed to make the research steps as operational as possible. Such a protocol was based on the pilot study presented in Chapter 3.

## SECTION 2

### SUMMARY

This second section described the methodological choices regarding the *exploratory case study* used to understand, through the study of teaching cues, the process of instructional communication in one-to-one instrumental lessons. The case considered in the present thesis was the communicative relationship established between violin teacher and student. Based on this, a pilot study was designed to inform conceptual and methodological issues in the main study.

The pilot study (Chapter 3) indicated that teaching cues, in instrumental context, can be recognized as multimodal summarized information, which informs critical features involved in the development of performance skills. Such information was classified taking into account its typology (i.e. structural teaching cues; aural teaching cues; technical teaching cues; interpretative teaching cues; and presentation teaching cues) and function (i.e. advising, problem solving and emphasizing). The pilot study brought evidence that such teaching cues might be used to alleviate the overload of information and consequently optimize instructional communication in one-to-one instrumental lessons. Based on these results, the pilot study informed the second question of this research (i.e. what could be recognized as a teaching cue in one-to-one instrumental lessons and how is it being used in instructional communication?).

#### CHAPTER 3

Pilot study

#### CHAPTER 4

Main study

Based on the findings discussed in Chapter 3, an exploratory embedded single-case study (Yin, 2009) of instructional communication in one-to-one

instrumental lessons was designed (Chapter 4). The participants were four violin teachers (aged between 41 and 62) with ten or more years of teaching experience and 8 violin students (aged between 9 and 15). The data collected and analysed included: (i) sixteen video recordings of one-to-one violin lessons (two sequential lessons with each student); (ii) transcription of twelve interviews; (iii) field notes; and (iv) twelve participants' characterization forms. The strategy adopted to analyse the data followed four steps: (i) selection of teaching cues; (ii) exploration of instructional communication/thematic analysis; (iii) exploration of teaching cues meanings /comparative analysis; and (iv) triangulation. Moreover, some considerations of ethics, validity and reliability were also discussed in Chapter 4.

The next section is dedicated to the presentation of the first part of the findings (i.e. perspectives and perceptions on instructional communication). Section 3 aimed to inform the first research question (i.e. how has instructional communication been used by teachers in one-to-one instrumental lessons?). This section is divided into two Chapters, 5 and 6. Both chapters present the results of the interviews conducted with teachers and students.



# **SECTION 3**

## **RESULTS - PERSPECTIVES AND PERCEPTIONS ON INSTRUCTIONAL COMMUNICATION**

### **CHAPTER 5**

Teachers' perspectives

### **CHAPTER 6**

Students' perceptions

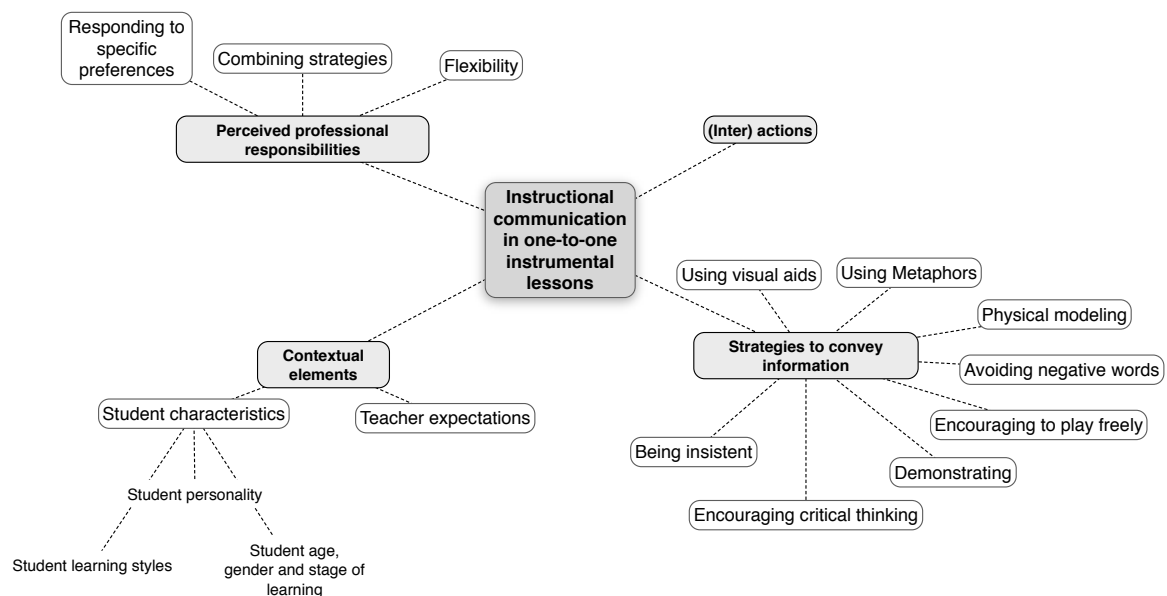
## INTRODUCTION

This section presents the first part of the results achieved. These results concern the perspectives and perceptions of instructional communication in one-to-one violin lessons. Chapter 5 presents teachers' perspectives on instructional communication. Particularly, teachers' perspectives regarding the contextual elements of communication as well as the perceived professional responsibilities of instructional communication are addressed. Moreover, teachers' interactions with pupils and strategies used to convey information are also described in this chapter. Following that, students' perceptions of instructional communication adopted by their teachers are presented in Chapter 6. Data reported in both chapters (i.e. Chapter 5 and 6), emerged through the thematic analysis described in the Chapter 4 (4.2.4).

In order to guarantee anonymity, participant names have been changed to pseudonyms and the equivalent code (e.g. T1 [teacher 1]; S1 [student 1]; 'C' is used to represent the interviewer [Clarissa]). In addition, some nonverbal actions are exemplified through visual extracts taken from the lessons video-recorded. The images were edited to cover the faces in order to maintain the anonymity of the participants.

## CHAPTER 5: TEACHERS' PERSPECTIVES

Data analysis revealed four themes regarding the teachers' perspectives relating to the process of instructional communication in one-to-one instrumental lessons: (i) contextual elements; (ii) perceived professional responsibilities; (iii) teacher (inter) actions; and (iv) strategies to convey information. Themes (i), (ii) and (iii) concern the aspects that shape instructional communication, while the last theme presents strategies to deal with these aspects. Figure 5.1 illustrates the thematic map that emerged from the thematic analysis of the teachers' interviews.



**Figure 5.1** Teachers perspectives in instructional communication: thematic map

### 5.1. CONTEXTUAL ELEMENTS

Teachers reported two main contextual elements which might influence instructional communication: (a) student characteristics and (b) teacher expectations.

#### 5.1.1 Student characteristics

All teachers interviewed emphasized the importance of taking into account each student's individuality during the communication process. According to them,

such individuality is shaped by the following characteristics: (i) student personality; (ii) student learning style; and (iii) student age, gender and stage of learning. Generally, the teachers indicated that they believed a student's characteristics may not only shape the instructional communication, but also the teaching and learning environment as a whole.

#### (I) STUDENT PERSONALITY

Teachers recognized that student personality could influence the selection of teaching strategies. The following example describes how this feature defined the educational approach adopted to deal, for example, with a shy pupil:

I mean the shy pupil you can see that, you know Ellen, she is very in the way she plays, so a lot of is just about encouraging to play more and again. (David, T1)

On the other hand, another teacher asserted that violin lessons could help students to develop their own personality. The following example illustrates this teacher's perception:

What I am aware of it's the personality of the child. For me the violin offers a chance to develop aspects of one's self. I want Vanessa to be encouraged to play out even when she is unsure of herself; I think this takes a leap of faith. (Diana, T4)

#### (II) STUDENT LEARNING STYLE

Teachers subscribed to the idea of learning styles, however they seemed not to question the validity of this idea. According to teacher Edgar the differences between students' learning styles might also shape instructional communication. The same teacher highlighted the importance of nurturing other cognitive channels (e.g. using visual strategies with a child who learns better visually):

Some children learn better listening and children learn better visually by examples, but I try to... even with other who are more visual, for example, I try to send oral instruction or to put examples, and also one of them who are more oral, I used try to send visual stimuli. (Edgar, T3)



## (ii) STUDENT AGE, GENDER AND STAGE OF LEARNING

All teachers recognized students' age and stage of learning as influential factors in their instructional communication. Particularly, the teachers indicated that such features defined the content behind the instructions conveyed. The following example highlights such statement:

I tend to think in terms of technique when children are young, and gradually think towards musical ideas later on. (Diana, T4)

The pedagogical vocabulary seemed also to be shaped by such features. There was a special concern to establish relationships between technical vocabulary and daily life in order to make instruction understandable. Apparently, such a relationship seemed also to be determined by gender when the teachers used gender stereotypes to choose metaphors that they used in their teaching.

Personally I use the daily language and I try to relate to what the child, depends on the age. The only experience of life so far, say for example when I use hold the bow, at beginning as if to hold as you are holding a twiggy or a branch of the tree, like for the boys I say hold the sword, they know exactly what to do, and then that's contrasting to be bow hold. I say do you must not hold the bow like the way you hold the sword. Relate everything to their own interest and with the violin then you have to teach them to understand the body as well, this is very important to start right from beginning. So I tell them this is the shoulder rest, you put it in your shoulder, that is a chin rest, you put in your chin, is pretty clear and so I show them where the chin is and tell them which way and all of this you can relate it to what they really know. There is, yeah, so nothing really to specify for the beginners. (...) It depends on the age. If I teach an older person, like a grown up then I would use totally different language, different ways of explain. This all depends on experience in life, how much they can understand. (Alexander, T2)

Combining verbal and nonverbal communication was highlighted as a positive means to make instructions clear to young students. This participant teacher recognized the use of kinaesthetic approaches with novice students to support verbal explanations.

When we're working from the scratch something, yes, I think what I touch more, is executed depends on the skill, if is bow stroke, is shifting, depend it. Usually at the beginning of a process it is more talk, more explanation because I want them to understand what they are doing, ah, kinaesthetic and I touch more. (Edgar, T3)

Another teacher assumed some difficulties in balancing technical content in instructional communication, mainly with students in the early stages of learning

the violin. This concern seemed to emerge from the ideal of technical-interpretative development established in one-to-one violin lessons.

So I found with early stage it is a very difficult balance between not putting them out or insisting, because I found if you don't insist you let something technical go, it's terrible for you later on and it's terrible for them. And I think those that are not mature enough for or don't understand or haven't got the attention span or don't really want to do it. Then, you know, I've had people leave because they just, they tired. (David, T1)

### 5.1.2 Teacher expectations

Data analysis revealed teachers pursued an ideal of clarity and understanding in instructional communication. This ideal seemed not to be restricted to the understanding of the instructional itself. Rather, critical thinking, imagination and memory seem also aimed in this process.

I am not aware that I write on the pupil's music to create a memory or legacy for them, I wish to give guidance and clarity. (Diana, T4)

C: What was your intention when you give examples that the student need to imitate, make a copy, like in the last lesson with Alice, (when you said about the accordion)?

T1: First of all it's so that they understand what the passage in the music is there for. So that then they can use their own imagination, once you said oh that's what it is, you know, they will think, and just hopefully that will mean they'll better produce better result when I come to play it and also they might wonder what this sounds a bit funny. What's this for? (David, T1)

I wasn't expecting that, but I guess, it is because English is not his first language, neither is mine, it's surely his feeling for jumping was not correct, jump is something unstable, not positive, why he described it later in a different way is a lot more correct. (Alexander, T2)

## 5.2. PERCEIVED PROFESSIONAL RESPONSIBILITIES REGARDING INSTRUCTIONAL COMMUNICATION

Teachers highlighted that instructional communication was shaped by the following perceived professional responsibilities: (i) flexibility; (ii) combining strategies; and (iii) responding to specific preferences.

### 5.2.1 Flexibility

There was agreement among the teachers concerning the importance of flexibility in instructional communication. Such flexibility required teachers to adapt their educational approaches according to student needs. Teachers mentioned practical examples of how they applied flexible approaches regarding the pedagogical vocabulary adopted:

If one word is not affecting them, if they don't react then you have to find a different word. (...) Full bow, if you say full bow all the time they ignore you, so you say, you find other word to express the idea, or I say swing your arm, that's another, it's more visual, moving to the same thing. (Alexander, T2)

For example if you have one "tension" to avoid squashing the string in excess instead of telling them, I try to send the information, as try to "way to avoid this". (Edgar, T3)

I tend to be different, I think with different students probably like I would be with people. I am not saying that is convenient but it is not always appropriate to use the same feedback, because the student might not respond so well to it. (...) I mean as I have said earlier, it depends who the student is. Because you tailor what you do to each person. (David, T1)

It very much depends on the student, with some of the students, I don't really need to say much, I just play the way I want or the way I think it should be and then they copy immediately, like Bruno, he is very quick with that, but some other people I really have to explain in small details, break down everything into logical terms, which is a bit, not quite ideal. (Alexander, T2)

### 5.2.2 Combining strategies

Teachers have highlighted their capacity to combine different strategies in instructional communication. This aspect seems to be of paramount importance to the success of a pedagogical approach. The following extract suggests that teachers must develop a varied repertoire of strategy to make their instructions clear.

I try to combine different strategies and try to balance. Everybody has a tendency into focus in one strategy some people tends to talk, some people tend to give examples, some people prefer touching, but I try to combine all of them, not at the same level, but I try to increase a lot them to the more strategy you combine, the more you use, the more useful and successfully you can be sending information. (Edgar, T3)

When the student starts to learn to position and shifting I like to be very "technical" about it. And on the A string doing first finger b playing 123 (sing) and then doing the slide and then. Showing and saying to them without the violin you can move like this (he shows the movements). So that is an example without the violin this concept to the hand. (David, T1)

### 5.2.3 Responding to specific preferences

There was a sense amongst teachers that one of their responsibilities was to explore each student's previous knowledge and background. According to some participating teachers, a positive communicational experience in violin lessons could be maximized through musical material closely related to a student's artistic preferences.

[The content of the communication] could be the own experience in school and that would maybe trigger their own way of thinking and expressing meaning. For example with Bruno, he is very musical and he likes a certain type of music, so I choose a few pieces that's to in to keep his interests in music, (...) Relate everything to their own interest and with the violin. (Alexander, T2)

Culturally they [students] are not exposed to this sort of music that they work on very often, you know Alice, and pop music. Although if you see she is in a Saturday orchestra she absolutely loves it. So I think its kind part of general thing that makes things more amusing. (David, T1)

### 5.3. TEACHER (INTER) ACTIONS

Individual patterns of (inter) action among teachers were identified in their discourse of instructional communication. These patterns seemed to shape their perspective and approach to this phenomenon. The word 'action' was here used to represent teachers' behaviours, while the word 'inter' was adopted to represent the relationship established between teachers and students<sup>23</sup>.

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<sup>23</sup> According to Novak (2010), the use of the word 'act' to 'behave' "implies a conscious, deliberate, and emotion-laden event, not the kind of passive event we associate with a trained rat or bird. Very little human activity is behaviour in the animal sense. Most of it is deliberate action, and at least in the mind of the actor, the action makes sense" (Novak, 2010, pp. 19–20).

Overall, the teachers (inter) acted by: (i) playing or singing; (ii) talking; (iii) explaining and demonstrating; (iv) asking; (v) touching; (vi) touching and talking; (vii) showing extra material; and (viii) writing on the score. Some excerpts from the interviews are described below in order to illustrate such types of (inter) action:

Yes, yeah, you can send information **talking** or **giving examples**, or **kinaesthetically, touching physically** the students, so transmitting information for their bodies. I try to use this with all [my students]. (Edgar, T3)

**Singing** and **using hands**, being demonstrative, it is another means by which to get a message across. Why not use the voice when playing the violin feels to me like an extension of singing. (Diana, T4)

**Showing** and **saying** to them without the violin you can move like this (he shows the movements). So that is an example without the violin this concept to the hand. (David, T1)

Moreover, a specific communicational code established between teacher and student was found. This code seems to develop through the combination of verbal instructions supported by practical examples. The code that the teachers' referred might be applicable to the teaching cues characteristics.

In private lessons let apart from oral instructions and examples, I try to establish, like a code, of extra, so they know what I mean, what I do extra, for example, when we start reading something, or when I copy something, or instead of talking their performance I show my fingers, show a finger pattern, or they know if this is high it is low, or the finger pattern should be higher they need to shake the hand, so I like to combine also gestures, I need to stop, then to play. (Edgar, T3)

The teachers' (inter) actions seemed also to be shaped by their own learning experiences. A participating teacher brought some examples of common phrases used in their lessons. Some actions, used by her previous teachers, were still an influence in her current teaching practice.

I might say, 'Get into your body. How does it feel to play this stroke? 'What does this music remind you of?'(...) I would use such things with other students. I do write on music just like my teacher did on mine. I know like seeing my old teacher's handwriting. It felt as though they were looking after me. These are my thoughts. (Diana, T4)

These (inter) actions were not rigid, so it was adapted according to each student. Despite this, the use of demonstrations seemed to be recognized by some participating teachers as fundamental for instructional communication:

I think that demonstration, the way is to demonstrate, it is the most important. You know, like showing a hand position or when the people say don't play like this, but showing the why you know. Why the fourth finger can't reach or again about tendons again, just demonstration. (David, T1)

#### **5.4. STRATEGIES TO CONVEY INFORMATION**

Thematic analysis brought to light eight different strategies used by teachers to convey information, namely: (i) *being insistent*; (ii) *demonstrating*; (iii) *encouraging critical thinking*; (iv) *encouraging to play freely*; (v) *avoiding negative words*; (vi) *physical modelling*; (vii) *using metaphors*; and (viii) *using visual aids*. Table 5.1 presents a summary of the main characteristics of each strategy. Such characteristics are described in the next paragraphs. Most of the terms adopted here were inspired by established teaching strategies, which were described in the literature (for more information see Chapter 2, 2.3). Moreover, expressions mentioned by the teachers during the interviews were also considered.

**Table 5.1** Summary of strategies to convey information

Strategy	Characteristic
<b>Avoiding negative words</b>	Conveys information through motivating
<b>Being insistent</b>	The emphasis on some important aspects in the lesson
<b>Demonstrating</b>	Involves playing, gesturing, singing or talking
<b>Encouraging critical thinking</b>	Exploration of the students' awareness of learning
<b>Encouraging to play freely</b>	A source to connect technical and interpretative skills
<b>Physical modelling</b>	Assisting students to perceive how their bodies should perform
<b>Using Metaphors</b>	A source used to facilitate explanation
<b>Using visual aids</b>	Contributes to memorization and retrieval of information

#### 5.4.1 Avoiding negative words

Avoiding negative words is a strategy characterized by the search to convey information for improving a student's confidence. In this strategy the teacher emphasized the positive rather than the negative aspects of the pupil's performance. The next excerpt characterizes this strategy:

I don't like to say something is wrong I think that is the wrong way to do, I like to be encouraging, and so if that's as far as she's got with it. (...) I don't want to nag it because it might upset her, or she might think, you know, the best I can and he keeps saying no, no, no, wrong, wrong, and wrong. I think that's how I taught.

#### 5.4.2 Being insistent

This strategy was characterized by persistence and repetition of instructions regarding specific aspects of the task that the teacher wanted to highlight. Such a strategy was directly associated with the development and acquisition of technical skills. According to teachers, insistence was made by constant repetitions of determined instruction.

I found if you don't insist you let something technical go, it's terrible for you later on and it's terrible for them. (David, T1)

### 5.4.3 Demonstrating

Demonstration in instructional communication involves playing, gesturing, singing or talking. This strategy offers a model of how to do something. In general, demonstrating exemplifies solutions for a recognized problem. The results showed that teachers preferred demonstration as the quickest way to convey information. This strategy seemed to help teachers to give instructions on several aspects, such as unnecessary tension in the right hand and shifting. In the following quotations the importance of demonstration in instructional communication is emphasized:

It all depends what the context is, what the piece is, but I like to demonstrate, you know. I think that is one of the quickest ways rather than talk about it, (...) I think that demonstration, the way is to demonstrate, it is the most important. You know, like showing a hand position or when the people say don't play like this, but showing the why, you know. (David, T1)

Singing and using hands, being demonstrative, it is another means by which to get a message across. (Diana, T4)

It is very much depends on the student, with some of the students, I don't really need to say much, I just play the way I want or the way I think it should be and then they copy immediately, like Bruno, he is very quick with that. (Alexander, T2)

### 5.4.4 Encouraging critical thinking

Encouraging critical thinking in instrumental teaching concerns the encouragement and support of students' ability to reflect on what they are doing and why they are doing something. In order to promote critical thinking, teachers explored students' awareness of learning, for example, by asking questions, impersonations and imagery. From the teacher's point of view, such a strategy facilitates the understanding of "what is going on" in the lesson. The following excerpts illustrate the participants' points of view concerning the importance of this strategy:

So when we do the scale or when we start to doing the scale I also encourage them to be aware working or listening here, here or there, the first, the second and the third, or the fourth finger, so this is in E major in first position, so what I try them to imagine first of all (...) so I try then to be at aware of the finger pattern of the scale, so they know what is happening. (...) I try to let them to think what they are doing and to understand what they are doing before they copy, it is not copying is about understanding first. (...) I try also to ask the students to observe themselves, and to decide what really right and wrong. So, I usually do ask question. I tend to know what



is happening before I give the answer (...) I ask questions, so they can be aware of the feedback and they can analyse what they are doing. (Edgar, T3)

If a child is preparing a piece then I might use the idea of creating an aural picture, sometimes this comes from the title e.g.: 'a country walk'. I might say 'What does this music remind you of?' and then play the piece myself to stimulate discussion. 'Can familiar sounds be heard in the music?' etc. Later I might talk in terms of creating and being aware of the music being made up of a series of sentences. (Diana, T4)

C: What was your intention asking Ali: what do you think about this piece?

T2: It is about the abilities to read from the score, all the information was given to them and they could already build up and make a mean[ingful] image of the piece, or they could actually hear the melody within the head, so the music is always have got a title, the title says a lot, and them is got marking for tempo, the key, the nature of the key, major, minor. (Alexander, T2)

Sometimes I do impersonations with them. I wouldn't do it if I thought it would upset them obviously, but if you show above, so this is how do you to play that, sometimes she just laughs, and I say What was wrong with it? Oh, it was too quiet, you didn't use enough bow (David, T1)

#### 5.4.5 Encouraging to play freely

This communication strategy refers to the instructions that help students to develop presentation skills. Encouraging to play freely was recognized as a way to connect technical and interpretative skills. Some participants suggested that encouraging students to play freely could inspire them “to give more of themselves,” developing confidence in performing skills.

I wanted her to give of herself. Play out. I want her to be encouraged to play out even when she is unsure of herself; I think this takes a leap of faith. (Diana, T4)

I mean the shy pupil you can see that, you know Ellen, she is very in the way she plays, so a lot of is just about encouraging to play more (...) my intention was to encourage her to use all the bow, to be freer, because you can see she is very contained, part of her shyness, when she lets go it's terrific. (David, T1)

#### 5.4.6 Physical modelling

During the interview, the teachers talked about the physical aspect of modelling<sup>24</sup> as one strategy for communicating information (i.e. assisting the students to perceive how their bodies should perform). Teachers described this strategy as the

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<sup>24</sup> According to Burwell (2010) and Rosenthal (1984), modelling is an effective tool for helping instrumental students to achieve accuracy.

act of sending information kinaesthetically. According to some teachers this strategy might be used to promote a deep physical awareness during performance.

I try to transmit what I want them to do on the violin (...), As you know, I was just sending information touching, kinaesthetically. (Edgar, T3)

Sometimes your body just do it without you knowing it, so physical feelings sensing about part of your body is important while you play, so I would use the bow touching the shoulder just tapping and they know. (Alexander, T2)

#### 5.4.7 Using Metaphors

This strategy facilitated the understanding of a given explanation, even on technical issues. In the following quotations, it was possible to identify some concrete examples where the use of metaphorical language in instructional communication was emphasized. During the interview, many examples of metaphors used in the lessons emerged (e.g. “focus in binoculars”):

Say for example when I use hold the bow, at beginning as if to hold as you are holding a twiggy or a branch of the tree, like for the boys I say hold the sword, they know exactly what to do, and then that's contrasting to be bow hold. I say do you must not all the bow like the way you hold the sword (Alexander, T2)

C: What was your intention doing (hands in the face) and saying focus in binoculars?  
T1: Right, because for Alice, because she is now working in the grade 6, she has to be able to tune her own instrument in the exam the accompanist is not allowed to tune it for her. So I have just found quite useful way because as the fifths gradually get nearer and nearer the basin stop so this is almost in line but not careless and suddenly the sight is focus so it's just a noun to use. And thus it seems to work. Yeah... (David, T1).

#### 5.4.8 Using visual aids

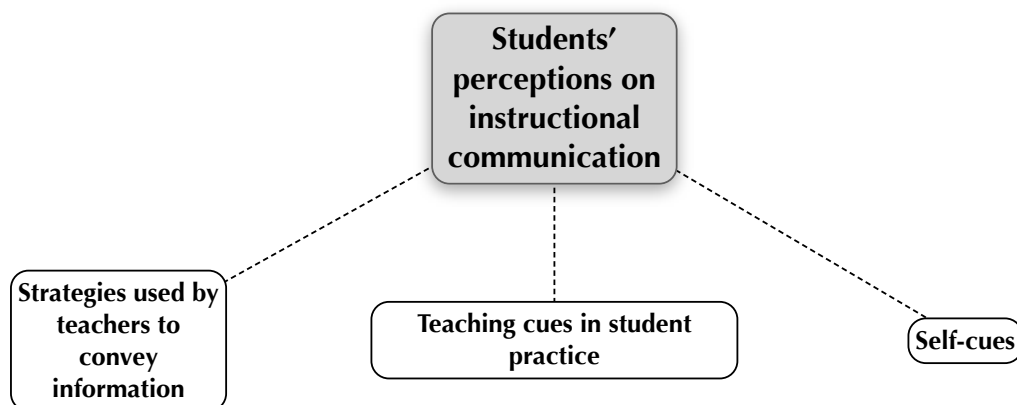
According to the participating teachers, the use of visual aids contributed to memorization and retrieval of information. Examples of such aids include writings in the score and external elements (i.e. pictures and photos):

To write in the score is saying 'remember this'. I need to trust the child will remember that this is important to them (...) I might write keys at the beginning of the music, pencil in breath marks, bowing, fingering and shifting (Diana, T4)

I have pictures, I have publications, photos so that they can put it inside the violin case and look at it, so that they've got a visual, because this is going to be great difficult to remember, you know half of our lesson is gone (David, T1)

## CHAPTER 6: STUDENTS' PERCEPTIONS

This chapter presents students' perceptions concerning the instructional communication adopted by their teachers. Each student's perceptions were identified through interviews, which were scrutinized through video recordings. The option to choose to interview students was one that has been adopted by other authors to observe knowledge encoded and stored (Karpicke, 2012; Karpicke et al., 2014). According to Karpicke et al. (2014), if students are able to describe information from previous lessons, then they probably have memorized and/or understood that content (Karpicke, 2012; Karpicke et al., 2014). Overall, three main themes were identified concerning students' perceptions (Figure 6.1), namely: (i) strategies used by teachers to convey information; (ii) teaching cues in student practice; and (iii) *self-cues*.



**Figure 6.1** Students' perceptions on instructional communication: Thematic map

### 6.1 STRATEGIES USED BY TEACHERS TO CONVEY INFORMATION

Data analysis explored students' perceptions relating to the teachers' strategies to convey information described in the Chapter 5 (5.4). Table 6.1 summarises the strategies that were reported by the students. This table suggests that students were familiar with a variety of strategies reported by their teachers.

**Table 6.1** Teacher strategies to convey information classified in the students' reports

Evidences from student interview	The teachers' strategies classified in the students' reports
<i>We usually play freely</i>	Encouraging to play freely
<i>She [teacher] usually writes things on the book</i>	Using visual aids
<i>To keep my back straight</i>	Physical modelling
	Demonstrating
	Being insistent
<i>I think about the character of the piece, and how to make it sound more like... yeah!</i>	Encouraging critical thinking
<i>Normally when he plays the section where needs to be gypsy fight, he did it himself. Like a tempo, I can hear what [it] sounds like</i>	Demonstrating
	Using metaphors
<i>Well, he [teacher] showing me how... he shows me how to do the low four [finger] and also do the patterns going on the E-string</i>	Demonstrating

The following paragraphs provide excerpts where students' perceptions of each strategy can be identified. In addition, to contextualize the strategy, examples from the lessons observations were extracted. The first excerpt was taken from Ellen's interview (Table 6.2). She described how the strategy 'encouraging to play freely' seemed to help her to manage technical issues.

**Table 6.2** Strategy encouraging to play freely reported by student

Strategy reported	Student report	Example of lesson context
Encouraging to play freely	We usually play freely. (Ellen, S2)	They are working on a specific bar of the piece. Student is playing the bar while teacher is moving his bow in order to call student's attention. T1 <i>Let's come back to these two notes. Down bow from about here</i> (he demonstrates the down bow) <i>and up bow</i> (demonstrates the up bow) <i>Right the way through. So down...</i>

The second excerpt (Table 6.3) was taken from Benjamin's interview. He described how the strategy 'using visual aids' was used as a means to facilitate instructional communication. In this particular case such aids were the teacher's annotations in

Benjamin's workbook. In this workbook the most important things to remember are highlighted. He explained what his understandings were of the teacher's annotations' and assumes that if the book had not existed he would explore his memory further:

**Table 6.3** Strategy Using visual aids reported by student

Strategy reported	Student report	Example from the lesson
Using visual aids	<p>C Do you find helpful for your practice when your teacher in the lessons write in the score?</p> <p>S8 Yeah, It helps you remember,</p> <p>C And if she doesn't do it, what do you? ...</p> <p>S8 I probably go home and do it by heart, but she usually write things on the book so...</p> <p>C What she writes on the book?</p> <p>S8 Things that I have to practise specifically like. Things that I should practise...</p> <p>C Things that you need remember as well?</p> <p>S8 Yes.</p> <p>C They are more related with things that you need remember or things that you need practise?</p> <p>S8 To practise.</p> <p>C For example, exercise ...</p> <p>S8 Yes also changes inside the piece, like the sections.</p> <p>C Do you read these things when you start to study?</p> <p>S8 Yes, it is. You can remember it, but I don't really remember much, so I read the book.</p> <p>(Benjamin, S8)</p>	<p>Teacher and student are working on a technical study. Teacher is very close to the student. The former is writing some instructions on the score</p> <p>T4: <i>I was wondering when you shift up to that position can you just bring your hand around a bit more.... That is it! Yeah! So bring your hand around so that you can ...</i></p> <p>(Teacher is writing on the score and student is trying to play the shift).</p>

The third excerpt (Table 6.4) was taken from Lucy's interview. This example concerns a specific moment in the lesson observed, where her teacher highlighted the instruction "to keep the back straight". The latter used different strategies to explain how the student should control and administer her back posture: (i) pointing the bow on the student violin, indicating to correct the posture (physical

modelling); (ii) imitating the student's posture showing how it is being done and how it should be done (demonstrating); (iii) teacher says many times "stand up, stand up!" (being insistent).

**Table 6.4** Strategy physical modelling; demonstrating and being insistent reported by student

Strategy reported	Student report	Example from the lesson
Physical modelling; demonstrating and being insistent	<p>C: Do you have more examples like the last one that can be helpful in your practice? That you don't need look in your notebook, you just remember?</p> <p>S4 (student thinking) I have to think.</p> <p>C When you take the violin and start to play?</p> <p>S4. Don't know (student thinking)</p> <p>C Do you remember the posture?</p> <p>S4 Yes! To keep my back straight.</p> <p>C Is this the first thing that you remember?</p> <p>S4 Yeah! (Lucy, S4)</p>	<p>Student is playing a G major scale while teacher gives the following task: doing all the notes with down bows</p> <p>T2 <i>Stand up! Straight! Lift the violin up! Lift the violin up! Excellent! Slower! Prepare! Really fast bowing.</i></p> <p>Student starts to play the scale again</p> <p>T2 <i>Stand up (teacher puts the bow on the student back). Prepare, brilliant! Wait! Prepare! Thank you! Lift your violin up (teacher models student posture).</i></p> <p>Following, teacher brings more information about how bow should be used on the scale. Student starts to play the scale again</p> <p>T2 <i>Stand up! Stand up! Keep your violin up! If you leave your violin forward you bring the D string to your bow. Stay in the opposite, this way with the A string up. Look, instead of this, do that (teacher demonstrates the wrong and the correct posture)</i></p>

Finally, the fourth excerpt (Table 6.5) was taken from Bruno's interview. He gave examples of how the strategy 'encouraging critical thinking' was used in his lessons. Apparently, this strategy was used as a means to clarify the aspects he had to remember before starting to play the piece. Such aspects were the main message given by the teacher. At the same time, critical thinking was also used in order to encourage Bruno to develop a point of view concerning the piece.

**Table 6.5** Strategy encouraging critical thinking reported by student

Strategy reported	Student report	Example from the lesson
Encouraging critical thinking	I shouldn't rush, and ... What the key is when we start the set. (...) I think about the character of the piece, and how to make it sound more like... yeah! (Bruno, S3)	Teacher and student start to work on the Bach Concerto. Teacher starts asking: T2 <i>What do you think about this piece?</i> S3 <i>I think it is jumpy!</i> T2 <i>Jumpy? You mean the character?</i> S3 <i>yeah, a kind of jumpy, It is a kind of Vivaldi</i> T2 <i>Jumpy, do you know what jumpy? Someone is a jumpy person.</i> S3 <i>I don't know what it means but, I mean it's kind of moving, it's a lot of moving in my arm it's sort of Vivaldi, Vivaldi concerto.</i>

Some students seem to have preferences concerning specific strategies used to convey information. Particularly, Alice seemed to prefer “demonstration” and “using metaphors”. She explained how demonstration could help her to understand the teacher’s intentions (Table 6.6).

**Table 6.6** Strategy demonstrating and using metaphors reported by student

Strategy reported	Student report	Example from the lesson
Demonstrating and using metaphors	Normally when he plays the section where it needs to be a gypsy fight, he did it himself. Like a tempo, I can hear what [it] sounds like. (Alice, S1)	They are studying the piece “Hungarian dance” (Brahms). The teacher is correcting some notes and rhythms. Before a given repetition starts teacher says: T1: <i>Ok, good, Let's see how much vibrato and how gypsy fight could you be today! Ok, off we go!!</i> At this time has a little of funny in the class and they start to play T1 <i>That is the one! Can you hear on the piano, it is going um pa, um pa, all the time. That's four quavers, so you have go wait for um pa, so it is gonna be</i> (while teacher is playing he says) <i>one, two, one, two.</i>

A similar opinion was shared by Ellen who chose demonstration as a useful strategy to understand instructions given by her teacher concerning the practice:

**Table 6.7** Strategy demonstrating reported by student

Strategy reported	Student report	Example from the lesson
Demonstrating	He shows me how to do the low four [finger] and also do the patterns going on the E-string. (Ellen, S2)	They are finishing a piece; teacher is playing on the piano with student. When they finished, teacher asks: T1 <i>Do you know when you do the setting up? When do you do the fourth finger on the E string? Yeah, and it's just the same place again, isn't it?</i> (Teacher plays the passage showing how the finger should be and then plays again showing how the student is placing the fourth finger)

## 6.2 TEACHING CUES IN STUDENT PRACTICE

Data analysis revealed some students' experiences of teachers' instructions that could be interpreted as teaching cues. These instructions included words or gestures used by teachers to summarize information regarding specific skills which emerged in the students' interviews. Such teaching cues were classified taking into account their typology (e.g. technical teaching cue, structural teaching cue). Moreover, this categorization took into account the strategy used to convey information (see Chapter 5, 5.4).

Overall, technical teaching cues were the most reported typology, while using metaphors was the most embedded strategy. The Table 6.8 illustrates such findings. Descriptions of each teaching cue are presented in the next paragraphs.

**Table 6.8** Teaching cues in student practice

Teaching cue reported	Teaching cue typology	Teacher strategy to convey information
Mouse hole	Technical teaching cue	Using metaphor and physical modelling
Like balloon	Technical teaching cue	Using metaphor
Keep my thumb up	Technical teaching cue	Demonstration
Playing in gypsy style	Interpretative teaching cue	Using metaphor
To imagine it is a game	Structural teaching cue	Using metaphor



### 6.2.1 Technical teaching cues

The first example of technical teaching cue was taken from Lucy's interview. In the following quotation she explains how such a cue was used to clarify how she might correct her left hand position. This cue was conveyed through physical modelling (Table 6.9 and Figure 6.2):

**Table 6.9** Teaching cue "Mouse hole" in student practice

Technical teaching cue	Student report	Example from the lesson
<i>Mouse hole</i>	I think about my tuning and my shapes in my hand so like, holding my bow, holding my violin and the little pose. He said to remember it while thinking of the <b>mouse hole</b> , so I have that little hole there. And also how to which bones is in my... like when I'm doing my scales which bones to do. (Lucy, S4)	They are working in a scale. Student starts to play and immediately teacher says: <i>T2 Mouse hole!</i> (While he put a pencil between the violin arm and student's fingers) (see Figure 6.2)



**Figure 6.2** Illustration of the teaching cue "mouse hole" – Extract from the video recording / Teacher Alexander and Student Lucy

At the end of the interview Lucy reported two other examples of technical teaching cues, which she considered helpful for her practice:

**Table 6.10** Teaching cue “Balloon” in student practice

Technical teaching cue	Student report	Example from the lesson
<i>Balloon</i>	(...) Also my bowing like balloon, also how to bow, like how to keep my fingers because I always remember that because he is always showing me to keep my thumb up	They are approaching the movement of the bow in the G major Scale. T2: <i>Once more, focus on the control of your circle landing and freedom ... and let it go.</i> The student start to play and the teacher says: T2: <i>You are still afraid of letting it go, come on let it go, come on.</i> At this time the teacher go close to the student and ask: T2: <b><i>Have you ever heard a balloon bursting?</i></b> S4: <i>No, yes,</i> T2: <i>Touch it, How does it sound, imagine and emulate on the violin.</i>

When Lucy talked about her bowing, saying “my bowing like balloon”, she was using the same teaching cue (i.e. the words) that her teacher used in the lesson to exemplify how the bowing should sound. The teacher metaphorically compared the sound of the bow with the “balloon bursting”. This comparison was illustrated through gestures and demonstration.

Table 6.11 sets out a student report that reflects the teacher’s concern with the position of the bow. The teacher has constantly emphasized this issue. In this case, the teaching cue “thumb up” was used to demonstrate a correct position of the thumb.

**Table 6.11** Teaching cue “Thumb up” in student practice

Technical teaching cue	Student report	Example from the lesson
<i>Thumb up</i>	Like how to keep my fingers because I always remember that because he is always showing me to keep my thumb up. (Lucy, S4)	The student starts to play while teacher is talking T2 <i>That's it, your thumb is not helping; your thumb is too passive, the bow seat on the thumb like this (he demonstrates the <b>thumb up</b>), that is it. Faster, faster ... wait ... prepare ... that's it ... be more brave, let it go ... quicker ... prepare, prepare! That's it again, thank you! ... good!</i>

### 6.2.2 Interpretative teaching cues

The example of interpretative teaching cues was taken from Alice's interview. She explained that the expression "playing in gypsy style" (Table 6.12) was used to assist her to refine some particularity regarding interpretation. Moreover, the teacher used this teaching cue as a means to clarify his perception concerning the character behind the piece, which seemed to be understood by the student.

**Table 6.12** Teaching cue "Gypsy style" in student practice

Interpretative teaching cue	Student report	Example from the lesson
<i>Gypsy style</i>	Well, the practice the bits that I'm not sure about, and yeah, just to keep practising to make sure that (...) my 7 <sup>a</sup> diminish, something a part of my piece, I need, I mean Like <b>playing in gypsy style</b> . (Alice, S1)	They are studying the piece "Hungarian dance" (Brahms). The teacher is correcting some notes and rhythms. Before a given repetition starts teacher says: T1: <i>Ok, good, Let's see how much vibrato and how gypsy fight could you be today! Ok, off we go!!</i> At this time has a little of funny in the class and they start to play

### 6.2.3 Structural teaching cues

The example of structural teaching cues was taken from Ellen's interview. Her teacher used the cue "to imagine it is a game" (Table 6.13) as a metaphor to describe structural aspects that she must take into account in sight-reading:

**Table 6.13** Teaching cue "Imagine it is a game" in student practice

Structural teaching cue	Student report	Example from the lesson
<i>Imagine it is a Game</i>	He tells me that when I am doing sight-reading to imagine it is a game so I can't stop and he also tells me to play the scales more like a piece than a scale and should be aware of the fingering and a good vibrato in a low flow. (Ellen, S2)	They are working on sight-reading. At the end of the task teacher says: T1 <i>That is really good anyway, think of the strategy when you get it, you are good with the rhythms and clearly bowing this matrix sight-reading. Again part of it is if you can keep going, it is like a game.</i>

### 6.3 SELF-CUES

As referred to in Chapter 1 (1.3), self-cues in a sports environment are adopted by students when they give themselves cues in a process often referred to as “self-talk”. During the interview it was possible to observe that the violin students sometimes used different words to summarize their teacher’s instructions. All these words were associated with an instruction given by the teacher (i.e. teaching cue). Although students recognized the expression used by the teacher they consciously chose a different term to name the instruction itself. This choice differentiates a self-cue from a teaching cue in instructional communication. Self-cue does not mean that the teacher had not conveyed the word before; the word might not be necessarily new in the communication established between teacher and student. Rather, it means that the student deliberately chose his/her own vocabulary to summarize information.

The following three examples illustrate expressions used by students that were considered here as self-cues. All these examples were not mentioned by teachers in the observed lessons. The first one was taken from Bruno’s interview. When he was asked to explain the instruction “sustain” (given by his teacher), he used another word to refer to its meaning: “sustain, it’s apparently what we should call **push bowing**”.

The second example was identified in Ellen’s interview. When asked about the meaning of the nonverbal teaching cue “movements with the hands imitating the bow” she used a different expression: “Yes, like **smooth long bows**”.

The last example was taken from an extract of Patricia’s interview where the meaning of the teaching cue “rock the bow” was asked. According to Patricia, this instruction seemed to remind her of another term: “keep the bow and hand **like a rabbit**”.

## SECTION 3 SUMMARY

Section 3, (i.e. Chapter 5 and Chapter 6), presented teachers' perspectives and students' perceptions on instructional communication in one-to-one violin lessons. The results presented in Chapter 5 revealed four themes regarding the teachers' perspectives: (i) contextual elements; (ii) perceived professional responsibilities; (iii) teacher (inter) actions; and (iv) strategies to improve understanding of instruction. These results suggested that each teacher had a pedagogical multimodal vocabulary to communicate musical ideas. Teachers reported the use of such vocabulary according to student individual characteristics such as: student personality; student learning style; and student age, gender and stage of learning. The pedagogical vocabulary was recognized as encapsulated in eight communication strategies, namely: (i) being insistent; (ii) demonstrating; (iii) encouraging critical thinking; (iv) encouraging to play freely; (v) avoiding negative words; (vi) physical modelling; (vii) using metaphors; (viii) using visual aids.

### CHAPTER 5

Teachers' perspectives

Chapter 6 presented students' perceptions concerning the strategies used by teachers to convey information, teaching cues used by teachers in instructional communication and self-cues that students develop to summarize teachers' instructions. Overall, students indicated that the strategy of demonstrating was further explored in instructional communication, while technical teaching cues were mentioned more than other typologies discussed here. In addition, data analysis allowed the identification of different expressions used by students to summarize

### CHAPTER 6

Students' perceptions

teachers' instructions. Such terms were considered self-cues.

All the results in this section presented evidence to answer the first research question (i.e. how has instructional communication been used by teachers in one-to-one instrumental lessons?). The thematic analysis provided an opportunity to understand teachers' opinions and practices concerning instructional communication in one-to-one violin lessons, and students' perceptions about the same process. The next section is going to present the second part of the results, concerning the meanings and the effectiveness of teaching cues.

# **SECTION 4**

## **RESULTS - TEACHING CUES: MEANINGS & EFFECTIVENESS**

### **CHAPTER 7**

Meanings and the use of teaching cues

### **CHAPTER 8**

Communication effectiveness of teaching cues

## INTRODUCTION

This section presents the results concerning the meanings and the effectiveness behind the teaching cues in verbal and nonverbal instructional communication. Chapter 7 presents the meanings behind teaching cues used by participating teachers, as well as their use in one-to-one instructional communication. These results are based on the analysis of 28 teaching cues identified in the lessons, which were further explored in data analysis.

Based on this set of cues, the results of a comparative analysis that triangulated teachers' intentions and students' understandings are presented in Chapter 8.



## CHAPTER 7: MEANINGS AND THE USE OF TEACHING CUES

This chapter examines the meanings behind the selected teaching cues as well as its use. The cues were identified based on the following criteria: (i) summarized instruction used to alleviate information overload; (ii) adopted to guide the focus during the development of skills; (iii) preceded by a detailed explanation of content. Table 7.1 presents the set of teaching cues selected for data analysis.

**Table 7.1** Set of the selected teaching cues

<i>Teaching cue code</i>	<i>Teaching cues</i>
1	Focus in binoculars
2	B into the C
3	Put the finger in the ear
4	Make a copy
5	All the way
6	Shapes and singing the notes
7	Gypsy fight
8	Right the way through
9	Full bow (doing some movements with hands)
10	Perform, perform
11	Right the way through
12	Try to get the flow
13	Tap, tap, tap
14	Place the bow on the student's shoulder
15	Rock the bow
16	Imagine first the finger pattern
17	Play comfortably
18	Exemplifying the pressure
19	Slide rather jump
20	Movements with hands, (imitates the bow)
21	Control
22	Sustain
23	Balloon
24	Try to move the hand like an arc
25	Movement with the hand, the wrong and the correct position of the left hand
26	Remember the thumb
27	The thumb is on the corner
28	Bring your hand around

The nature of these selected teaching cues was verbal or nonverbal (Table 7.2). The nature of those cues does not mean that they were conveyed only through a unique

mode of communication, rather than this was the main mode that characterized the nature of the cue.

**Table 7.2** Set of the selected teaching cues according to their nature

TC code	Verbal teaching cues	TC code	Nonverbal teaching cues
1	Focus in binoculars	3	Put the finger in the ear
2	B into the C	4	Make a copy
5	All the way	6	Shapes and singing the notes
7	Gypsy fight	8	Right the way through
9	Full bow (doing some movements with hands)	14	Place the bow on the student's shoulder
10	Perform, perform	18	Exemplifying the pressure
11	Right the way through	20	Movements with hands, (imitates the bow)
12	Try to get the flow	25	Movement with the hand, the wrong and the correct position of the left hand
13	Tap, tap, tap		
15	Rock the bow		
16	Imagine first the finger pattern		
17	Play comfortably		
19	Slide and not jump		
21	Control		
22	Sustain		
23	Balloon		
24	Try to move the hand like an arc		
26	Remember the thumb		
27	The thumb is on the corner		
28	Bring your hand around		

### 7.1. TEACHING CUES MEANINGS

The meanings here presented took into account the typologies previously discussed in Chapter 3 (i.e. structural, aural, technical, interpretation and presentation teaching cues). Such meanings were grounded on the teachers' intention behind each cue, which were explored through the video and posteriorly, if necessary, checked in the interviews.

## AURAL TEACHING CUES

The aural teaching cues concern the summarized instruction used to convey information on the development of aural skills (Davidson, 2002). The following paragraphs describe a set of examples where this typology was used. The first example, “focus in a binoculars,” was adopted to help the student to tune the violin. Such cue was embedded in the strategy using metaphors. Table 7.3 shows the teacher intention and the lesson excerpt where such cue was used.

**Table 7.3** Teaching cue 1 “Focus in binoculars”

Teacher Intention	Lesson context
<p><i>Right, because for Alice, because she is now working in the grade 6, she has to be able to tune her own instrument in the exam the accompanist is not allowed to tune it for her. So I have just found quite useful way because as the fifths gradually get nearer and nearer the baseline stop so this is almost in line but not careless and suddenly the sight is focused so it's just a noun to use. And thus it seems to work.</i></p>	<p>It is the beginning of the lesson. The teacher is on the piano, playing the tones while the student is trying to tune her violin. While teacher is playing the tones to assist with the tuning, he establishes a nonverbal communication, by eye contact, repeating the note on the piano that was not in tune. After, he asks the student to play both strings together. When she plays teacher detects the tuneless notes and says:</p> <p>T1: Do you remember what we were saying about <b>focus in binoculars</b>?</p> <p>S1: Yeh!</p> <p>T1: So, does that sound right?</p> <p>S1: I don't know what the sound is suppose</p> <p>T1: You don't know what is supposed to sound right. After, teacher takes the student's violin and puts the G string low, for the student can retune again.</p> <p>T1: Ok, so now you can put that right. So what we can do is you gonna play both strings and you gonna turn that and see if this sounds (teacher put the hands on the face and imitate the binoculars).</p> <p>At this time student attempts to tune with two strings</p> <p>T1: Did you hear it come back out? (he made a gesture with hands indicating the approximation)</p> <p>Them they try the A and E String together and that was good. They finished with teacher saying "Good!"</p>

The second example of aural teaching cues, “B into the C,” (see Table 7.4) was embedded in the strategy demonstrating. In this example, the teacher tried to demonstrate the intonation of specific notes. In this extract it is possible to observe that the teacher is certain that his intention is clear and that it is the student’s responsibility to “know” it.

**Table 7.4** Teaching cue 2 “B into the C”

Teacher Intention	Lesson context
<i>B is leading to C, it needs to be very high it needs to say I want to go home to C.</i>	<p>T4 <i>Are you listening to what you are playing?</i> S8 <i>yes</i> T4 <i>So, you can say handle your heart you listen to every single millimetre of you playing. Listen. The <b>B into the C!</b> Here. BC</i> She demonstrates again with more highlights to the note b and c. When teacher is playing student is making some pizzicatos (he is not so concentrate). He plays again and teacher says: T4 <i>A bit better. Were you listening there?</i> S8 <i>Yes</i> T4 <i>You don't sound convinced</i> S8 <i>no</i> T4 <i>Why were you not listening to yourself? Why should I listen to you if you are not listening to yourself? You listen to you. Listen to yourself and then you will really know that you are doing what I am asking you to do. Can you do it and this time you can carry on.</i></p>

The third example of aural teaching cue was a gesture when the teacher had “putted the finger in the ear” (see Figure 7.1). When teacher Alexander putted the finger in his ear (see Table 7.5), he was trying to drive the student’s attention to the intonation of the notes. Such cue was embedded in the strategy using visual aids, conveyed through nonverbal communication.



**Figure 7.1** Visual representation of teaching cue 3 “put the finger in the ear” - Extract from the video recording | Teacher 2 and Student 3

**Table 7. 5** Teaching cue 3 “Put the finger in the ear”

Teacher intention	Lesson context
[it is] a cue to intonation, to choose the right note	<p>T2: <i>Could you do once more without me saying anything? Remember everything.</i></p> <p>Student restart, teacher didn't say anything just <b>put the finger in the ear</b></p> <p>T2: <i>You were observing, what do you think? How much of it is good?</i></p> <p>S3: <i>I think that the third line isn't as good as the rest</i></p> <p>T2: <i>in what point?</i></p> <p>S3: <i>I think that my fingers rush</i></p> <p>T2: <i>yes, on the way up your finger rush on the way down it is bit better! but then also, What do you think about the tuning? Did you get all the notes right?</i></p> <p>S3: <i>I think that I got most of the notes right.</i></p> <p>T2: <i>Yes! sometimes you play c sharp sometimes you play c natural. I don't know which one to choose. (they smile) It has to be really precise perfect every single note as planned. Let's do it one last time the section.</i></p>

#### INTERPRETATION TEACHING CUES

Interpretation teaching cues concerns the summarized information used to assist students in developing interpretative skills. The teaching cues classified in such typology are presented here. The first teaching cue, “make a copy of the accordion sound,” (Table 7.6) was embedded in the strategy using metaphors. Teacher explained the cue verbally, while exemplifying the accordion through gestures.

**Table 7.6** Teaching cue 4 “make a copy of the accordion”

Teacher Intention	Lesson context
<p><i>First of all it's so that they understand what the passage in the music is there for. So that then they can use their own imagination. Once you said oh that's what it is, you know, they will think Oh, um, that's if they know what on a piano accordion is a squeezebox. And just hopefully that will mean they'll better -produce better result when I come to play it and also they might wonder what this sounds a bit funny. What's this for? So it's something to know why that particular new basis in music</i></p>	<p>They are playing the piece together (teacher on piano)  When piece is almost finished the teacher asks:  T1: <i>Could that be softer and that louder?</i>  The student immediately starts to play. Teacher asks:  T1: <b><i>Do you remember what is supposed to be copying? It is copying something.</i></b> The student does not understand what exactly the teacher is trying to say. At this moment the teacher starts an explanation about the context of the piece and composer.  T1: <i>It is a sort of an instrument , you know. It's all about Brahms and his framework, it's all about different types of ... They used to call it gypsy music. There is an instrument in a gypsy band that they used... In this time teacher decides to use the violin to exemplify.</i>  T1: <i>It's gonna be something to play more one note... that goes... (and he demonstrates) I'll do my impersonation of it. See if you get it.</i>  By the end of the demonstration the student hadn't gotten it yet. The teacher gives another example, to demonstrate his intention. Following, he moves the hands like an accordion. Initially, the student thinks teacher is trying to represent a harmonica. After a first attempt, student finally guesses what teacher is trying to demonstrate: "the accordion!" They seemed excited in finding the instrument that looks like that part of the piece. After this, the teacher starts to explain the similarities between the piece and the accordion.  T1: <i>So, it's when it goes (sing da á and does the gestures of the accordion). I don't know but you see me do it.</i>  S1: <i>I like that</i>  T1: <i>You like that. So, whoever is playing squeezebox pushes it together harder or pulls apart.</i>  (The teacher explains the mechanism of this instrument.). In this moment the student starts to play while the teacher imitates the movement of the accordion; also he sings when he open the arms (daaá).  T1: <i>That's it, yeah, you probably don't need to do so much vibrato there, do you? because if you don't do vibrato on it gives the effect of the instrument more.</i></p>

The teaching cue “All the way” (Table 7.7) was verbalized while teacher Alexander made a gesture to make his intention clear, improving the student’s expressive skills. This cue was classified as interpretation teaching cue and was embedded in the strategy encouraging the student to play freely.

**Table 7.7** Teaching cue 5 “All the way”

Teacher Intention	Lesson context
<i>I think that I mentioned the bowing, all the way. This means you use the whole length of the bow; you use right from the hilt of the bow to the tip... you have to build expression in different ways, and so the only way to do that is free up the arm; you have the ability to use any part of the bow, and that starts with playing with the full bow.</i>	They are working now in the next part of the study. Student starts to play and soon teacher asks him to stop. Teacher puts his hand in the ear saying: T2 <i>Intonation!</i> Student is playing while teacher is giving instructions: T2 <i>Bravo! Pull back <b>All the way!</b></i> (Indicates the student’s bow). Afterwards, the teacher starts to correct the intonation of some notes.

The teaching cue, “shapes and singing the notes” (Table 7.8), embedded in the strategy demonstrating, the teacher is suggesting a possible interpretation of a specific part of the piece. As Figure 7.2 shows, the teacher is moving her arms, shaping and singing the notes. However, it was clear in the transcription that the student did not have a chance to try the suggestion.

**Table 7.8** Teaching cue 6 “Shapes and singing the notes”

Teacher Intention	Lesson context
<i>Singing and using hands, being demonstrative; it is another means by which to get a message across. Why not use the voice when playing the violin feels to me like an extension of singing. Also the violin is a physical instrument; sounds are made through movement of the body.</i>	They are working on a given piece. T4 <i>What do you feel the melody’s doing in all that? Is it static, is it moving? What does it feel?</i> S7 <i>Moving.</i> T4 <i>Which notes did you feel more important?</i> S7 <i>The high ones</i> T4 <i>Of those four groups any one in particular?</i> S7 <i>B</i> T4 <i>B BB AA CC BB is that what you were playing?</i> (she sings emphasizing note B and doing shapes with the hands) S7 <i>Not really</i> T4 <i>You see I wonder whether it first beats to the bar. (She sings emphasizing the first beat in the bar and doing shapes with the hands). So the first beat of the bar is quite important, so I wonder if you can <b>stick to this shape</b> as you play it (at the beginning). Then here, a completely different movement (teacher plays the next part) So quite a light bow.</i> Here, student starts to play the second part of the piece.



**Figure 7.2** Visual representation of teaching cue 6 “Shapes and singing the notes” - Extract from the video recording | Teacher 4 and Student 7

The final example of the interpretation teaching cues “gypsy fight” (Table 7.9) summarizes all the information that teacher intended to communicate about the musical character of that piece. This cue was embedded in the strategy using metaphor. This cue appeared before the student started to play. At that moment, the teacher challenged her to play in a “gypsy style”.

**Table 7. 9** Teaching cue 7 “Gypsy fight”

Teacher intention	Lesson context
To develop the interpretation of the piece	They are approaching the piece “Hungarian dance” (Brahms). The teacher is correcting some notes and wrong rhythms. Before a given repetition starts, teacher says: T1: <i>Ok, good, Let's see how much vibrato and <b>how gypsy fight could you be today!</b> Ok, off we go!!</i> At this time has a little of funny in the class and they start to play

#### PRESENTATION TEACHING CUES

Presentation teaching cues concern the summarized instruction used to convey information of performance on stage. The following examples illustrate such a typology. The first one, “right the way through,” (Table 7.10) was embedded in the strategy encouraging student to play freely. Teacher David has communicated the teaching cue to summarize an instruction regarding how to bow. He was moving from three different forms to convey information: talking, demonstrating and supporting the student, modelling the movement of the bow.



**Table 7.10** Teaching cue 8 “Right the way through”

Teacher Intention	Lesson context
<i>Because she uses such small amounts of bow most of the time, my intention was to encourage her to use all the bow, to be freer.</i>	<p>Student starts to play two notes</p> <p>T1 <i>Let's come back to these two notes. Down bow from about here (he demonstrates the down bow) and up bow (demonstrates the up bow) <b>Right the way through.</b> So down...</i></p> <p>Student plays the two notes again, paying attention to the bow.</p> <p>T1 <i>Yours was this; watch: (teacher shows how the student is doing) I want you to do: (teacher shows the way he desires)</i></p> <p>Student plays (teacher moves his bow)</p> <p>T1 <i>That's it! What did you notice about those two notes? The second one has a little bump in it, doesn't it?</i></p> <p>S1 <i>Yeah</i></p> <p>T1 <i>So be lighter (demonstrates playing sol do) when you throw the bow up just be light don't push on it. So G C F.</i></p> <p>Student plays three notes G C F, paying attention to the bow. (Teacher moves the bow)</p> <p>S1 <i>Ai, I don't know.</i></p> <p>T1 <i>Yeah (not so convincing) Ok, nearly, so that's ... let's play again from the beginning.</i></p>

Similar to the previous example, the next one, “full bow,” (Table 7.11) was also conveyed through verbal and non-verbal communication (i.e. doing some movements with hands, imitating the bow). This cue was used to assist student with the range of movement of the bow. As shown in the Figure 7.3, the teacher was moving the hands imitating the bow and saying “full bow”. This cue was embedded in the strategy encouraging to play freely.

**Table 7.11** Teaching cue 9 “Full bow - Doing some movements with hands (imitating the bow)”

Teacher Intention	Lesson context
<i>The movement that I show them is another interpretation of full bow, or all the way, or all the way up, all the way down; that movement is to visually enhance what I meant. Sometimes I do it without even saying; they recognize that gesture.</i>	<p>They are working on the G major Scale.</p> <p>While the student is playing, the teacher is clapping the time with fingers, doing exactly the movement that is needed to do with the bow. Sometimes he says:</p> <p>T2 <b>Full bow</b>, enjoy your sound (<b>move the arm imitating the bow</b>). <b>Full bow</b>, keep moving (move the arm imitating the bow)... <i>don't rush. I have seen the determination in your face; the concentration is sharp, excellent. Why don't you do that all the time? Was there a problem? You play so well. All the notes were there.</i></p>



**Figure 7.3** Visual demonstration of the Teaching cue 9 “Full bow - Doing some movements with hands (imitating the bow)” - Extract from the video recording | Teacher 2 and Student 4

When teacher Diana was working with student Vanessa on interpretative aspects of the music, she verbalized the cue “perform, perform” (Table 7.12), while nonverbal communication was also used. Such nonverbal communication included: singing, snapping the fingers and counting the tempo. This teaching cue was embedded in the strategy encouraging to play freely.

**Table 7.12** Teaching cue 10 “Perform, perform”

Teacher Intention	Lesson context
<i>I wanted her to give of herself. Play out. She can be an insular player, playing as though to herself in her bedroom. What I am aware of is the personality of the child. For me the violin offers a chance to develop aspects of one's self. I want Giulia to be encouraged to play out even when she is unsure of herself; I think this takes a leap of faith</i>	They are talking about some elements in the piece, which were not so good. The teacher asks the student to think about all the things discussed, while playing once again. While student plays, teacher is giving some instructions and scaffolding for the student's playing (starting to snap the fingers and count...) Before student starts to play again teacher says: T4 <b>Perform! perform!</b> Student plays while teacher is given helping T4 More... <i>A bit less, one, two, three, ...</i> (snapping the tempo).

The final examples of presentation teaching cue, “right the way through” (Table 7.13) and “try to get the flow” (Table 7.14), were embedded in the strategy encouraging to play freely. Both cues were used by the teacher Diana but with different students. These cues summarized information concerning how the

student should perform the entire piece. In addition, the teacher also used nonverbal gestures to make the verbal communication clear. The cue “right the way through” was used also by teacher David (teaching cue 8) and both teachers used it with similar intentions, (i.e. to develop bowing skills).

**Table 7.13** Teaching cue 11 “Right the way through”

Teacher intention	Lesson context
To feel the bow, to use all the bow	<p>T4: <i>I really appreciate how you are standing, I could see. Especially at the opening when... we have being talking about.</i> (Student plays the two first chords and moves the body forward and backward) <i>Try to get the flow! You just do the down-bow! So you're on the right foot and then ...</i></p> <p>They play together the simple bow down with the movement with the body.</p> <p>T4: <i>Yes, so really, so feel the bow quite heavy and straight, that is it. <b>Right the way through!</b> All the way to the point.</i> (Teacher plays and student imitates)</p> <p>T4: <i>Yes! Good, so you feel that your body is helping you in that movement.</i></p>

**Table 7.14** Teaching cue 12 “Try to get the flow”

Teacher intention	Lesson context
To feel the bow and play freely	<p>They start to work on the piece. The student starts to play from the beginning of the piece. She is reading the score and she seems to be quite lost. After the student finishes the first part of the piece the teacher complains and gives some instructions. She talked about posture and about the position of the student's feet.</p> <p>T4: <i>I really appreciate how you are standing, I could see. Especially at the opening when... we have being talking about.</i> (Student plays the two first chords and moves the body forward and backward) <i><b>Try to get the flow!</b> You just do the down-bow! So you're on the right foot and then ...</i></p> <p>They play together the simple bow down with the movement with the body.</p> <p>T4: <i>Yes, so really, so feel the bow quite heavy and straight, that is it</i></p>

## TECHNICAL TEACHING CUES

Technical teaching cues concern the summarized instruction used to convey information regarding technical skills explored in one-to-one instrumental lessons. This typology was further explored during the lessons observed so that several examples are here described. The first one, ‘tap, tap, tap,’ (see Table 7.15) was embedded in the strategy using metaphor. This cue describes how the end of a given piece should be performed. Particularly, the teacher seemed to use this cue to explain *spiccato*.

**Table 7.15** Teaching cue 13 “Tap, tap, tap”

Teacher Intention	Lesson context
<i>Well it was to get the directions of the stroke because she was being too lateral. I mean, In the Brahms in the Vivace it was too [teacher sing] it was too long and I want to do more vertical strokes, so saying tap, you know [he tap in the table] if you tap something it works as tap a suggestion that it is a down bow, shorter.</i>	They are working in some technical aspects in a piece. T1: <i>Now play me a couple of bars of that.</i> Student plays T1: <i>Ok, it's very good, it's very spirited. Can you get it ... here (teacher play) What yours is at the moment (he demonstrate what student is doing) is a bit on the string.</i> Student plays T1: <i>That's it! That's it!</i> After the Teacher explains that the sound should be like a <b>tap, tap, tap</b> . Student tried again and got it.

During the lesson observed, teacher Alexander “placed the bow on the student’s shoulder” (Table 7.16), while the performance was being carried out. Apparently, he was interested in making clear an instruction concerning to the relaxation of the shoulder. This cue was embedded in the strategy physical modelling. Figure 7.4 shows the exact moment when the teacher was using this non-verbal cue. This cue was considered a summary of all the information concerning the required relaxation of the shoulder to play a specific bowing.

**Table 7.16** Teaching cue 14 “Place the bow on the student's shoulder”

Teacher Intention	Lesson context
<p><i>You can see clearly that when they, the person plays the instruments or just seating on the table you see that they are tense, their shoulder it come up, is a hanged of your shoulder is the signal of tension and you have to deal a losing that tension by remind them. I have to remind them the ugly they know sometimes your body just do it without you knowing it, so physical feelings sensing about part of your body is important while you play, so I would use the bow touching the shoulder just tapping and they know. Instead of that I could do the same using my hand, but I would avoid it, to use the bow is a bit more appropriate.</i></p>	<p>Teacher and student are working on G major Scale. They are standing and very close. The task is to play two times each note of the scale. The bow needs to be very fast. Suddenly teacher asks to do just down bows, as a circle. Before student starts he demonstrates once. After such demonstration he says:</p> <p>T2 <i>Do the circle, all the bow! stay on the string. That's it but fast! Better, hold on, give to the string, relax, shoulder (he placed the bow on the student shoulder), elbow up, shoulder down, elbow up.</i> (He is touching the student all the time). <i>He has to support that string, you got to create this direction so the bow can travel straight ... if you have this elbow down he goanna go ...</i></p> <p>The student starts to play</p> <p>T2 <i>That's it, your thumb is not helping; your thumb is too passive, the bow seat on the thumb like this, that is it. Faster, faster ... wait ... prepare ... that's it ... be more brave, let it go ... quicker ... prepare, prepare! That's it again, thank you! ... good!</i></p>



**Figure 7.4** Visual representation of teaching cue 14 “place the bow on the student's shoulder” - Extract from the video recording | Teacher 2 and Student 4

Teacher Edgar used a common exercise taken from Paul Rolland's pedagogy<sup>25</sup> to develop a technical skill of the right hand and summarized it as "rock all the bow" (Table 7.17). This cue was embedded in the strategy demonstrating. Apparently, teacher Edgar used it to clarify his intentions concerning the student's position and the flexibility of his right hand.

**Table 7.17** Teaching cue 15 "Rock the bow"

Teacher Intention	Lesson context
<p><i>Rock the bow from Rolland, Rolland say, talk some exercises to avoid the excessive tension, one of them is Rock in Roll, bow. So rock "control", rock the bow to shake the bow in this way. And this is rock apparently you need to rock the bow. And roll the bow in the strings, so it stop on rock or stop on bow, it's just to avoid unnecessary tensions in the right hand.</i></p>	<p>Teacher and student are starting the discussion on the piece. They are in front of a music stand, looking at the score. Before they start, the teacher asks if the student has some doubts about the piece. He is talking about the hand's flexibility in that piece. He is all the time showing the correct right hand movement and showing the fingers' flexibility.</p> <p>The teacher takes the violin and starts doing some movements with the bow in order to explain his idea of flexibility. Following this, the student imitates.</p> <p>T3 <b>Rock the bow.</b> <i>Rock again. Rock. The ... thank you could you try every day in the beginning rock all the bow, and keep ... (show the fingers on the bow hand). Now let's play the same and when I say "freeze", stop please ... you have to check ...</i></p> <p>Before the student starts to play the teacher explains his ideas of flexibility. He starts to play and stops in the middle. Teacher says:</p> <p>T3 <i>Freeze! stop, rock the bow. Rock and roll (moving the hands) continues. Is better, I like that in the certain point you did ... (demonstrate), good, keep going. Stop, rock, and roll. Ready go. Stop, rock and ... roll. They repeat 3 more times, continuing along the piece.</i></p> <p>T3 <i>Good, it is better, excellent!</i></p> <p>He does some movements with the hand in order to explain how the bow should be used.</p>

The following example of a technical teaching cue, "imagine first the finger pattern," (Table 7.18) was used through the strategy encouraging critical thinking, stimulated by mental images. This cue was conveyed through verbal instruction in order to summarize all the information concerning how the left hand must be used.

<sup>25</sup> 'The Teaching of Action in String Playing' - 1974.

**Table 7.18** Teaching cue 16 “Imagine first the finger pattern”

Teacher Intention	Lesson context
<i>I also encourage them to be at "aware" working or listening here, here or there, the first, the second and the third, or the forth finger, so this is in E major in first position, so what I try them to imagine first of all, what would have been working in a sight reading a lot because of the times, so I try then to be at aware of the finger pattern of the scale, so they know what is happening</i>	<p>They are practising A Major scale. The teacher is seated in front of the student.</p> <p>T3 <i>A Major, A major please.</i></p> <p>Parent: <i>No shifting, no shifting</i></p> <p>T3 <b><i>Imagine first the finger pattern</i></b></p> <p>At this time the student is strumming the fingers on the fingerboard, she is trying to do the finger pattern suggested by the teacher. The latter gives time for student to think.</p> <p>T3 <i>Yeah? The finger is clear? Is the finger clear? Are you sure?</i></p> <p>S6 <i>Yes.</i></p> <p>T3 <i>Have you been practising? Off we go:</i></p> <p>After this, the student starts to play the scale. She goes until the A string (note D) but she forgets the shifting to 3rd position and restarts the scale again. When she finishes, teacher says:</p> <p>T3 <i>Yeah, much better than the last week, yeah it's not clean, completely clean but it's much better.</i></p>

Teacher Edgar used the teaching cue, “play comfortable” (Table 7.19) embedded in the strategy ‘encouraging student to play freely’. The following example brings an excerpt of the teacher’s discourse where an incoherence concerning the use of this cue seems to exist. The teacher said that playing comfortable means to choose a comfortable tempo. However, in the lessons this same participating teacher gave the following instruction: “Let's play once more please, in the same tempo, in the same time, play comfortable!” Apparently, the student played slower than his first attempt before the instruction.

**Table 7.19** Teaching cue 17 “Play comfortable”

Teacher Intention	Lesson context
<i>I mean choose a comfortable speed, in the sight-reading they try then to play faster than they can. You know one of my priority on they play sight reading is that they play well not that they play fast, and they play a tempo and fast then I prefer that they play comfortable, slowly, so they can think in their pattern they have more chances to play the correct notes.</i>	<p>T3 <i>Let's play once more please, in the same tempo, in the same time. <b>Play comfortable!</b></i></p> <p>The student play and at the end, the teacher says:</p> <p>T3 <i>Good, much better, more consistent.</i></p>

When Eva, a student of teacher Edgar, was practising the A major scale and arpeggio during the lesson observed, the teacher tried to explain the required physical tension to perform a scale. Such explanation involved the establishment of differences between excessive and ideal finger tension. Therefore, he “exemplified the desired pressure of the fingers in the student arm,” (see Table 7.20 and Figure 7.5 for the moment when it happened). This teaching cue was embedded in the strategy physical modelling.

**Table 7.20** Teaching cue 18 “Exemplifying the pressure”

Teacher Intention	Lesson context
<p><i>When we they do this (touched Clarissa's arm), I try to transmit what I want them to do on the violin, for example if you have one "tension" to avoid squishing the string in excess instead of telling them, I try to send the information, as try to "way to avoid this", so may I? I want to release the pressure more and that, and this is what the violin is feeling when you play and this is what I want for you to feel. As you know, I was just sending information touching, kinaesthetically.</i></p>	<p>They are practising the A major scale and arpeggio, just with one finger. While the student is playing the teacher is talking and correcting some wrong notes. He asks the student to repeat the task:  T3 <i>Good, please, don't forget the thumb. And scales or rhythm when you do the whole thing... this leaves the pressure of the string (he demonstrates with his hand), keep the pressure all the time.</i>  After this, he takes the student's arm to <b>demonstrate the pressure</b> that student was doing and the pressure should be done.  T3 <i>May I have your arm? This is what I do.</i>  (Demonstration) <i>I press and I release ... This is what you do (demonstration)</i>  S6: <i>Oh</i>  T3 <i>Yes, the violin complain as well.</i>  Next, the student takes the violin and plays again.  Teacher sings the notes (A C E)  T3 <i>I like what you did 'cause you are doing the motion quite well ... I like that you release the pressure because you pull up the thumb again.</i>  She plays again.  T3 <i>Well done, excellent! Perfect! Yes!!</i></p>





**Figure 7.5** Visual representation of teaching cue 18 “Exemplifying the pressure” - Extract from the video recording | Teacher 3 and Student 6

Now, teacher David is working with Student Ellen on a D minor scale. To explain about the technical issues concerning the shifts, the teacher used the cue “slide rather than jump,” (Table 7.21). This cue was used to clarify the instruction concerning violin shifts and was embedded in the demonstrating strategy.

**Table 7.21** Teaching cue 19 “Slide rather jump”

Teacher intention	Lesson context
To do a natural shifting	<p>They are working in D minor scale. The teacher asks to play the slow version of the scale. Ellen plays with the same tempo she played before. When Ellen finished teacher says:</p> <p>T1: <i>Ok, now can you show me the shift on the first finger on the A string to the third position on the same string, so we are going from here.</i> Teacher demonstrates the passage (B, C#, D). Ellen starts to play immediately the three notes. When she finished teacher says:</p> <p>T1 <i>That’s it, so you actually gonna make that movement? Sometimes you sort of jump, instead of sliding, <b>can you set to slide rather jump</b>, otherwise if you knock the violin ‘cause you jump, the bow gets knocked and then it isn’t quiet as smooth, so try going all of this notes in one bow (teacher plays two times what he asked) with the slide up to the D”.</i> Ellen plays and immediately the teacher ask:</p> <p>T1: <i>Could you hear this last? They really... Don’t be shy about the slide. Be more bow from the hill.</i> Student play again and teacher</p> <p>T1: <i>Yeh, you’re still hiding it, you’re still going (teacher play as student doing), I want to hear it (teacher play with the slide between B and D and give a little smile before student start). Ellen attempt again and teacher says:</i></p> <p>T1: <i>Yes there it is! If you did that, obviously you can minimize can’t you? You doesn’t have to sound like that but don’t be frightened of the shift, if you try and jump like happened before you will knock the fiddle and you get out of the sound.</i></p>

Teacher David used “movements with hands” (imitating the bow) while he gave a long explanation concerning the student’s bow (Table 7.22). While the student was playing, the teacher was moving hand, imitating the bow. Although it is not evident in the image when this cue was conveyed (Figure 7.6), the teacher was trying to make instructions clear through movements. Based on this movement, this cue was classified in the strategy demonstrating.

**Table 7.22** Teaching cue 20 “Movements with hands (imitating the bow)”

Teacher intention	Lesson context
To student use long bow	<p>They are working in a specific bar of the piece.</p> <p>T1: <i>Here is one of these notes.</i> ( teacher plays the notes and demonstrate the bow going to the fingerboard) <i>Do this... when you play. Shall we see how could you get out off that ... that note? How could you? ... What do you need to have more off? For that note</i></p> <p>S2 <i>More bow</i></p> <p>T1: <i>More bow. So when you retrieve the up-bow just make sure you walk</i> (moving the bow, teacher demonstrates what the bow needs does one time all the phrase and the last time just the last two notes, the problematic point). <i>So that you really... just try from there ... don't worry about that, you are usually nicely in tune, just go forward it. So from (sing bom bom) up down...</i></p> <p>Student plays the same bar again and teacher <b>moves his bow</b> trying to pay attention to the bow</p> <p>T1 <i>Yeh, let's do this for me.</i></p> <p>Teacher goes to a new strategy, using others instructions.</p>



**Figure 7.6** Visual representation of teaching cue 20 “Movements with hands (imitating the bow)” - Extract from the video recording | Teacher 1 and Student 2

The following two examples of technical teaching cues, “sustain” and “control”, (Table 7.23) (Table 7.24) were embedded in the strategy being insistent. Teacher Alexander conveyed these cues to emphasize a given instruction concerning the technique of the bow.

**Table 7.23** Teaching cue 22 “Sustain”

Teacher intention	Lesson context
To the bow sustain the sound	<p>It is the start of the lesson. Alexander and Bruno are working in a technical study. Bruno starts to play the study very quick. He finishes the first phrase, so the teacher gives the following instructions:  T2: <i>Ok! First of all, your left hand doesn't have rhythm (he shows his hand moving very quick the fingers) your fingers haven't got muscle and control and it can run away from you. Secondly your bow doesn't have the sound, <b>sustain in that</b>. In the beginning it sounds good, at the end of the bow you lost some power.</i>  The student starts to play from the beginning and the teacher focuses on the student left hand. He is very close to student, giving some instructions while student is playing. (...)  Now student is playing from the beginning and teacher starts to snap the fingers and give some instructions:  T2: <b>Sustain!</b> (at the same time he points a finger) <i>control, control! Don't run ... every note! Better! Better! Let's do it once more!</i>  T2: <i>Could you do once more without me saying anything? Remember everything</i></p>

**Table 7.24** Teaching cue 21 “Control”

Teacher intention	Lesson context
Control the bow, the bow must sustain	<p>Before student starts to play again teacher gives more instructions  T2: <i>The bow, doesn't matter what you have on the left hand, (teacher demonstrate) the bow must sustain steady. So do not get affected by the left hand! Ok? Now student is playing from the beginning and teacher start to snap the fingers and give some instructions:  T2: <b>Sustain!</b> (At the same time he points a finger) <b>control, control!</b> <i>Don't run every note! Better! Better! Let's do once more!</i>  T2: <i>Could you do once more without me saying anything? Remember everything</i></i></p>

Again, teacher Alexander has used a cue to work on bow skills. He gave the example of a “balloon” bursting to clarify his intention concerning the student’s bow. This teaching cue which was embedded in the strategy using metaphor can be visualized on the Table 7.25.

**Table 7.25** Teaching cue 23 “balloon”

Teacher intention	Lesson context
to control the long bow and play free	<p>They are approaching the movement of the bow in the G major Scale.</p> <p>T2: <i>Once more, focus on the control of your circle landing and freedom ... and let it go.</i></p> <p>The student start to play and the teacher says:</p> <p>T2: <i>You are still afraid of letting it go, come on let it go, come on.</i></p> <p>At this time the teacher go close to the student and ask:</p> <p>T2: <b><i>Have you ever heard a balloon bursting?</i></b></p> <p>S4: <i>No, yes,</i></p> <p>T2: <i>Touch it, How does it sound, imagine and emulate on the violin.</i></p> <p>The student tries, and teacher:</p> <p>T2: <i>No, no, the balloon doesn't go (burst)... it doesn't do that. I don't think that the sound is this. How does it sound with a middle point touching it, how does it do? Can you actually predict when it bursts? Try. No I still can't hear when it's gonna burst. I can predict at that. You have never heard a balloon burst. No, a balloon burst like this (he sings pop and does the moment with the hands like a burst).</i></p> <p>After this she imitates the same sound as the teacher.</p> <p>T2: <i>Yes, that's the one, and then let the bow fly, thank you.</i></p>

The following example, “try to move the hand like an arc,” (Table 7.26) was embedded in the strategy demonstrating. Edgar used this teaching cue through verbal and nonverbal communication in order to clarify his intention concerning shifting.

**Table 7.26** Teaching cue 24 “Try to move the hand like an arc”

Teacher intention	Lesson context
To execute good shifting. The hand needs to move as a block with the thumb together.	<p>The student repeats the exercise twice with the aid of the teacher. After an attempt student tries alone. The teacher corrects the head posture, while student is trying to improve a given passage.</p> <p>T3: <i>Try to move the hand like an arc, this way (demonstrate the hand movement like an arc) up and down, up and down, pushing the thumb up.</i></p> <p>... Student repeats four times. She is using the same shifting but now with notes. The teacher plays first, followed by the student. Immediately teacher asks:</p> <p>T3: <i>Sorry, did you do?</i> (he moves the hand like an arc)</p> <p>S5: <i>Move the head (no)</i></p> <p>T3: <i>Not, let's try.</i></p> <p>When she is playing the teacher helps her moving the violin, to give the idea of the arc.</p> <p>T3: <i>Yes, right</i></p> <p>Now he starts to talk to student's father:</p> <p>T3: <i>Could you practise this glissando? Is arpeggio played with one finger, the "improvisacion" for the thumb, don't forget the thumb please...S6 [another student] has the same problem today... We will try on Friday in the group ... that way (move the hand like an arc). After, they move back to the scale.</i></p>

When teacher Edgar was working with student Eva on the A major scale, he was very concerned with the student's left hand position. To help her with correcting the hand and to clarify his intention he showed a nonverbal teaching cue: “movement with the hand, the wrong and the correct position of the left hand” (Table 7.27). The extract that exemplifies the moment when both gestures (i.e. the wrong and the correct left hand position) are shown in Figure 7.7. This cue was embedded in the strategy demonstrating.

**Table 7.27** Teaching cue 25 “Movement with the hand, the wrong and the correct position of the left hand”

Teacher intention	Lesson context
For student to correct the left hand position	<p>They are doing the A major scale just with two fingers on the E string. Before student starts the exercise one more time, the teacher says:</p> <p>T3: <i>Last time 1 2, 12, 1234.</i> (He asks for attention to the right hand position <b>showing the wrong and the correct position</b>)</p> <p>She repeats the exercise again.</p> <p>T3: <i>Nice intonation, much, much better.</i></p>



**Figure 7.7** Visual representation of the teaching cue 25 “movement with the hand (the wrong and the correct position of the left hand)” - Extract from the video recording | Teacher 3 and Student 6

Teacher Edgar, working on an arpeggio with student Eva, conveyed through verbal and nonverbal communication before the student started a task the cue “remember the thumb” (Table 7.28). Figure 7.8 shows the exact moment in the lesson when the teacher conveyed this cue. In the figure, Edgar is demonstrating how the thumb should be placed. Because of this the cue was embedded in the strategy demonstrating.

**Table 7.28** Teaching cue 26 “Remember the thumb”

Teacher intention	Lesson context
The thumb needs to be relax and follow the hand in the shifting	<p>The student takes the violin and plays again. Teacher sings the notes</p> <p>T3: <i>See what you did. You are doing the movement quite well I like that you release the pressure because you pull up the thumb again.</i></p> <p>She plays again.</p> <p>T3: <i>Well done, perfect! Yes!!</i></p> <p>Next he asks to do the same arpeggio with a "passing note" and says</p> <p>T3: <b>Remember the thumb!</b> (and <b>moves the thumb</b>).</p> <p>T3: <i>Stop, did you move the thumb?</i></p> <p>S6: <i>Aha!</i></p> <p>T3: <i>The first time as well?</i></p> <p>S6: <i>Yes.</i></p> <p>T3: <i>The first time for sure? I don't have hundred per cent sure. Could you please try again?</i></p> <p>She plays again</p> <p>T3: <i>Stop! Yes If you could try at home, some shiftings with one finger, ok, listen to me please! Listen to make sure you are moving the thumb?</i></p>



**Figure 7.8** Visual representation of the teaching cue 26 “remember the thumb”- Extract from the video recording | Teacher 3 and Student 6

Similarly, the following example of teaching cue, “the thumb is on the corner,” (Table 7.29) was used after an explanation about the left hand posture in high positions. Such cue was embedded in the strategy physical modelling.

**Table 7.29** Teaching cue 27 “The thumb is on the corner”

Teacher intention	Lesson context
Intonation and posture in high positions. Teacher is encouraging student to correct the left hand position	<p>Student is playing a passage in high positions.            Teacher is trying to help the student with intonation and posture in high positions. Following, teacher touches the student hand saying            T4: <i>Yes, the thumb. Can you bring the thumb? So it is here! That's it!</i>            At this moment student complains.            T4: <i>So you feel uncomfortable?</i>            Teacher plays the arpeggio and student is not paying much attention while teacher plays. After she says:            T4: So, <b>the thumb is in the corner</b>, right? <i>Because you put your hand quite low down, and I am encouraging you to put your hand off.</i>            After, they play together and she continues correcting the hand position before coming back to write on the score:            T4: <i>Focus in your shifts here.</i></p>

The final example of technical teaching cues, “bring your hand around,” (Table 7.30) was embedded in the strategy demonstrating. This cue was used three times by the same teacher using the same strategy. Each time, his intention was to



summarize instructional communication concerning a good intonation in the shifts.

**Table 7.30** Teaching cue 28 “Bring your hand around”

Teacher intention	Lesson context
To help the student’s posture of the hand in the shifts	<p>Teacher and student are approaching a technical study. Teacher is very close to the student. She is writing the instructions that she is talking about on the score.</p> <p>T4: <i>I was wondering when you shift up to that position can you just <b>bring your hand around</b> a bit more.... That is it! Yeah! <b>So bring your hand around</b> so that you can ...</i></p> <p>(She is writing on the score and student is trying to play the shift).</p> <p>T4: <i>Can you do those three notes ADF natural because those are the shifts that you are doing.</i></p> <p>Student plays and teacher is observing and in the end she says:</p> <p>T4: <i>Could you <b>bring your hand around</b> a bit more the neck. (She demonstrates with her hand while student is playing)</i></p> <p>T4: <i>Good, and carry on. Good.</i></p>

## 7.2. THE USE OF TEACHING CUES

Following the presentation of the selected teaching cues, this section examines how teachers used those cues as a means to communicate their intentions regarding instructional communication. Such use was investigated, based on the triangulation between the results from the thematic analysis (presented in the Chapter 5) and the observation of the video. Each teaching cue previously described was categorized according to the following features:

1. Teacher intention – The teacher’s purpose in using each cue. The purpose was identified through video observation. In some cases, where the purpose was not evident, the intention was checked with the participating teachers. When the teachers were not asked about the cues, the identification of the purpose to use each cue was supported by analysis of the lessons based on my previous experience and knowledge as a violin teacher;

2. Teaching cue typology – the indication of the main skill associated with the cue. This typology was previously identified in the pilot study (Chapter 3, 3.4) taking into account the framework of performance skills proposed by Davidson (2002): (i) structural teaching cues; (ii) aural teaching cues; (iii) technical teaching cues; (iv) interpretative teaching cues; and (v) presentation teaching cues;
3. Characteristic - description of the multimodal communication (verbal and nonverbal) used by the teacher to convey each cue. The criterion was to describe the teacher's main actions while the cue was being communicated. In many cases, the teachers were using verbal and nonverbal communication at the same time;
4. Moment - the moment during the task when the teaching cue was used (i.e. before the student starts the task; when the student started the task; in the middle or at the end of the task, or even during the whole task);
5. Strategy – the strategy where the cue was embedded. This feature came from the previous analysis presented in Chapter 5, (5.4). The strategies were originated from the teachers' perceptions about instructional communication. They were: (i) being insistent; (ii) demonstrating; (iii) encouraging critical thinking; (iv) encouraging to play freely; (v) avoiding negative words; (vi) physical modelling; (vii) using metaphors; and (viii) using visual aids;
6. Function - the interpretation of the function behind the cue. The functions were identified in the pilot study presented in Chapter 3 (3.3). The basis of the teaching cue functions came from the observation of the sequential units of teaching identified by Yarbrough and Price (1989). Based on these units (i.e. where teacher presents a task, followed by student engagement, which is the source for the teacher's feedback) the use of teaching cues was identified associated with three main functions: (i) advising; (ii) problem solving; and (iii) emphasizing. Overall, the functions were categorized taking in account their context. The function advising was classified when teachers conveyed the teaching cue to students before they engaged with the task, or even during the task itself. The function problem

solving was classified when the teacher diagnosed a specific problem, mainly after the student performed the task, and then gave a solution. The function emphasizing was classified when teachers used cues to highlight some aspect while the task was being performed.

Table 7.31 shows the results following such categorization.

**Table 7.31** Categorization of the *teaching cues*

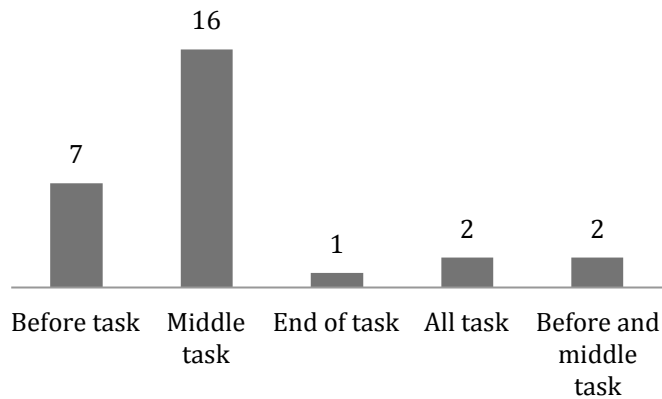
<i>TC</i> code	Teaching cue	Teaching cue typology	Teacher Intention	Characteristic	Moment	Strategy	Function
1	<b>Focus in binoculars</b>	Aural teaching cue	For student to develop the skill of self-tuning of the instrument For student to pay attention to the intonation. The B needs to be very high	Verbal with Nonverbal	Middle of task	Using metaphors	Problem solving
2	<b>B into the C</b>	Aural teaching cue	needs to be very high	Verbal with singing;	Middle of task	Demonstrating	Problem solving
3	<b>Put the finger in the ear</b>	Aural teaching cue	A cue to intonation, to choose the right note	Nonverbal action	Middle of task	Using visual aids	Advising
4	<b>Make a copy</b>	Interpretation teaching cue	That students understand what the passage in the music is there for	Verbal and Nonverbal (gestures); asking question	Middle of task	Using metaphor	Problem solving
5	<b>All the way</b>	Interpretation teaching cue	For student use the whole length of the bow to build expression in different ways	Verbal and gesture	Middle of task	Encouraging to play freely	Problem solving
6	<b>Shapes and singing the notes</b>	Interpretation teaching cue	Another means by which to get across a message about interpreting the music	Nonverbal with verbal	Before task	Demonstrating	Advising
7	<b>Gypsy fight</b>	Interpretation teaching cue	Develop the interpretation of the piece	Verbal, challenge	Before task	Using metaphor	Advising
8	<b>Right the way through</b>	Presentation teaching cue	For the student to feel encouraged to use all the bow, to be freer	Verbal and nonverbal	Before task	Encouraging to play freely	Advising

TC code	Teaching cue	Teaching cue typology	Teacher Intention	Characteristic	Moment	Strategy	Function
9	<b>Full bow (doing some movements with hands)</b>	Presentation teaching cue	For student to visually enhance what I meant	Verbal with nonverbal (gesture); supporting student	All task	Encouraging to play freely	Emphasizing
10	<b>Perform, perform</b>	Presentation teaching cue	For student to give of herself. Play out.	Verbal	Before task	Encouraging to play freely	Advising
11	<b>Right the way through</b>	Presentation teaching cue	To feel the bow, to use all the bow	Verbal	Middle of task	Encouraging to play freely	Emphasizing
12	<b>Try to get the flow</b>	Presentation teaching cue	To feel the bow and play freely	Verbal, with corporal movements	Middle of task	Encouraging to play freely	Problem solving
13	<b>Tap, tap, tap</b>	Technical teaching cue	To get the directions of the stroke	Verbal; an action that produces a sound	End of task	Using metaphor	Emphasizing
14	<b>Place the bow on the student's shoulder</b>	Technical teaching cue	For student to lose excessive tension by reminding them	Nonverbal with verbal; action	All task	Physical modelling	Emphasizing
15	<b>Rock the bow</b>	Technical teaching cue	For the student to avoid excessive tension	Verbal with Nonverbal	Middle of task	Demonstrating	Problem solving
16	<b>Imagine first the finger pattern</b>	Technical teaching cue	For the student to be aware of the finger pattern of the scale	Verbal; an action is implicit	Before task	Encouraging critical think	Advising
17	<b>Play comfortably</b>	Technical teaching cue	For the student to think of their pattern	Verbal; an action is implicit	Before task	Encouraging to play freely	Advising
18	<b>Exemplifying the pressure</b>	Technical teaching cue	For the student to realize the tension and avoid it	Verbal with Nonverbal	Middle of task	Physical modelling	Emphasizing
19	<b>Slide rather jump</b>	Technical teaching cue	To do a natural shifting	Verbal and playing	Middle of task	Demonstrating	Emphasizing

<i>TC</i> code	Teaching cue	Teaching cue typology	Teacher Intention	Characteristic	Moment	Strategy	Function
20	Movements with hands, like this... (imitates the bow)	Technical teaching cue	For student to use a long bow stroke	Nonverbal	Middle task, while student is playing	Demonstrating	Emphasizing
21	<b>Control</b>	Technical teaching cue	Control the bow, the bow must sustain	Verbal	Middle of task, while student is playing.	Being insistent	Emphasizing
22	<b>Sustain</b>	Technical teaching cue	For the bow to sustain the sound	Verbal	Middle of task, while student is playing.	Being insistent	Emphasizing
23	<b>Balloon</b>	Technical teaching cue	To control the long bow and play freely	Verbal and nonverbal	Middle of task	Using metaphor	Problem solving
24	<b>Try to move the hand like an arc</b>	Technical teaching cue	To execute good shifting. The hand needs to move as a block with the thumb together	Verbal with nonverbal	Middle of task	Demonstrating	Problem solving
25	<b>Movement with the hand, the wrong and the correct position of the left hand</b>	Technical teaching cue	For student to correct the left hand position	Nonverbal	Before student plays and in middle of task	Demonstrating	Emphasizing
26	<b>Remember the thumb</b>	Technical teaching cue	The thumb needs to be relax and follow the hand in the shifting	Verbal with nonverbal	Before the new task	Demonstrating	Advising
27	<b>The thumb is on the corner</b>	Technical teaching cue	Intonation and posture in high positions. Teacher is encouraging student to correct the posture	Verbal and nonverbal action	Middle of task	Physical modelling	Emphasizing

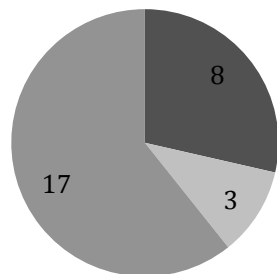
<i>TC</i>	Teaching cue	Teaching cue typology	Teacher Intention	Characteristic	Moment	Strategy	Function
28	<b>Bring your hand around</b>	Technical teaching cue	To the shift. The posture of hand in the shifts	Verbal with nonverbal gestures	Before task and middle	Demonstrating	Problem solving

Overall, teachers have mainly used teaching cues to explore technical skills. As Figure 7.9 and Figure 7.10 show, they conveyed the cues mostly in the middle of a task (i.e. 16 teaching cues) by both verbal and nonverbal communication (i.e. 17 teaching cues).



**Figure 7.9** The use of teaching cues according to the moment during the task

■ Verbal    ■ Non Verbal    ■ Verbal and nonverbal



**Figure 7.10** The use of teaching cues according to the communication mode

The interpretation of the use of teaching cues is presented according to the most representative categories: (i) strategies, (ii) typology and (iii) functions.

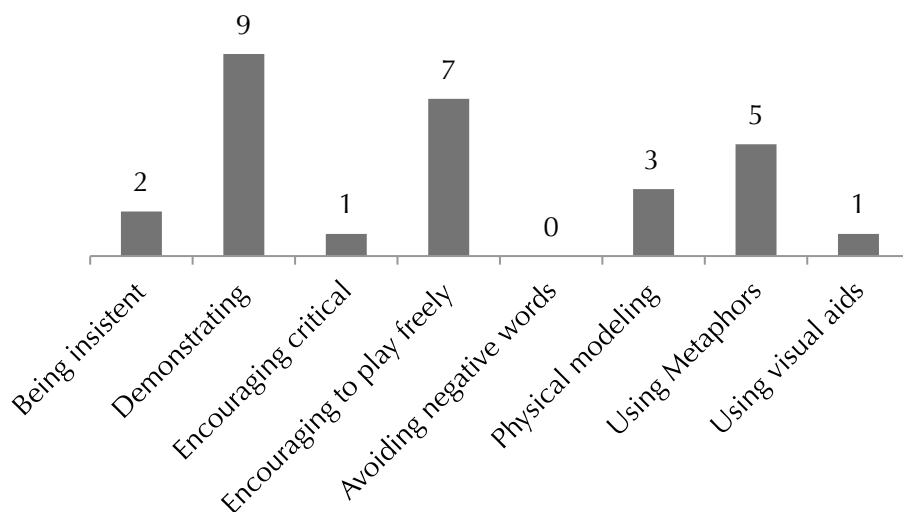
### 7.2.1 Strategies

Teachers used metaphors supported by verbal and non-verbal language to communicate teaching cues concerning interpretative and technical issues. When teachers were trying to avoid excessive tension in the students' playing they used



physical modelling as the main strategy. Moreover, when teachers explored self-evaluation with students, trying to develop meanings and awareness, they started the task communicating verbally and using the strategy encouraging critical thinking. When teachers had the intention to encourage students to play out and develop bowing skills, they used the strategy encouraging to play freely supporting the student by snapping the fingers, singing, counting the tempo or moving the arm imitating the bow. Finally, teachers used demonstrating through verbal and nonverbal communication in order to express their ideas concerning aural, interpretation and technical skills.

Based on Table 7.31, a quantitative demonstration of the findings (Figure 7.11) allowed the inference that teachers mostly conveyed teaching cues through demonstrating (9 times). Also, the strategies encouraging to play freely (7 times) using metaphors (5 times) and physical modelling (3 times) were used more times than, for example, using visual aids or being insistent. The only strategy that was not associated with teaching cues was avoiding negative words.

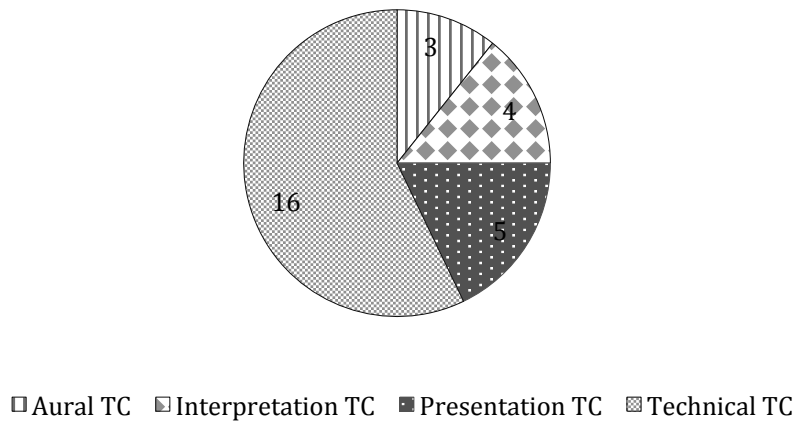


**Figure 7.11** Strategies used in teaching cues communication

### 7.2.2 Typology

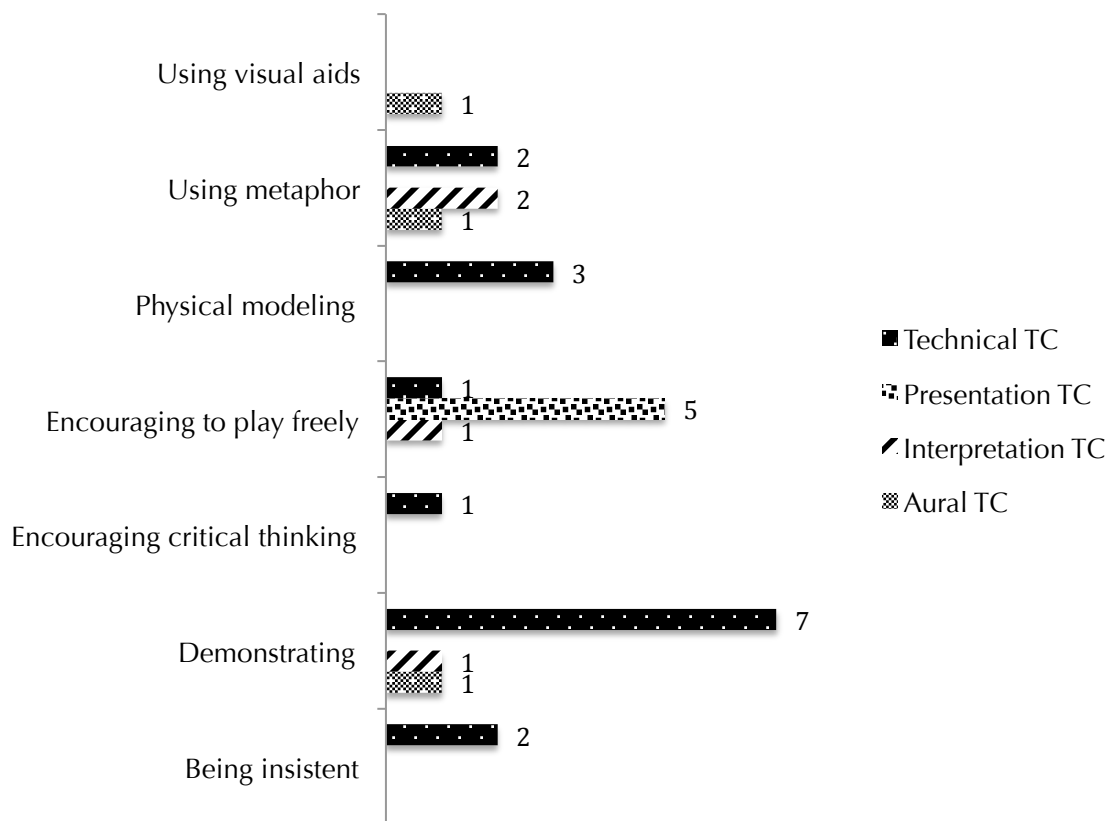
Based on the selected teaching cues, the results show that participant teachers used teaching cues to convey information concerning technical, interpretative, aural and presentation skills. Based on these results, Figure 7.12 indicates that the

technical teaching cues were the most used typology (16 times), followed respectively by presentation (5 times), interpretation (4 times) and aural teaching cues (3 times).



**Figure 7.12** Teaching cues used according to the typology

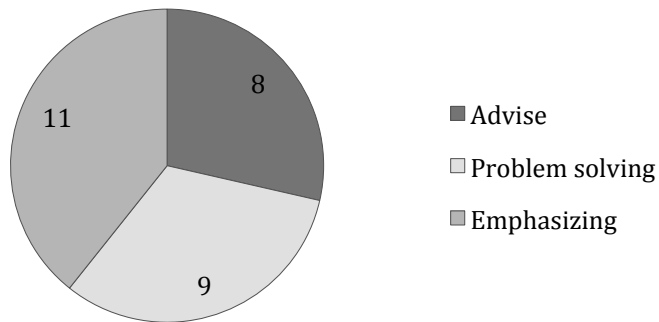
Concerning the strategies where the teaching cues were embedded, Figure 7.13 shows that technical teaching cues were mainly embedded in demonstrations and physical modelling. The only strategy that was not associated with technical information was using visual aids. In addition, Figure 7.13 demonstrates that the second most used type of teaching cue (i.e. presentation) was only embedded in the strategy encouraging to play freely. Concerning the interpretation teaching cues, Figure 7.13 demonstrated that these cues were embedded in using metaphors, encouragement to play freely and demonstrations. Teachers did not use interpretation teaching cues in visual aids nor in physical modelling. Also they did not use the strategy encouraging critical thinking and being insistent associated with this typology. On the other hand, the aural teaching cues were embedded in visual aids, using metaphors and demonstration.



**Figure 7.13** Relation between teaching cues typology and strategies used to convey information

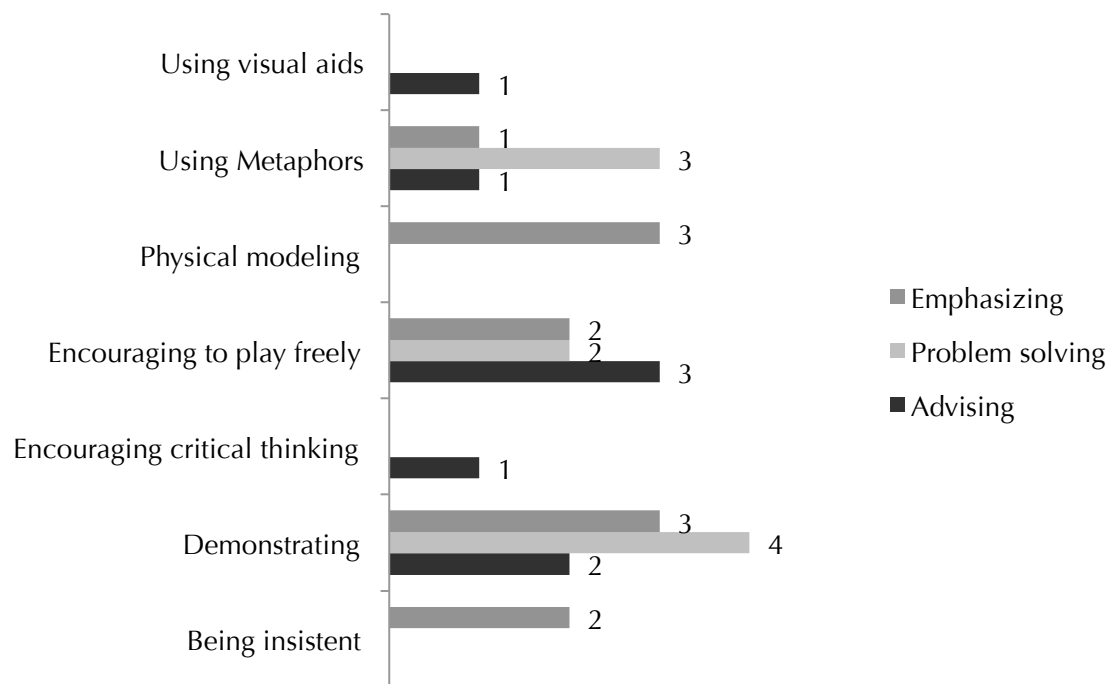
### 7.2.3 Functions

According to Figure 7.14, the selected teaching cues were used mostly with the function to emphasize some important aspect in the lesson (i.e. 11 times). Also, teaching cues were used several times for problem solving (i.e. 9 times) and to advise (i.e. 8 times).



**Figure 7.14** Teaching cues use according to functions

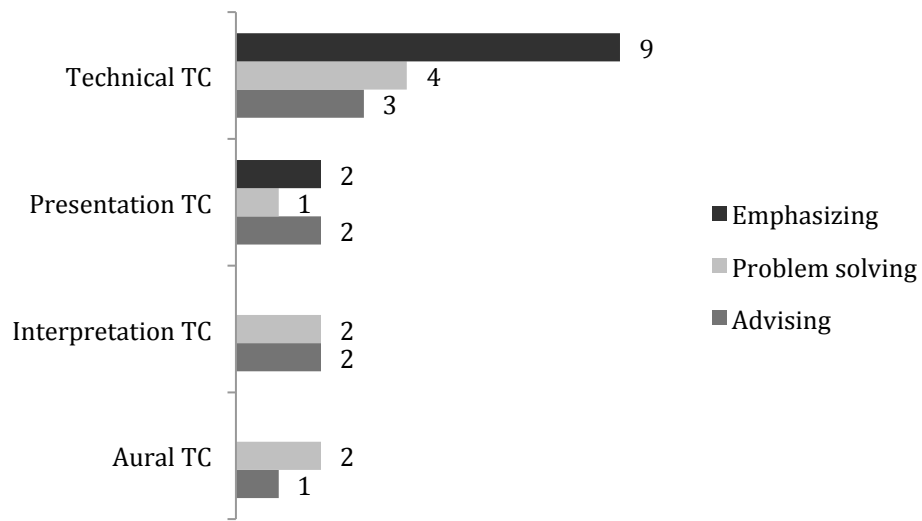
Figure 7.15 shows that teaching cues with the function of emphasize were embedded in five different strategies (i.e. being insistent, demonstrating, encouraging to play freely, physical modelling and using metaphors). There was no evidence found concerning the use of the strategies using visual aids and encouraging critical thinking with the function emphasize. On the other hand, the function of advising was associated with five different strategies (i.e. using visual aids, using metaphors, encouraging to play freely, encouraging critical thinking and demonstration (Figure 7.15). Finally, the function of problem solving was related with the following communication strategies: demonstration, encouraging to play freely and using metaphors.



**Figure 7.15** Teaching cues functions and strategies

Overall, Figure 7.15 shows that the strategies physical modelling and being insistent were used only with the function of emphasizing. The strategy using visual aids and encouraging critical thinking were used exclusively with the function of advising. On the other hand, the strategies using metaphors, encouraging to play freely and demonstrating were used with the three functions identified.

Although Figure 7.15 showed that the function of emphasizing was distributed among different strategies, according to the typology of the teaching cue (Figure 7.16), this function was much more used when technical skills were approached. On the other hand, Figure 7.16 shows that teaching cues with the function of problem solving and advising were used among all the typologies.



**Figure 7.16** Teaching cues functions and typology

## CHAPTER 8: COMMUNICATION EFFECTIVENESS OF TEACHING CUES

The definition of communication effectiveness of a teaching cue was based on students' interpretations of the teaching cues meanings, taking into account the teachers' intended meanings (for review see Chapter 1, 1.2). Based on this perspective, the communication effectiveness of the teaching cues was explored through a comparative analysis, which involved the triangulation between the teacher's intentions behind the selected teaching cues and the student's understanding of those cues. The teacher intentions were identified through video observation and interviews. Following this, the student's understanding (evidenced by the interview data) was classified taking into account their recognition of the teacher's intention indicated during the interviews and the lessons observed. The results of this triangulation allowed verification of some features behind the effective communication of teaching cues that can act in the optimization of the instructional communication in one-to-one violin lessons as a whole. Therefore, the presentation of the results discussed here is divided into two main parts: (i) teacher intentions and student understanding and (ii) features of communication effectiveness of the teaching cues.

### 8.1. TEACHER INTENTION AND STUDENT UNDERSTANDING

Data analysis revealed two main attributes concerning students' understanding of the teaching cues used by their teachers: *understood* and *not understood*. Figure 8.1 illustrates the attributes and values used in such classification. The first classification *understood* suggests the student achieved *total* recognition (i.e. the student reported the same meaning as the teacher's intention) and *partial* recognition (i.e. the student reported sufficient evidence that the meaning was understood in relation to the teacher's intention). The second classification *not understood* suggests that students have *totally not understood* (i.e. the student did not show any evidence of understanding the meaning of the teaching cue intended by the teacher) and *partially not understood* (i.e. the student recognized the instruction, but with a different meaning intended by the teacher).



**Figure 8.1** Students' understanding classification

### 8.1.1 Teaching cues understood

#### TOTALLY UNDERSTOOD

The classification totally understood was applied to those answers where students attributed the same meaning of the teacher's intention behind a teaching cue. The following example illustrates this classification.

**Table 8.1** Teacher intention and student understanding TC 14 "placed the bow on the student shoulder"

Teaching cue	Teacher's intention	Student's answer
<b>Put the bow on the student shoulder</b>	(...) <i>To deal [with] to lose that tension by reminding them</i> (T2)	<i>Is to keep my [shoulders], because sometimes I'm not relaxed in my shoulders or elbows and it reminds me of my shoulder because it gets tense.</i> (S4)

In such case the teaching cue was conveyed when the teacher had placed the bow on the student shoulder (i.e. nonverbal communication). The teacher assumed that this instruction was a way to remind the student of unnecessary tension in their shoulders. The student's answer was interpreted as totally understood because the student identified the needed to keep the shoulders relaxed, avoiding excessive tension.

Table 8.2 presents all the teaching cues classified as totally understood. The words in bold represent relevant segments of data analysis.



**Table 8.2** Teacher intention and student understanding: teaching cues total understood

Teaching cue code	Teaching cue	Teacher's intention	Student's understanding
4	<b>Make a copy</b>	T1 first of all it's so that they understand <b>what the passage in the music is there for</b> . So that then they can use their own imagination. Once you said oh that's what it is, you know, they will think. Oh, that's if they know what on a piano accordion is a squeeze box. And just hopefully that will mean they'll better produce better result when they come to play it and also they might wonder what this sounds a bit funny. What's this for? So it's something to know why that particular new basis in music	S1: When he gives examples. <b>You can listen about what it should sound and try to do.</b>
22	<b>Sustain</b>	To the bow <b>sustain the sound</b>	Sustain, it's apparently what we should call the push bowing; it means <b>use the same length and same expansion later.</b>
14	<b>Placed the bow on the student's shoulder</b>	T2 You can see clearly that when they... the person play the instruments or just seating on the table you see that they are tense, their shoulder it come up, is a hanged of your shoulder is the signal of tension and you have to <b>deal [with] a losing that tension by remind them</b> . I have to remind them the ugly they know sometimes your body just do it without you knowing it, so physical feelings sensing about part of your body is important while you play, so I would use the bow touching the shoulder just tapping and they know. Instead of that I could do the same using my hand, but I would avoid it, to use the bow is a bit more appropriately.	S4 is to keep my [shoulders], because sometimes I'm not relaxed on my shoulders or elbows gets and <b>it reminds me of my shoulder because it gets tense.</b>

7	<b>Gypsy fight</b>	To develop the <b>interpretation of the piece</b>	Because the music was written, between a period in time and it was time that gypsy, so it means basically to <b>how much could I play with feeling</b> and bouncing the bow.
19	<b>Slide rather jump</b>	To do a natural shifting without <b>taking the finger off the string</b>	He means <b>don't take the finger off the string</b> when you slide just is the easily so tap there... so that sometimes you can hear the slide
13	<b>Tap, tap, tap</b>	T1 Well it was <b>to get the directions of the stroke</b> because she was being too literal. I mean, In the Brahms in the <i>Vivace</i> it was too (sing) it was too long and I want to do more vertical strokes, so saying tap, you know (he tap in the table) if you tap something it works as <b>tap a suggestion that it is a down bow, shorter.</b>	S1 <b>The bowing, just tapping on the string.</b> Just, like, parts of my bow on the strings to give the effect of gypsy style
3	<b>Put the finger in the ear</b>	A cue to intonation, to <b>choose the right note</b>	I think. It means to listen to "audio things" ... and try to fix that then <b>try to fix the notes....</b> Sometimes is hard to tune because. Of ... yeah.
9	<b>Full bow</b>	T2 The movement what I show them is another interpretation of <b>full bow</b> , or all the way, or all the way up, all the way down, that's movements <b>is to visually enhance what I meant.</b> Sometimes I do it without even saying, they recognize that gesture.	S4 Oh, <b>is bowing. I need to do a copy</b> , and do the same thing. So I need to look at what he is doing and then remember it through all that thing.
20	<b>Movements with hands (imitate the bow)</b>	To student use <b>long bow</b>	Yes, like smooth <b>long bows</b>

24	<b>Try to move the hand like an arc</b>	To execute good shifting. The hand needs to move as a block with the <b>thumb together</b> .	He meant hum like <b>the move like the thumb</b>
5	<b>All the way</b>	<p>T2 That's I think that I mentioned the bowing, all the way, <b>the means you use the whole length of the bow</b>, you use right from the hilt of the bow to the tip. Most of the students they restrict their arm because of the tension, because of the efficiency in techniques, so the arm look stuck in one place, and they only play the back five centimetres of the bow, and that restricts the sound and they can only play the same sound for all kind of music. That is not music, you have to build expression in different ways, and so the only way to do that is free up the arm have the ability to use any part of the bow, and that start with playing with the full bow.</p> <p>C and saying all the way?</p> <p>T2 All the way.</p> <p>C It is a kind of instruction that you have...</p> <p>T2 yes. You play all the way up, all the way down</p>	<p>All the way, it means that from start to the finish,</p> <p>C ok, but is this related with?</p> <p>S3 to the piece... don't know with notes</p> <p>C But sometimes he says all the way and does this kind of thing (movements with hand).</p> <p>S3 with the bow, yeah, it means <b>all the bow, all the length</b>.</p>
25	<b>Movement with the hand, the wrong and the correct position of the left hand</b>	For student to <b>correct the left hand position</b>	<p>S5: Hum, it's caught like this, and then you can make fingers like this</p> <p>C ha, ok, and what do you need to do when he does it?</p> <p>S5 <b>keep it this way</b> (student demonstrates).</p>

1	<b>Focus in binoculars</b>	T1 Right, because for Alice, because she is now working at grade 6, she has to be able to tune her own instrument in the exam; the accompanist is not allowed to tune it for her. <b>So I have just found quite a useful way because as the fifths gradually get nearer and nearer the basin stop so this is almost in line but not careless and suddenly the sight is focus</b> so it's just a noun to use. And thus it seems to work. yeah...	S1 hum... oh... He says lots of things. C do you remember? S1 <b>no</b> , C when you are tuning the violin... S1 yeah, when we are tuning your violin C ok, and what it means? S1 basically it's like when you should be looked to make it. <b>To adjust the tuning and see what the sound is effectually like,</b>
23	<b>Balloon</b>	To control the <b>long bow</b> and play free	It is the bowing, so basically and I have to think in the balloon and how it caught so You can't predict when it caught. It just happens. With my bow I need to make it happen. <b>Go slow, not fast.</b> Because then you can tell by if it got caught like you have to just do it.
26	<b>Remember the thumb</b>	<b>The thumb</b> needs to relax and <b>follow the hand in the shifting</b>	Yeah, the thumb is shifting, yes, sometimes when I go to the. Hum "beyond the head" then when I go down I need my thumb there and I put my other finger down and then I have, <b>I just bring my thumb quickly down but I bring them both at the same time.</b>
27	<b>The thumb is on the corner</b>	<b>Intonation and thumb posture</b> in high positions.	<b>Keep the thumb at the top of the string.</b> I don't know what to call it.

## PARTIALLY UNDERSTOOD

Concerning this classification (i.e. partially understood), the answer reported by the students was not so clear as in the previous one (i.e. totally understood). Despite this, they provided a close description of the teacher's intention, showing evidence that the meaning was understood. As an example, Table 8.3 shows the teaching cue "right the way through". The teacher used such a cue as a tool to help the student to feel the bow (i.e. to use all the bow in that task). The student's answer confirmed that she understood the instruction. However, she demonstrated a degree of uncertainty about the answer, which was expressed by phrase as: maybe; I'm not sure.

**Table 8.3** Teacher intention and student understanding TC 8 "right the way through"

Teaching cue	Teacher's intention	Student's answer
<b>Right the way through</b>	<i>My intention was to encourage her to use all the bow, to be freer (T1)</i>	<i>Oh, I am not sure, but he says that I should make loud and do a longer note before note (S2)</i>

Table 8.4 presents all the teaching cues classified as partially understood. Similarly to the previous classifications, the words that are in bold represent relevant segments of data analysis.

**Table 8.4** Teacher intention and student understanding: teaching cues partially understood

Teaching cue code	Teaching cue	Teacher intention	Student' answer
18	<b>Exemplifying the pressure on the student's arm</b>	T3 Yes, may I? When we they do this [demonstrated in my arm], I try to transmit what I want them to do on the violin, for example if you have one "tension" to avoid squishing the string in excess instead of telling them, I try to send the information, as <b>try to "way to avoid this"</b> , so may I? I want to release the pressure more and that, and this is what the violin is feeling when	S6: Oh basically he like do the pressure so <b>I know the bow down hard</b> sometimes.

		you play and this is what I want for you to feel. As you know, I was just sending information touching, kinaesthetically.	
21	<b>Control</b>	<b>A reminder to student control the bow;</b> the bow must sustain	Control... When he says control It really, really reminds me, or it is kind of a reminder that I, it is kind of obvious that I need to think about it yeah. <b>It kind of reminds me.</b>
12	<b>Try to get the flow</b>	To feel the bow and <b>play freely</b>	Like <b>move with the bow</b> like kind in you go for and out kind.
10	<b>Perform, perform!</b>	T4 'perform, perform'. <b>I wanted her to give of herself. Play out.</b> She can be an insular player, playing as though to herself in her bedroom. What I am aware of is the personality of the child for me the violin offers a chance to develop aspects of one's self. I want Vanessa to be encouraged to play out even when she is unsure of herself. I think this takes a leap of faith.	S7 yeah, I try and do first and sound straighter, <b>perform better like more.</b>
16	<b>Imagine first the finger pattern</b>	T3 ah, the finger pattern is the distribution of the tones in the finger, so when we do the scale or when we start to doing the scale I also <b>encourage them to be at aware</b> working or listening here, here or there, the first, the second and the third, or the forth finger, so this is in E major in first position, so what I try them to imagine first of all, what would have been working in a sight reading a lot because of the times, so I try then to be at aware of the finger pattern of the scale,	S6: I hum sometimes clarify, otherwise, I hum <b>in my head</b> da da da and <b>I put my finger as well</b> and then. C ok, you are playing and what do you need do, sorry? S6 basically, <b>you look at the train and follow it,</b> but without trains you are ready to do it.

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		so they know what is happening, like when you play jazz or improvise that you know where the fingers go, you don't think in isolate fingers or isolate notes, you put every note in context, and I wanted to be aware of the relationship between every note or the next one on the playing score.	
28	<b>Bring your hand around</b>	To the shift. The posture of <b>hand in high position in the shifts</b>	Bring your hand around because <b>when I go high</b> and the thing. Yeah, when we go up top, then you have, you have to bring your hand around
8	<b>Right the way through</b>	T1 because she uses such small amount of bow most of the time so my intention was to <b>encourage her to use all the bow, to be freer</b> , because you can see she is very contained, part of her shyness, when she let's go it's terrific. I mean now that she's been back from this course, you may see this afternoon that the piece she didn't do particularly well in last week, she will do much better because she's back from focus.	S2 oh, he says that I should make loud, make the bow loud all the way. All the way through the piece. C and what do you need do? S2 I need to try and do it and <b>do a longer note before note</b>
11	<b>Right the way through</b>	T4 To feel the bow, <b>to use all the bow</b>	Ah, it this means that <b>like keep on, like going through</b> , maybe, I'm not sure, I can't remember. Sorry. Like Do the sound right the way through like <b>to keep the whole sound</b> .

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### 8.1.2 Teaching cues not understood

#### TOTALLY NOT UNDERSTOOD

In this classification, the meaning of the teaching cue was not clear to the student at all. As an example (Table 8.5), when Teacher 4 was shaping and singing the notes, her intention was trying to use another way to communicate than just talking (i.e. demonstrating). However, the student did not remember this cue in the interview. Another cue that was totally not understood was “B into the C” (see Table 8.5). In the example described here, the teacher indicated that the note B needed to be very high. Apparently, the student did not know what this instruction meant.

**Table 8.5** Teacher intention and student understanding: teaching cues totally not understood

Teaching cue code	Teaching cue	Teacher intention	Student answer
6	Shapes and singing the notes	T4 Singing and using hands, <b>being demonstrative, it is another means by which to get a message across.</b> Why not use the voice when playing the violin feels to me like an extension of singing. Also the violin is a physical instrument; sounds are made through movement of the body.	S7 <b>I don't remember that move.</b>  C for example I am saying now, do you know what does it mean? Think about shapes?  S7no I don't know
2	<b>B into the C</b>	T4 Singing B-C. B is leading to C, it needs to be very high it needs to say I want to go home to C.	S8 hum... Oh the... yeah.  C Do you know what mean?  S8 Not really,  C B Into the C  S8 You go up to the C  C Ok, is it related with the fingers, is related with what?  S8 I'm not sure, <b>I don't know.</b>



## PARTIALLY NOT UNDERSTOOD

In this classification, the student recognized the instruction, but with a completely different description or even with other attributed meaning. For example, in the teaching cue “play comfortable” presented in Table 8.6, the teacher intention was to encourage the student to choose a comfortable speed to play the task. Despite this, the student said that to play comfortably was related to a comfortable position instead of body tension.

**Table 8.6** Teacher intention and student understanding: teaching cues partially not understood

Teaching cue code	Teaching cue	Teacher’s intention	Student’s answer
15	<b>Rock the bow</b>	T3 Rock the bow from Rolland, Rolland say, talk some exercises to avoid the excessive tension, one of them is Rock in Roll, bow. So rock "control", rock the bow to shake the bow in this way. And this is rock apparently you need to rock the bow. And roll the bow in the string, so it stop on rock or stop on bow, <b>it's just to avoid unnecessary tension in the right hand.</b>	S5 oh, <b>keep the bow and hand like a rabbit.</b> C ha, ok, is this what rock all the bow means? S5 yes,
17	<b>Play comfortable</b>	T3 ah, I usually I play comfortable, how can I say, play comfortable <b>I mean choose a comfortable speed</b> , in the sight reading they try then to play faster than they can. You know one of my priority on they play sight reading is that they play well not that they play fast, and they play a tempo and fast then I prefer that they play comfortable, slowly, so they can think in their pattern they have more chances to play the correct notes.	S6 it means that I get in a <b>comfortable like position</b> and I play like no more instead of <b>like rigid.</b>

## **8.2. FEATURES OF COMMUNICATION EFFECTIVENESS OF TEACHING CUES**

Some features of effective communication emerged from the results. These features will be presented taking into account the following aspects: (i) the strategies used to convey the cue; (ii) typologies of teaching cues and (iii) teaching cues functions.

### **8.2.1 Strategies used to convey information**

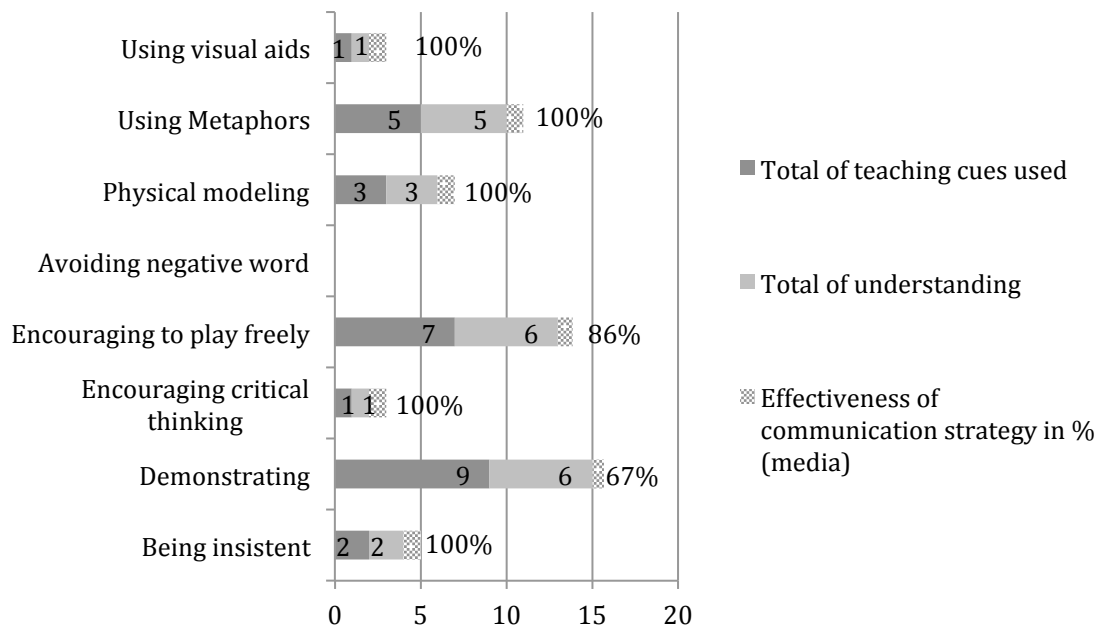
Three strategies (i.e. using metaphors; encouraging to play freely; and demonstrating) were highlighted in the students' understandings (see Figure 8.2). The cues behind these strategies have been expressed mostly verbally, but with nonverbal action. On the other hand, Figure 8.2 also shows that the same strategies encouraging to play freely and demonstrating were also the unique strategies, which in some cases were not understood by the students.

		Understood	
Totally	<ul style="list-style-type: none"> <li>● Using metaphor (5)</li> <li>● Physical modeling (2)</li> <li>● Encouraging to play freely (2)</li> <li>● Demonstrating (5)</li> <li>● Being insistent (1)</li> <li>● Using visual aids (1)</li> </ul>	<ul style="list-style-type: none"> <li>● Physical modeling (1)</li> <li>● Encouraging to play freely (4)</li> <li>● Encouraging critical thinking (1)</li> <li>● Being insistent (1)</li> <li>● Demonstrating (1)</li> </ul>	Partially
	<ul style="list-style-type: none"> <li>● Demonstrating (2)</li> </ul>	<ul style="list-style-type: none"> <li>● Encouraging to play freely (1)</li> <li>● Demonstrating (1)</li> </ul>	
		Not understood	

**Figure 8.2** Classification of degrees of understanding according to teaching strategies

Comparing the number of times that each communication strategy was used and the number of times that they were classified as understood by students, it was possible to verify that some of the original meaning of the teacher's intention was not received as intended. Teaching cues embedded in the strategy demonstrating (see Figure 8.3) was used nine times, but it was understood six times. Taking into account the overall results and the perspective of communication effectiveness of teaching cues here adopted, this strategy presented a low level of communication effectiveness (67%). In addition, teaching cues embedded in the strategy encouraging to play freely were articulated seven times, and six of the seven occurrences were understood by students, resulting in 86% of communication effectiveness (see Figure 8.3).

On the other hand, the same Figure (8.3) illustrates that the strategy using metaphors was used five times by the teachers and the students understood its meanings every time, resulting in 100% of communication effectiveness. In addition, students also recognized and understood the strategy physical modelling. This recognition was achieved all three times that this strategy was used by teachers, resulting in 100% of communication effectiveness.



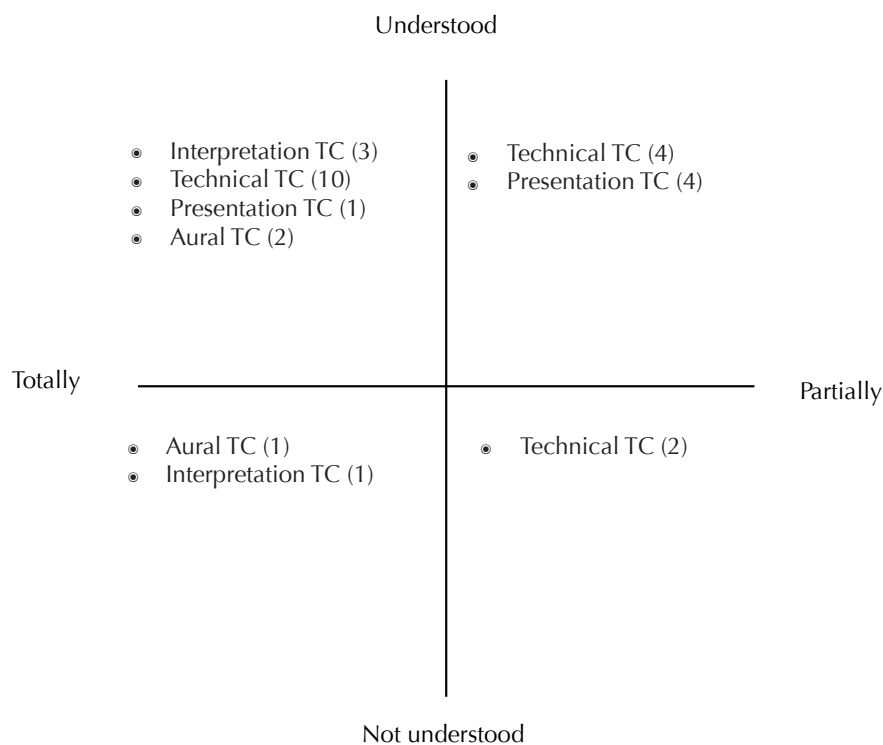
**Figure 8.3** Media of the strategies use and understanding

The present results did not compare the effectiveness among the strategies, rather the performance of each communication strategy based on the times that each one was conveyed. Therefore, these results do not suggest that such communication strategies as demonstrating and encouraging to play freely are not effective. Rather, the intentions behind some cues that were embedded in these strategies were not clearly recognized by students in the present study. Therefore, based on the perspective adopted in this research, the efficacy of these strategies in the communication of teaching cues in instructional communication (i.e. the interpretation of meaning by the receiver, taking into account the intended meaning of the sender) was not 100%.

### 8.2.2 Teaching cues typology

Analysing the typology of the teaching cues understood by students, Figure 8.4 shows divergent results concerning to the relation of this feature with students' understandings. For example, aural and interpretation teaching cues were totally understood and also totally not understood by students. Moreover, the majority of technical teaching cues were totally and partially understood (14 times). At the same time this typology was partially not understood twice (see Figure 8.4).

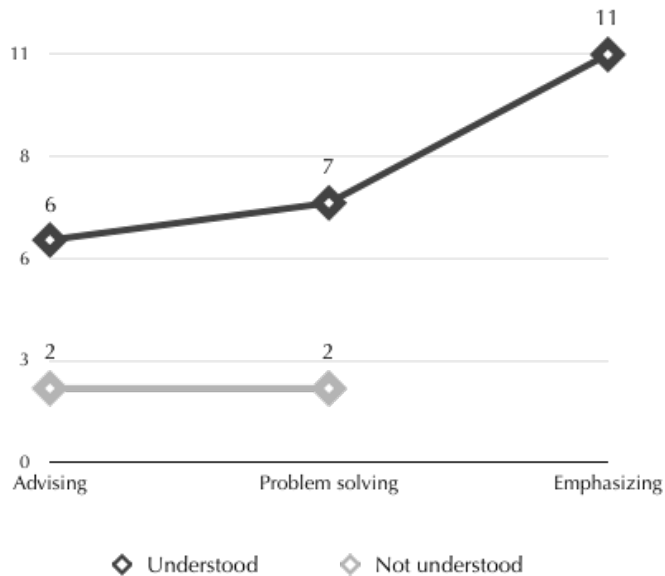
Conversely, Figure 8.4 also indicates that presentation teaching cues were the only typology that were all understood. All the times that teachers used such cues (i.e. five times) students understood the meanings behind the messages.



**Figure 8.4** Teaching cue typology according to students' understanding

### 8.2.3 Teaching cues functions

Overall, the results presented in Figure 8.5 highlighted the use of teaching cues with the function to emphasize some important aspect during the acquisition and development of skills. All teaching cues conveyed with the function emphasizing were understood by the students (i.e. 11 teaching cues).



**Figure 8.5** Teaching cues functions according to student's understanding

Regarding the other functions, Figure 8.5 also shows that from the nine teaching cues conveyed with the function of problem solving, two were not understood by the students. Also, cues used to advise presented similar results. From the eight cues conveyed with this function, two were not understood.

## SECTION 4 SUMMARY

In section 4 the second part of the results was presented. These results corresponded to the meanings and effectiveness of teaching cues. Similar to previous sections, section 4 also had two chapters (i.e. 7 and 8).

Chapter 7 presented the set of teaching cues selected and the analysis of their meaning and use. Concerning the meanings, all teaching cues were described based on the teacher's intention behind each cue. Each teaching cue was categorized according to: (i) teacher intention; (ii) teaching cue typology; (iii) characteristic; (iv) moment; (v) strategy; and (vi) function. Overall, the results showed that participant teachers used mainly technical teaching cues embedded in the following strategies: demonstrating and physical modelling. Mostly, technical teaching cues were embedded in demonstration, while presentation teaching cues were embedded in the strategy encouraging to play freely.

### CHAPTER 7

Meanings and the use of teaching cues

Chapter 8 presented the results of the comparative analysis, which aimed to identify the features of communication effectiveness of teaching cues in one-to-one instrumental lessons. Communication effectiveness of a teaching cue was defined according to each student's interpretation of the teaching cue meaning, taking into account the intended meaning of the teacher. Based on this perspective the meanings attributed by teachers and students regarding the twenty-eight teaching cues selected were examined and classified according to the degree of student understanding (i.e. totally understood, partially

### CHAPTER 8

Communication effectiveness of teaching cues

understood, partially not understood and totally not understood). Overall, the students totally understood sixteen of the twenty-eight teaching cues asked and partially understood eight teaching cues. Those cues that were understood presented some similar characteristics: they were conveyed mainly through such strategies as: using metaphors; encouraging to play freely; and demonstrating. Also, these cues were mainly related to the development of technical skills. In fact, technical was also the most used typology approached in the lessons observed. In addition, teaching cues understood by the students were communicated with the function to emphasize some important aspect of a skill.

All these results brought evidence to inform three of the four research questions addressed (i.e. What could be recognized as a teaching cue in one-to-one instrumental lessons and how is it being used in instructional communication? How can teaching cues be communicated effectively in instructional communication in one-to-one instrumental lessons? Can teaching cues optimize instructional communication in one-to-one instrumental lessons?). The next section will present a discussion of all the findings presented here as well as the conclusions and implications of this research.



# **SECTION 5**

## **DISCUSSION & CONCLUSION**

### **CHAPTER 9**

Discussion

### **CHAPTER 10**

Conclusion



## CHAPTER 9: DISCUSSION

The importance of communicating effectively, using language in creative and imaginative ways in order to promote student understanding and responsiveness, has been highlighted in the literature (Duffy, 2015; Duffy & Healey, 2013; Lennon & Reed, 2012). Despite this, few studies have been focused on instructional communication in instrumental lessons (Kennell, 1992, 2002; Lennon & Reed, 2012; Rostvall & West, 2003). Particularly, the features that contribute to the explicit communication of teacher intentions in this process have scarcely been debated (Lennon & Reed, 2012).

The aim of this research was to understand the process of instructional communication in one-to-one instrumental lessons through the study of teaching cues. Based on this perspective, the following questions guided this research: (i) How has instructional communication been used by teachers in one-to-one instrumental lessons? (ii) What could be recognized as a teaching cue in one-to-one instrumental lessons and how is it being used in instructional communication? (iii) How can teaching cues be used effectively in instructional communication in one-to-one instrumental lessons? (iv) Can teaching cues optimize instructional communication in one-to-one instrumental lessons?

In order to answer these questions this study adopted an exploratory case study of instructional communication in one-to-one instrumental lessons. The case analysed here was the communicative relationship established between violin teacher and student. According to Yin (2009), case studies rely on analytical generalization, where the investigator is “striving to generalize a particular set of results to some broader theory” (Yin, 2009, p. 43). Although this study has not verified the results within others musical teaching and learning environments, the findings presented here were replicable between participating teachers and students. Thus, according to Yin (2009) such results “might be accepted as providing strong support for the theory even though further replications had not been performed” (Yin, 2009, p. 44).

The methodological choices adopted here allowed the conversation with participants as well as the observation of teaching practices in the teaching and learning environment. Data collection provided an opportunity to corroborate teachers' opinions and practices concerning instructional communication in one-to-one violin lessons, while data analysis allowed an understanding of the use of teaching cues and the main features behind effective communication of those cues. Such features have been assumed as a core element for effective instructional communication (e.g. Mottet & Beebe, 2006; Richmond et al., 2006). Overall, previous studies focused on instructional communication have been grounded on observations (Burwell, 2010; S. Hallam, 2006; Rosenshine et al., 2002). Following this perspective, this thesis adopted the same methodological strategy, which was also complemented by interviews. The triangulation between both methodological tools allowed a further exploration of analytical insights, mainly through teachers' opinions expressed in interviews. Based on all these perspectives, one can infer that the study design adopted here provided rich data, which allowed a broader understanding of the addressed phenomenon.

Data analysis revealed three main types of results which will be discussed in this section: (i) mapping the process of instructional communication in one-to-one instrumental lessons; (ii) the use of teaching cues in violin lessons; and (iii) optimizing instructional communication: the role of teaching cues. The first one concerns the understanding of the process of instructional communication in one-to-one instrumental teaching and learning. The second type of results looked at the role and the use of teaching cues in one-to-one violin lessons. The third type of results discussed in this section concerns the presentation of a hypothetical model to optimize instructional communication in one-to-one instrumental lessons. Such a model is based on reflection on all the results here presented. Moreover, the role of teaching cues and self-cues for optimization of instructional communication and for practical applications of the model was also considered.

## 9.1. MAPPING THE PROCESS OF INSTRUCTIONAL COMMUNICATION IN ONE-TO-ONE INSTRUMENTAL LESSONS

Concerning the use of instructional communication in one-to-one violin lessons, the results presented here reinforce the conclusion of McCroskey (2004) who infers that the rhetorical approach (Chapter 1, 1.1) to instructional communication (i.e. a linear process where teachers select and stimulate meanings in students' minds) is widely employed. This rhetorical approach was also identified in the data collected in this study.

The process identified describes that each teacher has a pattern of multimodal (inter) action to communicate musical ideas. Other authors have corroborated this assumption, suggesting that instrumental lessons are characterized by a unique teacher-student discourse, which can be verbal and gestural (Duffy, 2015; Kennell, 2002). Prior studies have identified several behaviours in one-to-one instrumental lessons (Burwell, 2010; Carlin, 1997; Creech, 2012; Gipson, 1978; Hepler, 1986; Kurkul, 2007; Levasseur, 1994; O'Neill, 1993; Siebenaler, 1997; Simones et al., 2015; Zhukov, 2012). Based on the results found by these authors in earlier studies, the present study identified eight similar (inter) actions established between teachers and students: (i) playing or singing; (ii) talking; (iii) explaining and demonstrate; (iv) asking; (v) touching; (vi) touching and talking; (vii) showing extra material; and (viii) writing on the score. According to the teachers, such (inter) actions were communicated according to their expectations, intentions and each student's individual characteristics (i.e. student personality; student learning style; and student age, gender and stage of learning). Despite Brenner and Strand (2013) identifying similar results concerning the factors that shape instructional communication, some patterns of inter (actions) seem to be new in the literature.

In the same line of thought, the present study brought to light some perceived professional responsibilities among teachers that seem to shape instructional communication in one-to-one violin lessons. Such responsibilities include: (i) flexibility, (ii) responding to students' preferences and (iii) combining different strategies. The first and second perceived professional responsibilities concern the ability to adapt educational approaches taking into account the students'

individual characteristics and backgrounds. Other authors have emphasized the need to consider such aspects in instructional communication (Lennon & Reed, 2012).

Indeed, some participating teachers recognized the importance of flexibility in this communicational process. According to them, flexibility in communication could be exemplified through the use of different words to convey the same instruction. However, the results presented here also suggested an existing dichotomy between some teacher intentions and established behaviours, which are based on personal experiences with previous teachers. On one hand, participating teachers seemed to be aware of each individual student's differences as well as the importance of being adaptive to the student needs. Notwithstanding this flexibility, teachers also spoke about the use of a pattern of action, which could be applicable to all students. This result matches existing perspectives on instrumental teaching and learning, which suggest current practice in this context comes from an important oral tradition, where personal experience and historical anecdote form the basis of contemporary common practice (Ford & Sloboda, 2013). Kennell (1992) reinforces the view that performance expertise is "passed from one generation of performers to the next through personal historical conventions" (p. 5). The contradictions in teachers' instructional communication suggested here might also constrain the development of new pedagogical approaches, where the individuality of the students should be considered. In many cases, this constraint is dependent on their adherence to rigid forms of communication that are based on pedagogical heritage. The results presented here may also inform the discussion focused on the importance of rethinking such a 'one-model-fits-all' (Perkins, 2013).

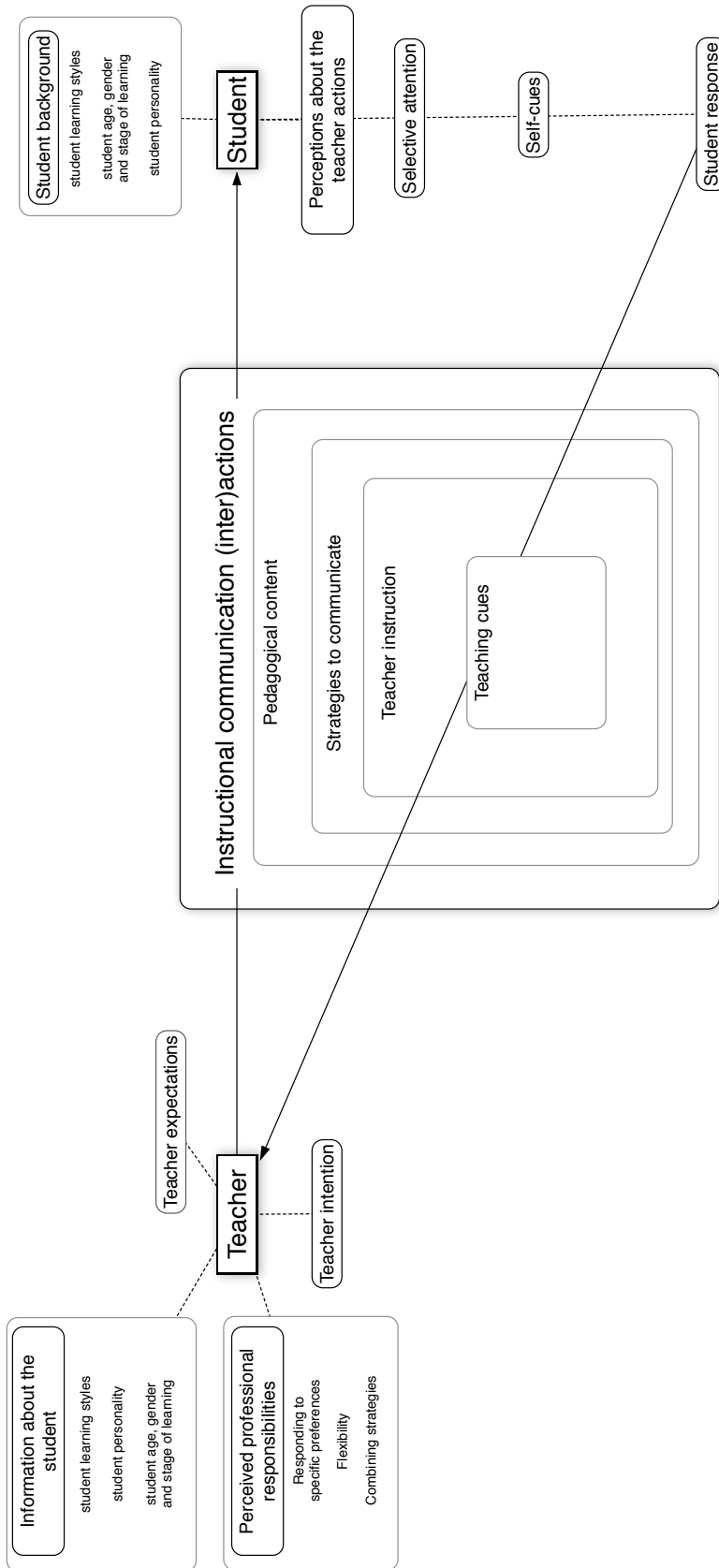
The third perceived professional responsibility (i.e. combining different strategies) concerns teachers' ability to combine different strategies to convey information. Participating teachers highlighted such a combination as a core element of the success of instructional communication. Despite this, few studies approached this feature in such an educational environment. Rosenthal (1984) analysed effectiveness in combining strategies (i.e. teacher model and teacher verbal guide). However, the author found that the use of teacher model only was more effective than the combination of this approach with teacher verbal guide. Despite the

present study contradicting this result, further research in this area is still needed to understand the potentialities of combining different strategies in instructional communication.

Data analysis revealed eight communication strategies adopted by teachers in instructional communication: (i) being insistent; (ii) demonstrating; (iii) encouraging critical thinking; (iv) encouraging to play freely; (v) avoiding negative words; (vi) physical modelling; (vii) using metaphors; and (viii) using visual aids. Each one seemed to be associated with one or more specific performance skills. For example, using metaphor was identified in the communication of interpretative and technical issues, while physical modelling was mainly adopted to convey information related to excessive tension in the students' playing. Moreover, encouraging to play freely was associated with the development of bowing issues, as well as connecting technical and interpretative skills. In addition, the results highlighted the use of demonstration as the strategy used most often. Teachers underline the importance of demonstrating as the quickest way to make an instruction understandable. Similarly, students also mentioned the communication strategy demonstrating during their interviews.

In addition, data analysis revealed that teachers summarized information through verbal and nonverbal instructions. This information was recognized as teaching cues and they were immersed in teachers' instruction concerning a pedagogical content. The cues were conveyed through the different strategies identified. Furthermore, this research revealed that students deliberately chose their self-vocabulary to summarize information (i.e. self-cues).

Based on the triangulation between results and literature, a theoretical model for the process of instructional communication in one-to-one instrumental lessons was designed (Figure 9.1).



**Figure 9.1** The process of instructional communication in one-to-one instrumental lessons: a theoretical model



The model (Figure 9.1) is based on the dyad *teacher* and *student* in the *instructional communication (inter) actions*. The teacher interacts and communicates a pedagogical content to the student based on intentions, expectations, knowledge about the student and perceived professional responsibilities. The content is defined taking into account the development of specific skills, which are conveyed through different strategies and sometimes summarized as teaching cues. The student, with his/her background and perception about the teacher's action and intention, selects the information to be stored in the memory to produce a given response (e.g. playing, talking, asking). Also, the student sometimes deliberately chooses his/her self-vocabulary to summarize information (i.e. self-cues).

## **9.2. THE USE OF TEACHING CUES IN ONE-TO-ONE VIOLIN LESSONS**

### **9.2.1 Teaching cues typology**

Four main types of teaching cues based on performance skills (Davidson, 2002) emerged through data analysis: (i) aural (i.e. used to convey information on the development of aural skills), (ii) technical (i.e. used to convey information regarding technical skills explored in one-to-one instrumental lessons), (iii) interpretation (i.e. used to assist students to develop interpretative skills) and (iv) presentation (i.e. used to convey information on performance on stage).

Based on a set of selected teaching cues, the results indicated technical teaching cues were the typology used most. Such findings corroborate previous studies, which indicate teachers mostly focused on technique skills during their lessons (Hallam, 2006; Tait, 1992; Kostka, 1984; Hepler, 1986; Thompson, 1984). This focus on technique seems to be rather common in the early stages of learning (S. Hallam, 2006). Although these results corroborated existing perspectives in one-to-one violin lessons, the use of teaching cues has not previously been described in this scenario. Thus, further exploration is needed in order to refine the perspectives on the contribution of teaching cues for instructional communication. In areas other than music, teaching cues have been recognized as important elements for effectiveness in instructional communication. Such elements can

empower the focus of attention, comprehension and retention of information amongst sports students (Konukman & Petrakis, 2001; Landin, 1994; Lorson, 2003; Judith Rink, 1993). Previous studies in instrumental teaching and learning provide evidence of the use of short verbalizations as a means to effective teaching (Duke, 1999; Goolsby, 1996, 1999; Tait, 1992).

### **9.2.2 Strategies to communicate teaching cues**

The results presented here suggest that teaching cues are embedded in seven of the eight communication strategies identified: (i) being insistent; (ii) demonstrating; (iii) encouraging critical thinking; (iv) encouraging to play freely; (v) physical modelling; (vi) using metaphors; and (vii) using visual aids. Particularly, the participating teachers further explored the following strategies to communicate teaching cues: (i) demonstrating (e.g. “shapes and singing the notes”, “try to move the hand like an arc” or “bring your hand around”); (ii) encouraging to play freely (e.g. “right the way through”, “full bow” or “play comfortable”); and (iii) using metaphors (e.g. “gypsy fight”, “balloon” or “focus in binoculars”).

Teachers clearly indicated their preference for using demonstrating for expressing their ideas. Moreover, they highlighted the importance of demonstrating as the quickest way to make an instruction understandable. Likewise, the literature suggests the effectiveness of the demonstration as a means to improve a student’s performance (Rosenthal, 1984). According to Kennell (1992) “the demonstration strategy has been linked to the creation of concepts” (p. 12); thus, teachers employ demonstration when they assume that a student did not understand the musical concept. The same author reinforces that “we offer some form of demonstration intervention to make that concept available to the student” (Kennell, 1992, p. 12). Despite these perspectives, data analysis also revealed that demonstration was not always effective in the communication of a teaching cue. Indeed, this study recognized that if teachers make demonstrations regarding a concept without considering the student’s previous knowledge the student could become confused so that the meanings behind such a concept may not be understood.

### 9.2.3 Teaching cues modes

The communication of teaching cues was identified in verbal and nonverbal modes. The results presented here indicate that teachers prefer to use verbal language supported by nonverbal language to make the instruction understandable. In fact, previous research identified the importance of nonverbal behaviours in instrumental teaching (Carlin, 1997; Gipson, 1978; Hepler, 1986; Highlen & Hill, 1984; Kurkul, 2007; Levasseur, 1994; O'Neill, 1993; Simones et al., 2015), so that a set of nonverbal cues were identified. These cues were embedded in three different strategies: (i) demonstrating, (ii) physical modelling and (iii) using visual aids. Among these strategies, teaching cues embedded in physical modelling and visual aids achieved 100% understanding among students. This result corroborates an existing perspective, which defends using visual aids in educational settings (i.e. the use of pictures or objects) which could optimize the memorization process (Aschermann, Dannenberg, & Schulz, 1998; Ritter, Kaprove, Fitch, & Flavell, 1973; Roebbers & Beuscher, 2004; Meacham & Colombo, 2001). In summary, the results here presented indicate that nonverbal teaching cues might play a key role in optimized instructional communication. According to Highlen and Hill (1984) such a role also concerns the expression of emotions, the regulation of teacher-student interaction and regulation of the meaning.

### 9.2.4 Teaching cues functions

Teaching cues were mainly used with the following functions: advising, problem solving and emphasizing. Among such functions emphasizing was further highlighted. This means that students understood all cues communicated with this function. According to Stone, Singletgary, and Richmond (1999) emphasizing actions can also optimize students' retention of information. According to the same authors the "lack of highlighting can result in the information being lost. Often students do not know what teachers expect, so students attempt to store too much information or simply forget it all" (p. 98-99). Despite this theoretical assumption and the results discussed here, there are still no empirical studies that investigate such a function in instrumental lessons.

### 9.3 OPTIMIZING INSTRUCTIONAL COMMUNICATION: THE ROLE OF TEACHING CUES

The results here presented indicate that teaching cues could be a useful tool to optimize instructional communication. Overall, it was recognized that teachers used verbal and nonverbal language to summarize information during the communication of pedagogical content. This summarization was recognized as teaching cues, which were used to approach technical, aural, interpretative and presentation skills. Based on these findings, twenty-eight teaching cues were explored taking into account their use. The analysis of the intended meaning behind the twenty-eight teaching cues revealed that only four cues were not understood by the students. This result indicated that when teachers summarized instruction to guide the focus during the development of skills, students demonstrated a positive understanding and recognition of those actions (Konukman & Petrakis, 2001). This result reinforces the conclusion previously reached by sports psychologists who suggest that teaching cues may alleviate the overload of information and consequently optimize the instructional communication (Konukman & Petrakis, 2001; Landin, 1994; Thomas & Gagen, 2008). In addition, the use of teaching cues with the function of emphasizing some aspects of the lesson seemed to have a strong impact on the students' understanding of teachers' intentions.

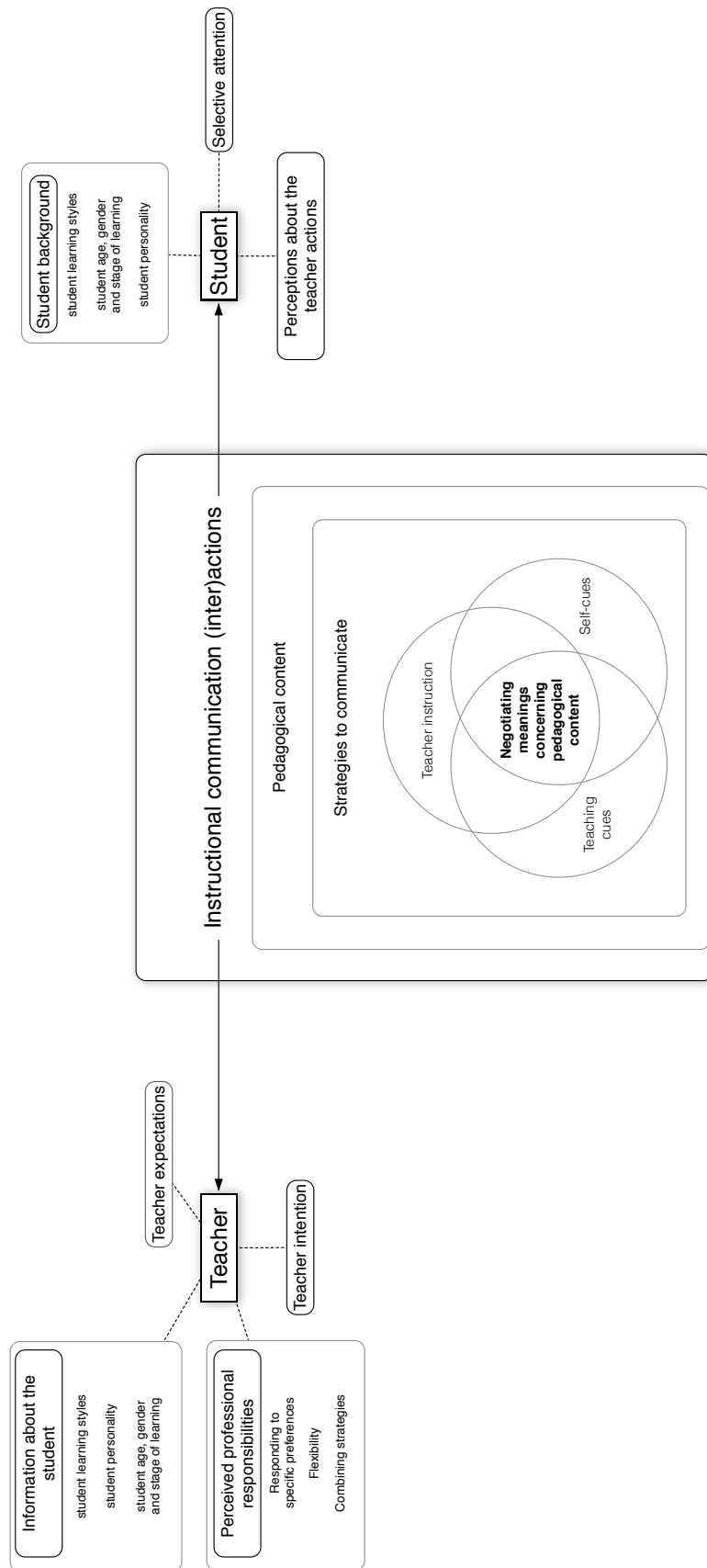
In the data analysis, summarized information mentioned by students also emerged. Such information was recognized as self-cues. Despite few occurrences of these cues, the present study highlighted that such a type of cue may also play an important role in the process of optimizing instructional communication in instrumental lessons as a whole. This type of cue is not necessarily new, so that in other areas than music its use seems to be often discussed (Rink, 1993). Concerning the potential of self-cues, Nukman and Petrakisko (2001) inferred that these cues might have a positive impact on learning (Nukman and Petrakisko 2001, 38). However, no evidence of teachers' concern or consideration about the students' self-cues was found in the video observations. This lack of evidence might represent reduced attention to students' self-constructions of concepts and

meanings. The limited exploration of self-cues might support the point that the teachers aimed for their own constructions of meaning to be conveyed to the students. This could mean that there was reduced negotiation of meanings concerning the pedagogical vocabulary adopted in the lessons.

Novak (2010), who focused on the importance of such negotiation states that “when learner and teacher are successful in negotiating and sharing the meaning in a unit of knowledge, meaningful learning occurs” (p. 18). In other domains rather than music, educational practices grounded on the decontextualized instructions automatically conveyed (e.g. the concept of banking education established by Freire (1970)) have been strongly attacked (Burwell, 2010; Gaunt, Creech, Long, & Hallam, 2012; Renshaw, 2009). Students understand the meanings of the words or actions according to their acquired background (Novak, 2010). If the teacher does not consider the concepts and meanings acquired by the student, the negotiation becomes difficult.

Based on this scenario, self-cues can be an important tool to enrich the development and implementation of teaching approaches that consider this negotiation. This means that teachers need to be aware of the students’ self-cues. According to some authors, an optimized process of communication depends on a shared understanding between teacher and student (Burwell, 2010; Burwell et al., 2004; Woody, 2002, 2006).

Based on all the results presented so far, this thesis suggests a hypothetical model (Figure 9.2) for optimized instructional communication. This model is based on the relational approach (Chapter 1, 1.1) to instructional communication, which assumes that teachers and students share information and ideas, producing common meanings and understandings. Moreover, the relational approach recognizes teachers and students as sources and receivers of information (Mottet & Beebe, 2006).



**Figure 9.2** Optimizing instructional communication in one-to-one instrumental lessons: a hypothetical model

The hypothetical model presented here (Figure 9.2) proposes that, instead of the one-direction model presented before (Figure 9.1), the communication of pedagogical content and the meanings behind the instructions can be negotiated between teacher and student. This communication can be empowered through the use of teaching cues as a pedagogical tool, conveyed through communication strategies (such as those identified in the present study). In addition, the recognition of students' self-cues can enrich the negotiation of concepts and meanings in an educational environment. Differently from the model presented in Figure 9.1, self-cues are inside the instructional communication (inter) actions.

In fact, the model presented in Figure 9.2 reinforces that communication between teacher and student is based on contextual elements: (i) teacher expectations; (ii) teacher's information about the student; (iii) teacher intention; (iv) student background; and (v) student's selective attention. All these elements combined with the teacher's capacity to be flexible, responding to specific student preferences and combining different strategies of communication, may lead to an optimized communicational experience.





## CHAPTER 10: CONCLUSIONS

The purpose of this study was to understand the process of effective instructional communication in one-to-one instrumental lessons through the study of teaching cues. The answers to the four main research questions which guided this investigation are summarised here.

HOW HAS INSTRUCTIONAL COMMUNICATION BEEN USED BY TEACHERS IN ONE-TO-ONE INSTRUMENTAL LESSONS?

Data analysis revealed that teachers establish a pattern of (inter) actions with students. This pattern involves the selection of a set of strategies to convey their intentions (i.e. being insistent; demonstrating; encouraging critical thinking; encouraging to play freely; avoiding negative words; physical modelling; using metaphors; and using visual aids). Such communication was shaped by their expectations as well as students' individual characteristics. Such characteristics included: personality; learning style; age, gender and stage of learning. Indeed, instructional communication requires professional responsibilities among teachers, namely: students' preferences, flexibility and a combination of different strategies. In addition, teachers have used summarized information to convey instructional messages. Such summarization was recognized as teaching cues, which were used to approach technical, aural, interpretative and presentation skills.

On the other hand, students seemed to perceive teachers' actions and intentions according to their backgrounds; personal characteristics; stage of learning and learning styles. They selected the information to be stored in the memory, which would be used to produce a given response. Sometimes students deliberately choose their own vocabularies to summarize teachers' instructions (i.e. self-cues).

WHAT COULD BE RECOGNIZED AS A TEACHING CUE IN ONE-TO-ONE INSTRUMENTAL LESSONS, AND HOW IS IT BEING USED IN INSTRUCTIONAL COMMUNICATION?

Data analysis revealed that in one-to-one instrumental lessons, teaching cues were recognized as summarized information in a teacher's instructions identified

through the following characteristics: (i) to alleviate the overload of information; (ii) to guide the focus during the performance; (iii) to give a clear picture of the skill. The outcomes illustrate that teaching cues were presented in both verbal and nonverbal instructions, which were conveyed according to the addressed skill. Despite this, data analysis revealed that teachers and learners seemed not to be aware that certain specific words or gestures that they use might help them to improve communication and the learning experience itself.

Overall, teachers used teaching cues to convey different kinds of performance skills, which were classified according to the teaching cues typology, namely: (i) structural teaching cues; (ii) aural teaching cues; (iii) technical teaching cues; (iv) interpretative teaching cues; and (v) presentation teaching cues. Moreover, teachers used teaching cues with the following functions: (i) advising; (ii) problem solving; and (iii) emphasizing. All the cues were conveyed through different strategies: (i) being insistent; (ii) demonstrating; (iii) encouraging critical thinking; (iv) encouraging to play freely; (v) physical modelling; (vi) using metaphors; and (vii) using visual aids.

Concerning the use of teaching cues, the analysis verified that most teaching cues were conveyed through verbal and nonverbal communication, particularly, when teachers focused on aspects related to technical and/or motor skills. This communication was embedded in the following strategies: demonstrating, encouraging to play freely and using metaphors and was most conveyed with the function of emphasizing an important aspect during the lesson. The second most used type of teaching cues were those related to presentation skills. These cues were embedded only in the strategy encouraging to play freely and were used with the three functions identified.

HOW CAN TEACHING CUES BE COMMUNICATED EFFECTIVELY IN INSTRUCTIONAL COMMUNICATION IN ONE-TO-ONE INSTRUMENTAL LESSONS?

The perspective adopted in this thesis considered communication of teaching cues to be effective when the student recognized and understood the meaning of the teaching cue, taking into account the intended meaning of the teacher. Among the

teaching cues understood by the students (i.e. sixteen totally understood and eight partially understood), a set of features was identified. Overall, the main features indicated that teaching cues could be communicated effectively by verbal and nonverbal modes of communication when the purpose was to emphasize an important aspect in the lesson (i.e. function). In addition, teaching cues could be communicated through using metaphors, physical modelling, encouraging to play freely, and demonstrating (i.e. strategies). Although teaching cues conveyed by verbal and nonverbal communication seemed to be effective, the findings highlighted the use of nonverbal teaching cues. Among these cues, the use of physical modelling and visual aids (i.e. the use of pictures or objects) could have effective impact on students' understanding.

CAN TEACHING CUES OPTIMIZE INSTRUCTIONAL COMMUNICATION IN ONE-TO-ONE INSTRUMENTAL LESSONS?

The results presented here suggest that teaching cues could be a useful tool to optimize instructional communication. When teachers used summarized instruction to alleviate the information overload and guide the focus during the development of skills, students demonstrated a positive understanding and recognition of these actions.

In addition, the emergent self-cues can be an important tool for the development and implementation of teaching approaches that consider negotiation of teachers' and students' perceptions of meanings and concepts. In order to achieve this condition, teachers need to be aware of the students' self-cues. The negotiation of meanings and concepts must be informed by the knowledge of the student's preferences and background. All these elements, combined with the teacher's capacity to be flexible, to respond to specific student preferences and to combine different strategies of communication, may lead to an optimized communicational experience.

## **10.1 LIMITATIONS OF STUDY**

Despite the present study providing rich data, some limitations must be taken into account in any extrapolation of these results. Particularly, two main points must be highlighted: small sample and data collection. Concerning the first limitation, one can infer that the sample strategy adopted here allowed a deep analysis of the instructional communication, but this was only achieved with a reduced number of participants. Research on this process with a bigger sample could reveal other types of cues as well as other strategies where such cues were embedded.

The limitation concerning data collection is based on the focus of the research, which included only primary and secondary schools. Thus, the findings and conclusions are referenced to this particular population and, obviously, are limited to the number and range of this research. The nature of the study was qualitative and although the use of quantitative strategies to present the data could contribute to the internal validity, the report of the case study was selective so that the numbers have represented adjectives to complement the interpretation of data.

## **10.2 PEDAGOGICAL IMPLICATIONS**

The results presented here suggest some insights which could contribute to the existing discussion on how the communication in one-to-one instrumental lessons might be improved. Particularly, this study enriched the understanding of how the process of instructional communication in one-to-one instrumental lessons is undertaken. The evidence presented in this thesis, and especially the theoretical model of instructional communication in one-to-one instrumental lessons (Chapter 9, 9.1), constitutes a framework which may inform teaching experiences. This model revealed teachers' professional responsibilities related to instructional communication, namely: teachers recognizing students' preferences; teachers' combination of communication strategies; and teachers' flexibility in communicating information. In the same model, the identification of eight communication strategies might expand the concept of teaching strategies that is further explored in the literature (e.g. Young et al., 2003). The knowledge of these

communication strategies may empower teachers to improve their communication skills.

One of the main implications of this research for the improvement of teachers' communication skills is an understanding of the use of teaching cues (i.e. summarized information) as a pedagogical tool in one-to-one instrumental lessons. As suggested by sports psychologists, these cues may alleviate the overload of information and consequently optimize instructional communication (Konukman & Petrakis, 2001; Landin, 1994; Thomas & Gagen, 2008). Teaching cues in an instrumental context can be used to advise, to solve a problem or to emphasize pedagogical content concerned with the performance skills developed in instrumental learning. Moreover, the exploration of students' perceptions through the interviews brought to light the concept of self-cues. This type of cue can contribute to pedagogical approaches that aim to support student learning by a negotiation of teachers' and students' perceptions of meanings and concepts.

In order to illustrate such a negotiation, I presented a reflection on my personal experience and practice. I chose an example that came from an attempt to solve a common problem in violin teaching: holding the violin. This problem concerns the action of flexing the wrist of the left hand forward, which may result in unnecessary tension and low intonation. In my experience as a violin teacher I have used a teaching cue (i.e. ice cream), in order to convey my ideas regarding this point. I used to ask the student to imagine that the cone of the ice cream is his/her arm, while the fingers and hand are the proper ice cream (first picture, Figure 10.1). Thus, if the wrist is flexed forward the flavours start to melt away (second picture, Figure 10.1). During the lesson, if the student flexed the wrist I quickly used the verbal teaching cue 'ice cream'. After the experience of conducting this research, I try to negotiate this meaning with the student. Such negotiation requires an understanding of how the student realizes that mechanical gesture. Therefore, the teaching cue would be created taking into account the student's perceptions of that gesture. When the student is totally familiarized with the vocabulary used, his/her engagement may increase because he/she is emotionally involved with the task (Wolfe, 2007).



**Figure 10.1** Wrist positions

Based on the triangulation of the results and the fundamental precepts of the selective theory (Chapter 1, 1.2) proposed by DeFleur (1970), Table 10.1 suggests practical actions for instrumental teachers that can optimize instructional communication. The first and the second column describe the main guidance to communication and a brief explanation about that guidance; the main evidence of this information came from the literature. The third column gives the practical application of such guidance. The last column is based on the evidence reached in this study and the findings suggested in literature.

**Table 10.1** Suggestions for optimize communication

<b>Guidance to communication</b>		<b>Application</b>
<b>Considering the student socio-cultural background</b>	We are constantly learning and relearning concepts, language and meanings	Search for less abstract terms
		Use language according to the student's level of knowledge
		Negotiating meanings concerning to pedagogical content
<b>Communicating in a clear, simple and appropriate way</b>	The information must be real with concrete applications	Encourage students to participate asking whether they have questions
		Avoid using too many complex words
		Negotiating meanings concerning to pedagogical content
		Explain why
<b>Helping the students to create the schema base</b>	People learn by selecting information into categories known as schema. A source must help the student create schema for new ideas	Search and use teaching cues
		Explore the students' self- cues
		Negotiating meanings concerning to pedagogical content
<b>Giving emphasis and being redundant</b>	Redundancy and emphasis enables students to have a second or third opportunity to comprehend the intended meaning	Hand out learning objectives
		Use teaching cues and self-cues
		Speak articulately
		Write on the notebook or score
		Reemphasis on significant content points
		Approach important information first or last in a message

As highlighted above, the findings presented here brought to light several implications for the understanding of instructional communication. Although this field of research is increasing, there is still room for new investigations. To a certain extent, some authors claim that the research in instrumental teaching is not following up the increasing demand for this practice (Burwell, 2012; Kennell, 2002).

#### **10.4 CONTRIBUTION TO KNOWLEDGE**

This research contributed to the understanding of the process of instructional communication in one-to-one instrumental lessons. According to the findings here described, teachers establish a pattern of (inter) actions with students. This pattern involves the selection of a set of strategies to convey their intentions and summarize information (i.e. teaching cues) which is shaped by their expectations as well as students' individual characteristics. In addition, the findings highlighted that teachers assumed some professional responsibilities in instructional communication (i.e. students' preferences, flexibility and a combination of different strategies). On the other hand, students seemed to perceive teachers' actions and intentions according to their own backgrounds, personal characteristics, stage of learning and learning styles. They selected the information to be stored in the memory, which would be used to produce a given response. Sometimes students deliberately chose their own vocabularies to summarize teachers' instructions (i.e. self-cues). This vocabulary might be an important role for the development and implementation of teaching approaches that consider negotiation of teachers' and students' perceptions of meanings and concepts.

Based on the process described so far, this research has focused on the use of teaching cues which has been considered an effective pedagogical tool for optimizing instructional communication by sports psychologists. The analyses of the use of this pedagogical tool revealed that teaching cues were presented in both verbal and nonverbal instructions, which were conveyed according to the addressed skill (mainly in technical and motor skills) and used with the function to advise, to solve a problem or to emphasise specific information. All the cues were conveyed through different strategies; however, some of these strategies seemed to



be more effective in the communication of those cues (i.e. using metaphors, physical modelling, encouraging to play freely and demonstrating). Based on the literature and the evidence presented in this research, it is possible to argue that teaching cues could be a useful tool for optimizing instructional communication, especially when used with the function of emphasizing information.

## **10.5 SUGGESTIONS FOR FUTURE RESEARCH AND DISSEMINATION**

As suggested previously, the results presented here have brought to light considerable implications for instrumental pedagogy, through the use of teaching cues. However, further research should assess the impact of the use of teaching cues as a pedagogical tool in one-to-one instrumental teaching and learning, considering different levels of teaching. Future studies could explore further the typologies and the communication strategies behind this pedagogical tool. Such exploration could adopt mixed method approaches as well as involving other cases studies (i.e. different instruments; different interactions such as teacher and a group of students, students-students in a group lesson) with different instruments of data collection. Such investigation could also include the assessment of strategies through quasi-experimental designs. These studies might take into account teacher and/or student personality, the relationships of teachers' and students' experiences, learning levels, gender, and cultural backgrounds.

In future research self-cues must be investigated. This kind of cue seems to be an important tool for optimizing instructional communication in one-to-one instrumental lessons; therefore this must be verified. This concept could be explored through students' conversations, lessons observation, students' interviews or new tools for collecting data. Future studies must contribute to the teachers' recognition of students' self-cues to improve learning experiences.

The hypothetical model suggested in Chapter 9 (9.3) also needs to be tested. The idea of negotiating the meanings behind instructional communication seemed to meet existing perspectives which defend the importance of constructivist approaches to instrumental teaching and learning. This idea, which emerged as a reflection on the findings presented here needs to be further explored in one-to-one

instrumental lessons. One possible way to explore it can be through the investigation of students' self-cues.

Although the effectiveness of strategies such as experimentation and exploration has been recognized in the educational field, findings from this study showed that in the communication of teaching cues these strategies could be further explored. In some cases, findings revealed that the meaning behind teaching cues communicated through these strategies was not being understood by the students. Therefore, future investigations might explore the impact of these strategies on pedagogical experiences.

Concerning dissemination, this study reinforces the need to fill in an existing gap between the research conducted in academia and the application of the findings in music practices. In order to overcome this challenge, a possible means to disseminate the results of this thesis includes the development of workshops and seminars that could introduce the findings of this research. Such activities could be articulated with educational organizations which aim to support teaching practices. Another possible way to disseminate results could be through digital environments. A digital platform could be created to provide research-based information for those engaged in instrumental teaching and learning. Digital strategies could provide tools to maximize and assess the outcomes, feeding the discussion concerning new perspectives on instructional communication in instrumental pedagogy.

Even if more research in the field of instructional communication in instrumental lessons still needs to be developed, I hope this study has contributed to a further understanding of this process in the scenario described here.

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# APPENDICES

## **APPENDIX 1**

Ethical procedures: pilot study

## **APPENDIX 2**

Ethical procedures: main study

## **APPENDIX 3**

Leaflet information main study

## **APPENDIX 4**

Characterization forms

## **APPENDIX 5**

Pre-formulated frame to student's draw

## **APPENDIX 6**

Students' drawings

## APPENDIX 1: ETHICAL PROCEDURES PILOT STUDY

1



### Documento informativo de Investigação

#### Tema do Projecto de pesquisa

Optimização do ensino-aprendizagem Instrumental

#### Investigadores envolvidos

Ms<sup>a</sup> Clarissa Gomes Foletto, aluna do curso de Doutoramento em Música no ramo do ensino instrumental da Universidade de Aveiro.

Dr<sup>a</sup> Sara Carvalho, Professora Auxiliar da Universidade de Aveiro (Orientadora).

Dr<sup>a</sup> Daniela Coimbra, Escola Superior de Música, Instituto Politécnico do Porto (Co-orientadora).

#### Descrição da pesquisa

Proponho-me investigar, no caso específico do ensino do violino, ferramentas de ensino-aprendizagem que possam contribuir para o desenvolvimento e aquisição de competências performativas nos alunos, colaborando com os professores na optimização do ensino.

#### Descrição do envolvimento de sujeito humano

Você está convidado a participar como sujeito num estudo de caso durante um ano lectivo. Esta participação implica na filmagem de 4 aulas por período com cada aluno (de três a cinco alunos entre os 6 e 15 anos) e uma entrevista individual no final do ano lectivo. Esta investigação não implica em deslocamentos até o conservatório além daqueles que já estão marcados com cada aluno, bem como interferências no decorrer normal das aulas. A entrevista será agendada de acordo com a disponibilidade do professor.

#### Desconfortos de participação

Os participantes têm a garantia de que não serão avaliadas suas competências e capacidades a nível de ensino. O objectivo do estudo de caso é colectar ferramentas que já são utilizados pelos professores de violino e não julgar suas capacidades.

#### Confidencialidade dos registos / dados

Os participantes não serão identificados e suas imagens e dados concedidos serão utilizados apenas para fins académicos.

Os Registos serão mantidos confidenciais para os investigadores envolvidos na pesquisa e as imagens serão utilizadas apenas para fins académicos científicos.



**Contactos**

Clarissa Gomes Foletto: Rua Comandante Rocha e Cunha, 7A, 3A, Aveiro. 3800-135.  
Tel. 234 486228; Tlm. 937 601778. Email: [clarissafoletto@gmail.com](mailto:clarissafoletto@gmail.com)  
Dr<sup>a</sup> Sara Carvalho: [scarvalho@ua.pt](mailto:scarvalho@ua.pt)

**Natureza voluntária da participação**

Sua participação neste projecto é voluntária. Você pode se recusar a responder qualquer pergunta por qualquer motivo.

**Documentação do consentimento**

Uma cópia deste documento será mantido com os registos de pesquisa deste estudo e uma cópia será dada a você.

**Consentimento do sujeito**

Eu li todas as informações descritas acima.

Clarissa Foletto se ofereceu para responder a quaisquer perguntas que eu possa ter sobre o estudo. Dou o consentimento para participar do estudo.

\_\_\_\_\_  
Assinatura

\_\_\_\_\_  
nome

\_\_\_\_\_  
data

**Audio / Video**

Após a conclusão do estudo, os registos serão mantidos de forma que porções editadas possam ser incluídas em apresentações/conferências, com sua futura aprovação e consentimento. Por favor, escreva uma linha separada no formulário de consentimento se houver restrições quanto a utilização de suas imagens.

Por favor, assine abaixo se você estiver disposto a conceder a utilização de sua imagem apenas para fins académicos científicos.

\_\_\_\_\_  
Data e assinatura

## DECLARAÇÃO

Eu \_\_\_\_\_, declaro que aceito participar da investigação de Doutoramento em música desenvolvida pela aluna Clarissa Foletto no decorrer do ano lectivo 2011/2012 e autorizo o uso de minhas imagens e dados concedidos em entrevista exclusivamente para fins académicos/científicos.

Aveiro, 06 de Setembro de 2011

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## DECLARAÇÃO

Eu \_\_\_\_\_, declaro que autorizo a participação de meu filho(a) \_\_\_\_\_ na investigação de Doutoramento em música desenvolvida por Clarissa Gomes Foletto, bem como a utilização de imagens e dados cedidos no trabalho de campo exclusivamente para fins académico científico.

Aveiro, 06 de Setembro de 2011

---



Ex.mo Sr.

Encarregado de Educação

No âmbito do projeto de Doutoramento em Música que a formadora Clarissa Gomes Foletto está a realizar na Universidade de Aveiro, a classe de violino em que o seu educando frequenta será objeto deste estudo. A investigação será realizada ao longo do ano letivo de 2011/2012, e tem como tema a otimização do ensino-aprendizagem instrumental. Assim, venho por este meio solicitar a sua autorização para captar imagens durante as aulas de violino do seu educando, com o objetivo de recolher dados para posterior análise e avaliação que farão parte do referido estudo.

Desde já informo que as referidas imagens serão apenas utilizadas no âmbito deste trabalho de investigação e para fins académico científico, sendo que o anonimato dos alunos será sempre mantido.

Tomei conhecimento e autorizo

Nome do aluno \_\_\_\_\_

O Enc. de Educação \_\_\_\_\_

Fátima, \_\_\_\_/\_\_\_\_/2011

## APPENDIX 2: ETHICAL PROCEDURES MAIN STUDY

### Ethics Application Form: Research Degree Students



Leading education  
and social research  
Institute of Education  
University of London

All student research that use research methods to collect data from human participants is required to gain ethical approval before starting. Please answer all relevant questions. Your form may be returned if incomplete. Please write your responses in terms that can be understood by a lay person.

For further support and guidance please see Ethics Review Procedures for Student Research <http://www.ioe.ac.uk/about/policiesProcedures/42253.html>, contact your supervisor or [researchethics@ioe.ac.uk](mailto:researchethics@ioe.ac.uk).

Section 1 Project details	
a.	Project title Retrieval cues as a teaching and learning tool in one-to-one violin lessons
b.	Student name Clarissa Gomes Foletto
c.	Supervisor Dr Andrea Creech
d.	Advisory committee members Andrea Creech, Lynne Rogers, Victoria Showumni, Clare Bentall, Sue Hallam
e.	Department LCE
f.	Faculty FPS
g.	Intended research start date 07/01/2013
h.	Intended research end date 26/06/2013
i.	Funder (if applicable) CAPES Foundation, Ministry of Education of Brazil, Brasilia – DF, Brazil
j.	Funding confirmed? Yes
k.	Country fieldwork will be conducted in <i>If research to be conducted abroad please check <a href="http://www.fco.gov.uk">www.fco.gov.uk</a> If the FCO advice against travel a full travel risk assessment form should also be completed and submitted: <a href="http://intranet.ioead/ioe/cms/get.asp?cid=14460&amp;14460_0=22640">http://intranet.ioead/ioe/cms/get.asp?cid=14460&amp;14460_0=22640</a></i> United Kingdom
l.	All research projects at the Institute of Education are required to specify a professional code of ethics according to which the research will be conducted. Which organisation's research code will be used? BERA (British Education Research Association)
m.	<i>If your research is based in another institution then you may be required to submit your research to that institution's ethics review process. If your research involves patients recruited through the NHS then you will need to apply for ethics approval through an NHS Local Research Ethics Committee. In either of these cases, you don't need ethics approval from the Institute of Education.</i> Has this project been considered by another (external) Research Ethics Committee? Yes <input type="checkbox"/> No X ⇒ go to Section 2 <i>If so, please insert the name of the committee, the date on which the project was considered, and attach the approval letter in either hard or electronic format with this form.</i>

	External Committee Name:	Date of Approval:
⇒ <i>If your project has been externally approved please go to <b>Section 8 Attachments</b>.</i>		



## Section 2 Research Summary

Please provide an overview of your research. This can include some or all of the following: purpose of the research, aims, main research questions, research design, participants, sampling, data collection, reporting and dissemination. *It is expected that this will take approximately 200-300 words, and you may write more if you feel it is necessary.*

The main purpose of this research is to analyse the potentialities to use *retrieval cues*, as a teaching and learning tool, in one-to-one instrumental lessons.

Learning an instrument is a process that could be difficult and taxing, where physical, mental and emotional efforts are needed. (McPherson & Zimmerman, 2002). One of the teacher's challenges in teaching an instrument in early stages of learning is using an effectiveness and clear communication, in order to approach a complex content, which involves a specific and technical vocabulary. However, a recurrent problem is that technical vocabulary frequently contains many words that are applied to common concepts, sometimes totally unrelated to the technical concept meanings (Novak, 2010).

Based on this assumption, the present study aims to answer the following question: how can teachers optimize the communication between teacher and student in one to one instrumental lessons? A current hypothesis for answer this question is that specific cues (retrieval cues) can be explored as a teaching and learning tool in the early stages of learning.

In cognitive psychology, this phenomenon has been investigated as a means to optimize the memorization process and it is recognized as stimuli that assist retrieval of information from long-term memory (Baddeley, 1999; Gleitman et al., 2010). The concept of *retrieval cues* is used in education as a teaching tool - i.e. *Teaching cues* (Petrakis & Konukman, 2001) or *Learning cues* (Rink, 1993). In sports, the use of these *Teaching/Learning cues* assists athletes to improve their learning in aspects such as attention, comprehension and information retention. In music, *retrieval cues* have been researched in a performance context i.e. *Performance cues* (Chaffin et al, 2009). On the other hand, there are not clear evidences on how retrieval cues as a teaching and learning tool could be explored in one-to-one instrumental lessons.

The final intention in this research is to develop an approach to using retrieval cues and thus, to contribute to positive and enjoyable teaching and learning experience.

### Exploratory Phase

#### Research methods

Observations and interviews are the main methods chosen to answers the research questions. The specific aim with each method is explained bellow:

- Observations reports and lessons' video recordings: to collect the most possible retrieval cues used by the teacher and student in theirs verbal and non-verbal communication.
- Teachers' interviews: to understand their intentions with the utilization of specific cues. The questions will be based in the first lesson's observation.
- Students' interviews and drawings: to understand what specific cues used in the lessons represent for them. The questions will be based in the first lesson's observation.

Personal details will not be asked in the interviews. The participants, before the interview, should complete a form to participants' characterization (It is different for teacher and student).

#### Participants

I am inviting Violin teachers from different venues and two students of each teacher (aged 5 -13) to take part in this research.

#### Data collection

I will observe and video record each teacher teaching two students in two different lessons with each student. The camera will be allocated in a place that captured both, student and teacher. Following the second lesson (or at another convenient time), I intend to accomplish a very short interview with both teacher and student.

During the interviews students must be accompanied by a parent or, if it is not possible, by the teacher. In addition, between the first and the second lesson, I shall ask the student to draw a picture about the recently observed lesson.

*Data analysis*

The analysis process will be divided in four steps: (i) Selection – selection in the video recordings only the segments that teacher and student are using retrieval cues. (ii) Transcription – the selected segments and the interviews will be transcribe; (iii) Codification - all selected segments, interview and drawings will be coded; (iv) Interpretation, the triangulation of data. The data (video recording; audio recording; observational reports; children's drawing) must be analysing with Nvivo 10.



**Section 3 Research participants Tick all that apply**

- |  |   |
|--|---|
| <input type="checkbox"/> Early years/pre-school  | <input type="checkbox"/> Unknown                        |
| X Primary School age 5-11                        | <input type="checkbox"/> Advisory/consultation groups   |
| X Secondary School age 12-16                     | <input type="checkbox"/> No participants                |
| <input type="checkbox"/> Young people aged 17-18 | X Adults <i>please specify below</i><br>Violin Teachers |

**Section 4 Research methods Tick all that apply**

- |  |   |
|--|---|
| X Interviews                               | <input type="checkbox"/> Controlled trial/other intervention study                      |
| <input type="checkbox"/> Focus groups      | <input type="checkbox"/> Use of personal records  |
| <input type="checkbox"/> Questionnaire     | <input type="checkbox"/> Systematic review  |
| <input type="checkbox"/> Action research   | <input type="checkbox"/> Secondary data analysis  |
| X Observation                              | X Other, give details: Children's Drawings and a form to participants' characterization |
| <input type="checkbox"/> Literature review |   |

**Section 5 Systematic reviews Only complete if systematic reviews will be used**

- |    |  |                              |                             |
|----|--|------------------------------|-----------------------------|
| a. | Will you be collecting any new data from participants? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| b. | Will you be analysing any secondary data?              | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

**Section 6 Secondary data analysis Only complete if secondary data analysis will be used**

a.	Name of dataset/s	
b.	Owner of dataset/s	
c.	Are the data in the public domain?	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>If no, do you have the owner's permission/license?</i> Yes <input type="checkbox"/> No* <input type="checkbox"/>
d.	Are the data anonymised?	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>Do you plan to anonymise the data?</i> Yes <input type="checkbox"/> No* <input type="checkbox"/> <i>Do you plan to use individual level data?</i> Yes* <input type="checkbox"/> No <input type="checkbox"/> <i>Will you be linking data to individuals?</i> Yes* <input type="checkbox"/> No <input type="checkbox"/>
e.	Are the data sensitive (DPA definition)?	Yes* <input type="checkbox"/> No <input type="checkbox"/>
f.	Will you be conducting analysis within the remit it was originally collected for?	Yes <input type="checkbox"/> No* <input type="checkbox"/> <i>Was consent gained from participants for subsequent/future analysis?</i> Yes <input type="checkbox"/> No* <input type="checkbox"/> <i>Was data collected prior to ethics approval process?</i> Yes <input type="checkbox"/> No* <input type="checkbox"/>

## Section 7 Ethical issues

What are the ethical issues which may arise in the course of this research, and how will they be addressed? Please consider / address ALL issues that may apply. *It is expected that this will take approximately 200-300 words, and you may write more if you feel it is necessary.*

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Potentially vulnerable participants</li> <li>• Safeguarding/child protection</li> <li>• Risks to participants and/or researchers</li> <li>• International research</li> <li>• Sensitive topics</li> <li>• Sampling</li> <li>• Gatekeepers</li> </ul> | <ul style="list-style-type: none"> <li>• Informed consent</li> <li>• Assent</li> <li>• Methods</li> <li>• Confidentiality</li> <li>• Anonymity</li> <li>• Data storage/security</li> <li>• Data transfer/transmission</li> </ul> | <ul style="list-style-type: none"> <li>• Data sharing/encryption</li> <li>• Data documentation</li> <li>• Data management plan</li> <li>• Data protection</li> <li>• Reporting</li> <li>• Dissemination and use of findings</li> </ul> |
|---|--|--|

### Procedure

I intend to collect data from the observations of violin lesson in different venues of London. I will observe violin teachers, teaching two students (children) on different days. At the end of the second lesson, I intend to interview the participants. Moreover, where informed consent is granted I intend to video record the lessons and audio record the interview. During the interviews, I will ensure that a parent or teacher accompanies the students. I will not be alone with the student any moment.

### Participants

The participants will be informed about the research by the information leaflet and the informed consent form will be attached. The leaflet shall be send by email to the violin teachers and they will forward this to the parents. I will include a simple information sheet for the children and will repeat the information verbally for the children (in child-friendly language) before observing their lessons or interviewing them. I will ensure that I provide the children with an opportunity to ask questions and I will make it clear to them that they will be free to not take part in the research, with no risk of adverse consequences. I will be alert to signs of 'assent' amongst the children and if there is any reason to believe a child is not comfortable with the research observation or interview I will draw it to a close immediately.

If Teachers or students wish to withdraw from the observation or interview at any time I will immediately stop the recordings and/or the observation. Also, they can say that do not want to answer some questions in the interview or that do not want to take part in drawing the picture (children). In this case, it will be respectful of their decisions.

I am not intending to interfere in the normal course of the lessons and the lessons will be scheduled according to the availability of the Participants. This research do not offered any risk for participants.

### Data

**Video recordings** – The purpose of the video recordings is to provide me with in depth data relating to the nature of retrieval cues and the ways in which these are used within instrumental teaching. I will select segments that teacher and student are using retrieval cues to be transcribed and analyzed. The others segments will be destroyed, as soon as all the data analysis is done.

**Audio from the Interviews** – I will transcribe and analyse the teachers' intentions and students' responses of the cues used in their discourse. I will not use the real names in the transcription.

**Children's Drawing** – the drawing will serve as a prompt in the interview with students.

All data analysed will be stored safely and securely according the following conditions: (i) selected segments of the video, audio recordings, interview and video transcripts will be stored in encrypted files in my computer with password protected and accessed only by agreed members of the team i.e. supervisors and co-supervisors; (ii) identifiable data (form to participants' characterization) will be in separate encrypted files from other data, password protected and save only in my computer, (iii) printed data (drawings) should be kept with me in locked folder.

The participants have options in the consent form to allow or not the video and audio recording and the use of this data in future. They can allow or not the use of images in conferences or academic presentations. If

they allow, this images will be faces' covered and will be only the segments that can better exemplify the use of retrieval cues, mainly in non-verbal communication. After five years, I will destroy the recordings.

**Section 8 Attachments** Please attach the following items to this form, or explain if not attached

a.	Further information about the work	Yes <input type="checkbox"/>	No X
b.	Approval letter from external Research Ethics Committee, if applicable	Yes <input type="checkbox"/>	No X
c.	Information sheets and other materials to be used to inform potential participants about the research.	Yes X	No <input type="checkbox"/>

**Section 9 Declaration**

I confirm that to the best of my knowledge this is a full description of the ethics issues that may arise in the course of this project

Name	Clarissa Gomes Foletto
Date	11/04/2013

Please submit your completed ethics forms to your supervisor/course administrator.




### Departmental use

If a project raises particularly challenging ethics issues, or a more detailed review would be appropriate, you may refer the application to the Research Ethics Coordinator (via [researchethics@ioe.ac.uk](mailto:researchethics@ioe.ac.uk)) so that it can be submitted to the Faculty Research Ethics Committee (FREC) for consideration. FREC Chairs, FREC representatives in your department and the research ethics coordinator can advise you, either to support your review process, or help decide whether an application should be referred to the FREC.


Also see 'when to pass a student ethics review up to Faculty level committee':

<http://intranet.ioead/ioe/cms/get.asp?cid=13449>

#### Reviewer 1

Supervisor name	Andrea Creech
Supervisor comments	The ethical issues have been addressed and informed consent forms have been checked.
Supervisor signature	

#### Reviewer 2

Advisory committee member name	Lynne Rogers
Advisory committee member comments	This is an interesting piece of research. Clear attention has been paid to the ethical issues.
Advisory committee member signature	

#### Decision

Date decision was made	12/04/13
Decision	Approved and reported to FREC <input type="checkbox"/>
	Referred back to applicant and supervisor <input type="checkbox"/>
	Referred to FREC for review <input type="checkbox"/>
Recording	Recorded in the student information system <input type="checkbox"/>

Once completed and approved, please send this form and associated documents to the faculty research administrator to record on the student information system and to securely store.

Further guidance on ethical issues can be found on the IOE website at

<http://www.ioe.ac.uk/about/policiesProcedures/41899.html> and [www.ethicsguidebook.ac.uk](http://www.ethicsguidebook.ac.uk)

Further guidance on recording ethics applications in the student information system can be found on the

intranet <http://intranet.ioead/ioe/cms/get.asp?cid=13449>



Clarissa Foletto, University of Aveiro; Institute of Education, University of London

Dr Sara Carvalho, University of Aveiro (Mainly Supervisor)

Dr Daniela Coimbra, Superior School of Music and Performing Arts, Porto Polytechnic Institute (Co-Supervisor)

Dr Andrea Creech, Institute of Education, University of London (IOE Tutor)

## Consent form for Violin Teachers

### Retrieval cues as a teaching and learning tool in one-to-one violin lessons

Please choose the appropriate column:

	Yes	No
I have read the information leaflet and I have informed my two students about the research.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to participate in the study	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in an audio recorded interview	<input type="checkbox"/>	<input type="checkbox"/>
I allow the researcher to video record the lessons If not,	<input type="checkbox"/>	<input type="checkbox"/>
I allow the researcher to audio record the lessons	<input type="checkbox"/>	<input type="checkbox"/>
I will allow the researcher use some images of my lessons (i.e. shorter segments with faces' covered) as examples for conferences or academic presentations.	<input type="checkbox"/>	<input type="checkbox"/>
I would like to know the findings of the research	<input type="checkbox"/>	<input type="checkbox"/>

Name \_\_\_\_\_

Signed \_\_\_\_\_ date \_\_\_\_\_

email (optional) \_\_\_\_\_

Researcher's name Clarissa Foletto \_\_\_\_\_

Signed \_\_\_\_\_ date \_\_\_\_\_



Clarissa Foletto, University of Aveiro; Institute of Education, University of London

Dr Sara Carvalho, University of Aveiro (Mainly Supervisor)

Dr Daniela Coimbra, Superior School of Music and Performing Arts, Porto Polytechnic Institute (Co-Supervisor)

Dr Andrea Creech, Institute of Education, University of London (IOE Tutor)

## Consent form for Parents

### Retrieval cues as a teaching and learning tool in one-to-one violin lessons

Please, choose the appropriate column:

	Yes	No
I have read the information leaflet and I have informed my child about the research.	<input type="checkbox"/>	<input type="checkbox"/>
I allow my child to participate in the study	<input type="checkbox"/>	<input type="checkbox"/>
I will allow the researcher records in video of two lessons of my child If not,	<input type="checkbox"/>	<input type="checkbox"/>
I allow the researcher to audio record of two lessons of my child	<input type="checkbox"/>	<input type="checkbox"/>
I allow my child to take part in an audio recorded interview	<input type="checkbox"/>	<input type="checkbox"/>
I will be present in the my child's interview If not, please answer the following: I will ask to my child's violin teacher to be present in the interview	<input type="checkbox"/>	<input type="checkbox"/>
I will allow the researcher use some images of my child's lesson (i.e. shorter segments with faces' covered) as examples for conferences or academic presentations.	<input type="checkbox"/>	<input type="checkbox"/>
I would like to know the findings of the research	<input type="checkbox"/>	<input type="checkbox"/>

Name \_\_\_\_\_ Child's name \_\_\_\_\_

Signed \_\_\_\_\_ date \_\_\_\_\_

email (optional) \_\_\_\_\_

Researcher Clarissa Foletto \_\_\_\_\_ date \_\_\_\_\_



Clarissa Foletto, University of Aveiro; Institute of Education, University of London

Dr Sara Carvalho, University of Aveiro (Mainly Supervisor)

Dr Daniela Coimbra, Superior School of Music and Performing Arts, Porto Polytechnic Institute (Co-Supervisor)

Dr Andrea Creech, Institute of Education, University of London (IOE Tutor)

## Consent form for Violin Students

### Retrieval cues as a teaching and learning tool in one-to-one violin lessons

Dear Violin Student, I am Clarissa Foletto, the research who is doing this study. I am going ask you some questions about your participation, please answer me by choosing **Yes** or **No**. Thank you, Clarissa.

	Yes	No
Has your violin teacher explained to you about this research?	<input type="checkbox"/>	<input type="checkbox"/>
Have your parents explained to you about this research?	<input type="checkbox"/>	<input type="checkbox"/>
Do you allow me to observe two of your violin lessons?	<input type="checkbox"/>	<input type="checkbox"/>
Would you mind if I use a video camera to record your lessons?	<input type="checkbox"/>	<input type="checkbox"/>
Do you agree to answer some questions about your lessons?	<input type="checkbox"/>	<input type="checkbox"/>
May I record your answers?	<input type="checkbox"/>	<input type="checkbox"/>
Would you like to do a drawing about your violin lessons for me?	<input type="checkbox"/>	<input type="checkbox"/>
Do you know that you can ask to stop the video and the interview in any moment?	<input type="checkbox"/>	<input type="checkbox"/>

Your Name \_\_\_\_\_ Date \_\_\_\_\_

Researcher's name Clarissa Foletto

Signed \_\_\_\_\_ Date \_\_\_\_\_



## APPENDIX 3: LEAFLET INFORMATION MAIN STUDY



Leading education  
and social research  
Institute of Education  
University of London

### Retrieval cues as a teaching and learning tool in one-to-one violin lessons

Exploratory Phase  
Start 01/2013 and end 06/2013

My name is Clarissa Foletto, PhD student from University of Aveiro (Portugal) and Erasmus Student at Institute of Education, University of London. I am violin teacher and I have taught in Brazil (2003 to 2008) and Portugal (2008 to 2012).

This leaflet tells you about the current fieldwork involved in my PhD thesis. I hope the leaflet will also be useful, and I would be pleased to answer any questions you have.

#### Why is this research being done?

Learning an instrument is a complex process where specific skills are involved. One of the teacher's challenges is clear communication of complex skills. My current hypothesis is that specific cues (retrieval cues) can be used as a teaching and learning tool. My intention with this research is to develop an approach to using retrieval cues and thus, to contribute to positive and enjoyable teaching and learning.

#### Who will be in the project?

I am inviting Violin teachers from different venues and two students of each teacher (aged 5 -13) to take part in this research.

#### What will happen during the research?

I will observe and video record each teacher teaching two students in two different lessons with each student. Following the second lesson (or at another convenient time), I would like to carry out a very short interview with both teacher and student. During the interviews students must be accompanied by a parent or, if it is not possible, by the teacher. In addition, between the first and the second lesson, I shall ask the student to draw a picture about the recently observed lesson.

#### What will I observe in the observations?

The verbal and non-verbal communication used on the lessons.

#### What will happen to you if you take part?

If you agree, I will video record the lessons and audio record the interview and transcribe them later. The purpose of these observations is to identify tools that are already used by teachers and the students and not judge their skills. In the interviews, I am not looking for right or wrong answers, only for what everyone really thinks.

#### Please note:

**The video recording will facilitate the data analysis and could help me with any misunderstanding due to my first language being Portuguese.**

#### Could there be problems for you if you take part?

I am not intending to interfere in the normal course of lessons. The sessions will be scheduled according to the availability of the participants. I hope you/your child will enjoy helping with the research, but if you/your child wishes to withdraw from the observation or interview at any time I will immediately stop. If you have any problems with the project, please tell me.

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#### What are the benefits of being part of this study?

You do not have a directly benefit taking part of the study. However this study is a phase of a PhD research where the findings can benefit one-to-one teaching and learning context in the future (for students, teachers and researchers).

#### Who will know that you have been in the research?

Only my supervisors and I will have access to the data collected. Participants will not be identified in the reports and their images and data provided will be stored safely and securely (encrypted files and password protected). You will have an option in the consent form to allow or not the use of images (i.e. shorter segments with faces' covered) as examples in conferences or academic presentations.

#### Do you have to take part?

It is your choice if you want (your child) to take part and, even if you say 'yes', you can drop out at any time or say that you don't want to answer some questions. You can tell me that you or your child will take part by signing the consent form in attached.

#### Will you know about the research results?

Please, let me know if you desire to know the research findings. I can send to you a short report from November/2013. Also, once completed this phase of study, their results will be presented in a chapter of a PhD thesis and may also to be published in research journals in areas like music education or psychology education as well.

#### Who is funding the research?

I have funding support from CAPES Foundation, Ministry of Education of Brazil, Brasília - DF, Brazil and Education and culture lifelong learning programme - ERASMUS.

**The project** has been reviewed and approved by the Faculty Research Ethics Committee [12/04/2013].

#### Thank you for reading this leaflet.

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## APPENDIX 4: CHARACTERIZATION FORMS



### Retrieval cues as a teaching and learning tool in one-to-one violin lessons Teachers' Characterization

Thank you for being willing to take part in this study. This form is the previous part of the interview and provides me with background information about the participants in my study. I assure that you will remain completely anonymous and data provided here will be used only for analysis. Please, complete the follow form:

1. Name
2. Age
3. Gender      Male       Female
4. Qualifications
5. Positions
6. Years of teaching violin
7. Venue (please choose)
 

Private studio	<input type="checkbox"/>
Junior Conservatoire	<input type="checkbox"/>
State School	<input type="checkbox"/>
Independent school	<input type="checkbox"/>
Saturday music service provision	<input type="checkbox"/>
Other, specific	<input type="checkbox"/> <input style="width: 200px;" type="text"/>

Thank you very much for your cooperation

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If you have any problems with the project, please tell me



## Retrieval cues as a teaching and learning tool in one-to-one violin lessons Students' Characterization

Thank you/your children for being willing to take part in this study. This form provides me with information about participants in my study. I assure that you/your children will remain completely anonymous and data provided here will be used only for analysis.

Please, you or your Parent, complete the follow form with the information about you/your child:

1. Name
2. Age
3. Gender    Male     Female
4. Actual Grade
5. Years of study violin
6. Time approximately of individual practice per week

Thank you very much for your cooperation.

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If you have any problems with the project, please tell me

## APPENDIX 5: PRE-FORMULATED FRAME TO STUDENT'S DRAW



Student's Name: \_\_\_\_\_

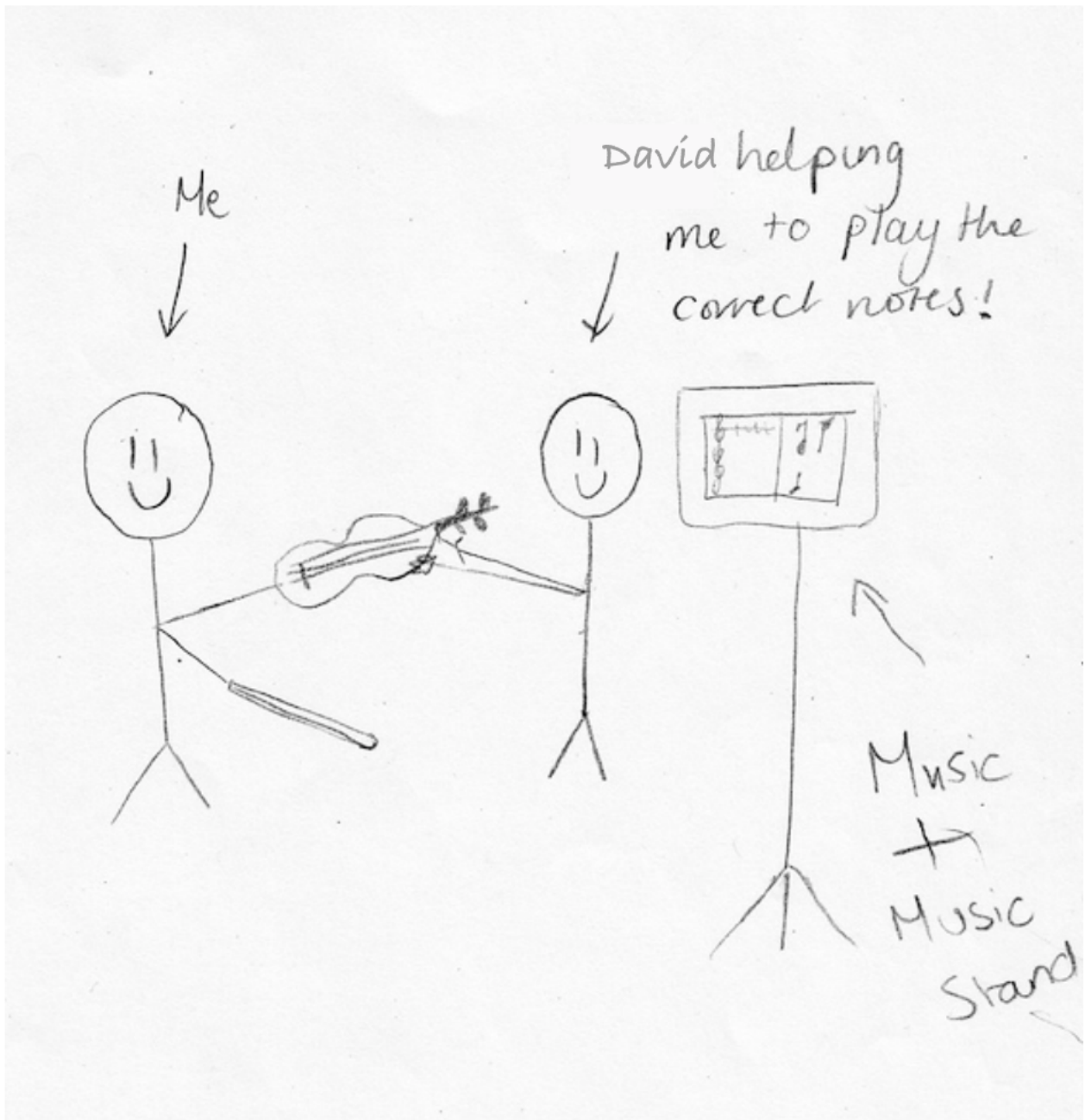
Please, draw here how do you learn the violin from your teacher:

**How I learn the violin from my teacher**

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If you have any problems with the project, please tell me.

**APPENDIX 6: STUDENTS' DRAWINGS**

## ALICE'S DRAWING



PATRICIA'S DRAWING



EVA'S DRAWING

