MERYC2013

Proceedings of the 6th Conference of the
European Network of Music Educators and
Researchers of Young Children

17th-20th July 2013,
The Hague, The Netherlands

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Dr. Susan Young

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Edited by Jessica Pitt and José Retra

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introduction

INTRODUCTION

We proudly present the Proceedings for the 6th Conference of the European Network for Music Educators and Researchers of Young Children (EuNet MERYC). The MERYC network aims to create a platform where both researchers and practitioners can meet, share expertise & experiences, enthusiasm and insights on music education for young children. These proceedings show the diversity of European early childhood music research and practice. A diversity with regard to heritage of methods and approaches, philosophies and theoretical ideas, but also languages and cultures that form the basis that inspires enthusiastic music educators and driven researchers to take new initiatives.

The MERYC board is happy to have participants representing a variety of seventeen European countries, including Belgium, Switzerland, Spain, Finland, Greece, Croatia, Iceland, Ireland, Israel, Italy Lithuania, The Netherlands, Norway, Portugal, Sweden, Turkey and the United Kingdom. One of the aims of EuNet MERYC is to promote the participation of European countries of all corners of the continent, including the Baltic countries.

All submitted abstracts have been blind reviewed by two reviewers of the composed European Review Panel of experts in music education, psychology of music, and other topics offered by the conference. The European Review Panel represented many European countries and European expertise. We are grateful to the Panel for their time and attention in reviewing the submissions.

The 6th MERYC Conference is hosted by the research group Youth and Development and the Teacher Education Department of The Hague University of Applied Sciences. Second organizing partner is Gehrels Muziekeducatie, a Dutch association for music education with almost 70 years of experience in early childhood music education and music education in primary schools. Both The Hague University of Applied Sciences and Gehrels Muziekeducatie are honored to organize the 6th MERYC Conference.

Michel Hogenes
The Hague, May 2013

keynote

WHAT DO YOUNG CHILDREN LEARN IN AND THROUGH MUSIC?

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ABSTRACT

KEYNOTE ADDRESS TO 6TH CONFERENCE OF THE EUNET MERYC
By learning in music I refer to the development of musical skills themselves: some children go on to learn an instrument, and at a certain level of proficiency they might become known as 'musicians'. But defining a 'musician' is becoming increasingly difficult: all children can sing, for example, and a prominent current view is that at some level of expertise, every child is a musician. This is the starting point of my talk, which focuses on what children learn through music: I will look at four different aspects of this exciting and rapidly-developing field of research. First, I will explore the powerful idea that early development is in itself musical in character: Steven Malloch and Colwyn Trevarthen speak of communicative musicality in early development, and this is also apparent in the spontaneous rhythmic abilities that are shown by babies and infants when they dance and move in response to music. This is clearly related to some of the recent findings of neuroscientific research, and I consider the plasticity of the developing brain, and the idea of auditory scaffolding. Third, I go on to look at the effects of musical training on young children: there is growing evidence that this can promote not only aspects of intelligence, which can have long-lasting effects, but also children's abilities in language, reading, and mathematical thinking. Alongside these cognitive abilities, music also clearly has positive effects on children's emotional, social, and personal lives: I will look at the social aspects of creativity in musical improvisation to illustrate this. Finally, I consider some of the applications of these ideas in the fields of education and health.

spoken sessions

SPOKEN SESSIONS

PART I

RESEARCH PAPERS

PRESCHOOL TEACHERS AND MUSIC MATERIALS

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ABSTRACT

This paper is intended to present the results obtained through research investigating knowledge of music materials in childhood education in Spain. Firstly, to provide information about teachers' perception of music materials, and secondly, ways to develop teacher training. The research originates from a concern that music materials should also be an object of research for conscious action and pedagogical criticism. This stems from observing the lack of interest (at least apparent) for the materials that make education. Too often, the professional teacher is teaching with materials which he/she has not decided, selected or chosen to use.
Music education is recent in Spain, from the law of 1990 (LOGSE) and childhood education acquires more importance in recent years (with subsequent educational reforms). I present the main findings of a study conducted at the Department of Teaching and School Organization of the University of Santiago de Compostela defended in 2010, to explore the perceptions of teachers on didactic and musical materials and to provide "light" in early childhood education.
The empirical study was developed with an opinion survey applied with a sample of early childhood teachers in public schools, private schools, schools with public financing, and unitary schools. Included in the research design were, interviews: conducted to better understand the questionnaire findings. The preparation and experimentation with these instruments was done in collaboration with experts in the field of early childhood music and education. In addition, we conducted a follow-up protocol with the respondents using direct and indirect techniques. The data were collected between 2009 and 2010.
I would like to point out that this study does not aim to be comparative and my intention was not to standardize the findings obtained by means of the empirical instruments, they approach the school reality in an accurate way.

KEYWORDS

Music materials, Perception of teacher, Training on specific music materials

INTRODUCTION

The context of this paper is research about the perceptions of teachers and their knowledge of music materials in childhood education in Spain in the first decade of the twenty-first century.
The descriptive and interpretative study includes questionnaires sent to a sample of 568 early childhood teachers in public, private, private-subsidised and unitary schools in Galicia (Spain), and also, the development of 10 interviews, conducted to better understand the questionnaire findings (De Ketele & Roegiers, 2000).
The subjects of the research are preschool teachers, music teachers who teach in preschool, education inspectors and professionals involved in teacher training (school teaching).

The study looks for dimensions of knowledge, use and evaluation of didactic materials through classification of the music materials that is based on the analysis of teaching practice, and information provided by teachers and trainer consultants:

- Sound materials: (Swanwick, 1991, p. 73) resources directly related to making sound, whether specifically created for school and music teaching or not.
- Support Materials for music learning. Materials related to 20th century music methods (Kodaly, Orff, Dalcroze, etc…). Visual, manipulative or game-related materials as well as musical instruments and those for school use.
- Printed materials for school curriculum projects. This group included materials developed to inform teachers about the content and implementation of the Reform Laws. It also included those elaborated as aids in the teaching process (such as textbooks, teaching guides, information or reference material, and didactic units).
- ICT and audio-visual materials. This group included materials related to information and communication technology (computer, DVD, video games, television, and others involving audio or visual design).

RESULTS AND CONCLUSIONS

In an attempt to be original, I would start at the end. I will expose the findings justified with some results of the study.

Conclusion 1st: Initial teacher training (preschool teacher or music teacher) influences the perception of teaching knowledge of didactic and music materials.
As you can see in the table 1, for example, the preschool teachers indicate that knowledge of music method materials is scant, especially because of lack of knowledge. The materials pertaining to music methods that arose in the twentieth century have an important presence in Spain (Diaz, 2004; Pascual, 2006) since they are thoroughly incorporated into the primary educational system, from the law of LOGSE (1990), but not yet in preschool education:

Knowlegde, but not use of the methods	**Preschool Teachers**
Kodály	14,75%
Dalcroze	12,14%
Willems	7,25%
Martenot	6,55%
Susuki	12,41%

Table 1. Preschool teachers' knowledge of materials of music methods

The perception of didactic and music materials is linked to the initial teacher training, teaching music traditionally is valued and associated with assessing talent and the skills in early learning (conservatories, music schools, etc.). This perception of music training hinders a positive appreciation of the possibility to look for competent professionals to teach music at the preschool stage.
I think that we, like teachers need a change in our own musical expectations because recent studies in music development indicate that we all approach music regardless of our previous skills or abilities, since it is possible to learn throughout life. (Hensy, 1977; Jiménez, R. & others, 2010; Sabirón, F. & Arraiz, A., 2012).
Conclusion 2nd: Didactic and music materials are used differently depending on the preparation and training teacher. The analysis results show that 45.53% of music teachers used the materials of musical methods in early childhood education, compared to 3.70% for preschool teachers:

Use of the metods in early childhood education	Preschool Teachers	Musuc Teachers
Kodály	6,79%	61,06%
Orff	7,72%	85,49%
Dalcroze	2,57%	59,54%
Willems	2,57%	42,72%
Martenot	1,4%	16,03%
Susuki	1,17%	8,39%

Table 2. Use materials of music methods

For example, the sound materials (rhythm instruments, bells, etc.) are known in an unequal way, the preschool teachers do not know the method materials and the music teacher does not use them in the preschool stage:

Knowlegde, but not use of the methods	Music Teachers
Kodály	25,95%
Orff	8,39%
Dalcroze	20,61%
Willems	27,48%
Martenot	45,8%
Susuki	56,48%

Table 3. Music teachers knowledge of materials of music methods

Nevertheless, music materials for movement and also the printed curriculum materials are used by the majority of teachers, independent of initial teacher training: 90% are music teachers and 80% are preschool teachers.
Then, the use of didactic and music materials is closely connected to the knowledge of these materials. I can think of three reasons:
- Received training on the use of materials.
- Experience as a factor in perception, use of materials.
- Contact with other teachers.

In addition, the study reveals some of the causes of use of these materials:
- They are easy to use.
- Access to and training.
- The popularity or updating of the material.
- The need to use the material for educational purposes.

In general, the music teacher is perceived as better prepared to teach music than the preschool teacher, they indicate that their training and experience in materials is the best taught of the subjects studied, and has had a positive influence on their perception. This indicates the lack or insufficiency in the training of preschool teachers in didactic and music materials, as they feel insecure in relation to this area. Nevertheless, results reveal that the standards of competence for music teaching are not enough to guarantee an integral education in music, for the great educational importance at the preschool stage (Malagarriga, 2002; Villalba, 2006; Diaz, 1998; Akoschoky, 2005).

Conclusion 3rd: The learning places influence teaching development.
An important number of studies highlight the role of places to make decisions regarding didactic and music materials in early childhood education (Iglesias, 1996; Padrón, 1996; Cañete, 2009). The type of school seems to influence the degree of use of music materials, for example, the research indicates there is a higher use of these materials in group of unitary, rural schools than in other types of Galician schools.
In relation to the school places to teach in early childhood education, the most used are preschool classes and music classes, followed by the gym, the playground and conference room. Other areas such as the library and halls are used by a minority, lack of own spaces (music class or similar):

Spaces of the school	**Percentages**
Preschool classes	41,84%
Music classes	22,39%
Library	2023%
Assembly hall	7,23%
Corridor	1,43%
Gim	11,24%
Playground	8,12%
Sports hall	1,69%
Others	3,84%

Table 4. Spaces of the School

Nearly 60% of teachers store music materials in the music classes, but only 22.39% of teachers use this place to develop music activities. Up to 55% of teachers have a specific space inside the preschool class and 9% used a “teaching

corner for music". In addition, 59.25% of preschool teachers say that they do not have a suitable space for teaching music, in particular mentioning the lack of space in their preschool classes, the absence of technical resources or the lack of furniture suitable for children.

A careful analysis of the results indicates that 65.10% of teachers in preschool education are using music materials. But an important number of music teachers (49.64%) indicate that these materials are in the music classes. 90.07% of teachers said that music materials are in the music classes, while 21.37% said that they have these materials in the preschool classes.
The causes that affect the perception of didactic and music materials are:
- Access to materials (place of deposit and use).
- The provision of classes (economic opportunities).
The use of community spaces favours the development (almost spontaneous, prior training and leadership groups) of two fundamental factors to consider in the perception of teaching:
- The autonomy of teachers, not as synonymous with individuality, but as a factor of integration of educational differences for the sake of building a shared musical and educational development unit:

Teaching speciality	No coordination
Preschool teacher	13,82%
Music teacher	16,79%

Table 5. Perception of coordination

- Collaboration (the study indicates that 62% of teachers collaborate) and the type of training is basic and priority given to develop the self-learning process of action research.
The study shows a clear dependence on the teaching spaces traditionally assigned to each specialist teacher (preschool or music). The analysis according to type of school and the relationship established between the specialist teachers (preschool and music) indicates different curriculum changes: legislative, educational and even structural. With regard to this last point it has not changed the essence of the teaching work, despite significant innovations developed in this regard they continue to predominantly work alone (they do not go out of their class rooms). Then, both the access to didactic and music materials (traditionally

arranged in music lessons), as well as the provision of classes (currently, depending on the specialty), as well as the available financial resources and individuals already in schools. It is necessary to seek to make use of community spaces, and to take full advantage of all the teaching materials and resources from the school.

Conclusion 4th: The didactic and music materials are selected intuitively. The assessment guides materials are unknown (Breen and Candlin (1987), Byrd (1995), Fenner and Newby (2000), and WWAA (2005).
The study found that a few teachers develop tasks related to the choice of materials, but this selection is intuitive and they do not offer guarantees of quality:

Selection the music material					
Blank	Nothing	Nothing	Something	Quite	A lot
36,40%	14,99%	14,99%	20,55%	23,45%	462%

Table 6. Teachers that select the music material

Often, the teachers chose according to the diffusion and propaganda of the material. In conclusion, the publishers offer materials in the schools and they can influence the choice of materials of the teachers who often confuse innovation with new:

Habitual ways of material selection	
Visiting websites, repositories,... to inform	51,23%
Visit libraries	45,77%
Editorial offerings coming to school	44,37%

Table 7. Habitual ways of material selection

A teacher chooses materials based on their experience, and they do not mention the appraisal guides materials as a process of analysis because it is unknown to them (Parcerisa, 1996; Rodríguez, 2009). Selection of features is prevalent in inexperienced teachers in teaching:

Teachers who select materials based on their experience				
Age	Nothing	Something	Quite	A lot
21-27	13,95%	6,98%	27,91%	44,19%
28-33	15,75%	7,53%	17,12%	43,84%
34-40	24,17%	4,17%	11,67%	45,83%
41-50	31,58%	4,68%	15,79%	40,35%
> 51	48,44%	7,81%	9,38%	25,00%

Table 8. Teachers who select materials based on their experience

LINES OF PRESENT AND FUTURE RESEARCH

In general, the researcher concludes this investigation with excitement not so much by the success of the results, but mainly the expectations that new knowledge has been acquired during this process.
There are few that we hope to return to begin a similar journey, therefore, the development of specific initiatives applied in the contest.
Before that, I believe that it is important to highlight the options that are possible future lines of enquiry, and, I have taken into account methodological considerations:
- The study of the perception of teaching is possible because the focus of the interview was qualitative and ethnographic.
- The study of the perception of materials is possible from the observational approach its spatial location in children's classrooms.
- The study of knowledge of materials is possible from the analysis of images obtained by use of video of the work developed by the newspaper / teachers in the infant stage.
- The study of the teaching materials and training in infant stage musical is possible from the analysis of the curricular content of teacher training resource centres, associations or movements of pedagogical renewal.
- Another approach that may offer new information would be to carry out practical studies with incisive techniques of observation and analysis of content (daily class, etc.).

STREAMS FOR THE DEVELOPMENT OF THE PERCEPTION OF TEACHING PROPER DIDACTIC AND MUSIC MATERIALS:

In other professions such as sculpture, the material is the first aspect that the artist spends time thinking about in the process of making an art piece: before the sculptor clicks on the stone, she/he looks at every cut, she/he observes the movement of the rock and assesses their qualities. She/he must consider the content (artistic idea to take shape in the stone) that will be better expressed through the chosen material (stone), but especially, if support material is that the artist wants to show the world (if it is the more suitable for artistic expression inspired). In music, the composer or performer analyses, first she/he analyses the aspects of its work, its meaning, the characteristics of the sounds, movements of feelings and its sensory, motor and emotional possibilities (its possibilities respect to the material that will make music and conversely, and the sense of ethereal expression, the consequences of the audience that goes in a musical instant). The process of education should be something similar.
As a final touch, I would like to offer three ways, not discovered by me, that emerged as a result of the research, as a culmination of educative intent (Cateura, 1992, p. 525-526; Romero, 2003, p. 147; Lopez, 2007, p. 483-510):

1) Addressing with conviction, the realisation that the training measures are important and highly valuable educational assets: Provide incentives for activities that promote educational relationship that governs the quality and enables innovation as a way to improve schools in:
Direct training in specific materials.
Training in developing teaching and collaborative planning (leadership, action groups, etc.).
teacher training related to the evaluation and use of materials, through the use of guides.
2) Encouraging the development of educational materials, from the need to share concerns of teaching through dialogue with teachers who share experiences (group of students, school, expectations, emotion, etc.): Create time and space for the development of Active Training Activities (ATA), in the workplace.

3) Establish channels linking community work among teachers of different specialties, different educational cycles, different views, etc., to develop self-training

activities and amplify knowledge: Create network of communication between schools for the development of dialogue and exchange experiences and to create active forums for communication in action research environments (an example: entwining).

TO THE END OF THIS SPEECH

I would like to offer my particular "lots of candies" for the creation and development of proposals for knowledge and use of didactic and music materials in preschool education, and also in successive stages:
- to value the didactic materials to its full extent.
- to develop a process of analysis of the situation about the knowledge, use and evaluation of educational materials.
- to reflect on the need for the creation of and training about educational spaces for dialogue.

This research, its design about the perception of teaching materials and teaching music, has a lot to do with the development of teacher training, traditionally based on the concept of teaching where the teachers should be innovative, have the ability to self-train, to know the mechanisms of action research and should realize their own learning to improve teaching.
However, the results indicate that we have tried this, without taking into consideration the situation of the teaching context.
We must learn to appreciate what we have as fundamental and then to look for development of educational innovation.
First we must have a clear understanding of the existing teaching materials and educational needs (through its analysis) and then start on the path to creating our own educational materials for our classrooms. They are parallel paths; they are not inconsistent, if we know a way across or can find a bridge.

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SPOTLIGHTS ON MUSICAL DEVELOPMENT IN INFANCY
A DESCRIPTION OF INFANT RHYTHMIC MOTOR BEHAVIOURS IN GROUP MUSIC SESSIONS

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ABSTRACT

This study concerns infants' rhythmic motor behaviour in response to music. We aim to contribute to a description of infants' overt behaviours concerning body and movement production (rhythmic-motor responses) in the context of musical guidance sessions.

A corpus of video clips was identified by two judges as representative of a certain type of behaviour – for instance, as typical "rhythmic motor active engagement". From this specific set, we selected six clips that came from two infants, at the ages of 6, 11 and 13 months old. These clips were codified in two groups of behaviour categories (vocal and motor) and analysed through the use of Observer / Noldus software. Results suggest the existence of a "body narrative" with a specific temporality, a rhythmic organization and full embodiment events. We found out that a musical guidance session is a propitious context for the expression of "embodied narratives" as acts of communicative intentionality. Infants seem to dialogue with musical stimuli and with adults' performed behaviours. "Embodied narratives" may present different organized structures, depending closely on the individual characteristics of each infant.
The study has an anthropological and ethological focus and it is part of a study in process that describes infants' spontaneous behaviour in ecological contexts of musical guidance sessions.

KEYWORDS
rhythmic motor behaviour, musical engagement, musical embodiment, communicative musicality

INTRODUCTION

A musical performative act involves a complex neurological interaction between motor and auditory systems. Perception and production are currently understood by neuroscience as inter-related phenomena.

In the field of cognitive neuroscience studies, Zatorre (2002, 2007, 2008) presents hypotheses showing the existence of a functional architecture involved in music perception and production. For the construction of this architecture the premotor cortex plays a main role. Time, sequencing and spatial organization of motor control functions are relevant at the moment of a performative act. Through the use of neuroimaging techniques, Zatorre shows how

"the auditory and motor systems are tightly coupled in general, and more so in trained musicians than in untrained people"(2007, p. 552).

Also in the field of neuroscience, Iverson & Thelen (1999) argue that body experiences play an integral role in human cognition. Gesture and speech share a semantic and communicative responsibility in an act of "embodied" communication.

The conceptualisation of these authors is related to the idea of "communicative intentionality" of Tomasello (2008). Among humans, gestural communication has been an intentional biological adaptation related to the need for cooperation and social interaction. "Pointing" and "pantomime" gestures were the first pre-verbal gestures developed by humans and were part of the genesis of verbal language. Infants reconstruct these gestures in their early narratives.

The relationship between movement/musical performative act is also emphasized in Edwin Gordon Music Learning Theory (1993, 1997) with another focus: children should show awareness of their body, in whole and in parts, while listening to or producing music.

Colwyn Trevarthen (1999) refers to the action that newborns perform with their mother in their non-verbal "conversations" or musical games as a "communicative musicality narrative". A baby's body movement can be a mimetic communication with relevant information about the infant's musical perception of vocalization.

Being "conversational" is a human adaptation that facilitates learning about one's own culture. A narrative is a kind of interaction, full of communicative intention characterised by musical regularity. Trevarthen (1999) defines musical regularity as an intrinsic motive pulse (IMP). This IMP is a product of the brain that allows the individual to develop the perception of complex structures in performances. Trevarthen and Malloch (2002) consider rhythm as the vital engine of communicative musicality. These researchers identify three human communication attributes related to the concept of communicative musicality: pulse, quality and narrative. Pulse focuses on the regular timing intervals which allow babies to anticipate events, and it can be observed in "joint vocalizations"; quality is related to pitch-contour and timbre, observed in the expressive contours of mother/infant interactions; narratives are the individual and shared emotional experiences that lead two people to a sense of purpose as time goes by.

Watanabe, Lemioux and Penhune (2006) focused on the effect of early motor training on adult performance. They suggested that enriched motor experience, such as musical training, during sensitive periods (before the age of seven) could result in lasting neural changes and improved motor performance later in their life.

The purpose of this study is to contribute to a description of infants' rhythmic motor behaviour in the context of a musical guidance session. By musical guidance session we mean an organized musical event in which parents and infants participate by listening, singing and moving under the supervision of a teacher trained according to Gordon's Music Learning Theory.

METHOD

For this study we selected six video clips labelled as examples of infants' rhythmic motor behaviour. These clips come from a video database concerned with infants' behaviour in the context of musical guidance sessions.

Throughout a two-year period, twelve infants, accompanied by their parents, took part in musical guidance sessions that occurred weekly. These sessions were videotaped. Each session's video was independently observed by two music education teachers, who selected a corpus of video clips that were considered representative examples of infants' responses in the context of musical guidance sessions. Afterwards, those clips were independently categorized by both

judges as representative of a certain type of behaviour – for instance, as typical "rhythmic motor active engagement". From this specific set, we selected six clips, three of one girl and three of one boy, at the age of 6, 11 and 13 months old. These clips showed the infants' response to different musical stimuli (three demonstrated behaviours that occurred in response to a melodic stimulus; another three demonstrated behaviours that occurred in response to a rhythmical stimulus).
For the description of the independently labelled "rhythmic motor active engagement" clips, we codified two groups of behaviour categories (vocal and motor) aiming to analyse them through the use of Observer / Noldus software.
First, we describe thoroughly each behaviour category (e.g. gaze, shaking hands, pointing, mouth gesticulation without sound) so that it could be assessed by independent judges and codified in Software Observer by independent codifiers. Preliminary observations revealed the importance of codifying specific attributes such as left or right, shake, clap or pointing to the main category of "hands movements", which could appear alternately or simultaneously. Second, we chose to analyse the same categories in all clips, related to both subjects (baby or teacher).
For vocal behaviours, we decided to distinguish teacher stimuli as "rhythmic" or "melodic", and to codify any type of infant vocalization as "vocal infant". By "rhythmic stimulus" we meant that the teacher, trained according to Gordon's music learning theory, was presenting a chant; by "melodic stimulus" we meant that the teacher was presenting a song without words.
We also took on Trevarthen's concept of "narrative" to describe moments of co-occurring behaviours, whether in the individual subject (intra co-occurring behaviours) or between infant and teacher (inter co-occurring behaviours).

RESULTS

CLIP 1.

Carolina	
6 months	Long duration behaviours:
clip duration: 49,56"	1 - gaze, trunk
	2 - shaking hands, legs
	short duration behaviours: right shaking
	non performed behaviours: pointing, mouth gesticulation, vocalization
	intra co-occurring behaviours: 1 - gaze / trunk
	2 - gaze/ right shaking/ left shaking /trunk/legs
	inter co-occurring behaviours: ----------
	sequenced patterns: trunk>left shaking
	alternate behaviours: ---------
	full embodiment event: 28,00"- 33,50" (duration: 5,50")

Figure 1. Visualization of 6 month-old Carolina clip – ex: narrative of full-embodiment behaviours

In this clip Carolina showed gaze as a prominent behaviour, focusing on another baby who was lying down on the ground. It was possible to observe a frequent intra co-occurrence of gaze and trunk, suggesting a sort of "dance" in front of the other baby. In this "dance", leg movement and shaking hands also played an important role, which at times were co-occurring behaviours. We observed short event (5,50 seconds) of full embodiment in the middle of the clip. The teacher can be observed, and some behaviours seem to have an inter co-occurrence (e.g. shaking hands, trunk), but Carolina did not look directly at the teacher, not allowing us to conclude if there was an embodied inter communication between them.

CLIP 2:

	Carolina
11 months clip duration: 30,76"	long duration behaviours: 1 - legs 2 - gaze, right pointing, left pointing, right shaking short duration behaviours: mouth gesticulation non performed behaviours: left shaking, trunk, vocalization intra co-occurring behaviours:1 – gaze /right pointing 2 – legs/right shaking inter co-occurring behaviours: pointing sequenced patterns: gaze® right pointing®legs alternate behaviours: legs / pointing full embodiment events : 15,00" - 25,50" (duration: 10,50")

This is a very short clip in which leg movement was the behaviour with the longest duration. Gaze and pointing were also relevant duration behaviours. It is a clip with a context of pointing movements, so this was the most frequent behaviour from both subjects (infant, teacher). Significantly, legs and pointing never occurred simultaneously.

CLIP 3:

	Carolina
13 months clip duration: 45,45"	long duration behaviours: 1º left shaking 2º right shaking, trunk, short duration behaviours: right pointing non performed behaviours: left pointing, clapping hands, mouth gesticulation, vocalization intra co-occurring behaviours: right shaking/ left shaking/ trunk/legs inter co-occurring behaviours: shaking hands, trunk, legs sequenced patterns: gaze ® pointing; pointing ® gaze gaze ® right shaking alternate behaviours: gaze / pointing full embodiment event: 5,30"- 12,00" (6,30")

This is a clip where shaking hands/arms was Carolina's most predominant behaviour; it was also the most active behaviour performed by adults that are visible in the clip. It is possible to suggest that Carolina is imitating them. We also observe sequenced patterns between gaze and pointing, suggesting that one behaviour leads to the other.

CLIP 4:

	Filipe
6 months clip duration: 105,32"	long behaviours: 1 - left shaking 2 - right shaking, legs short duration behaviours: trunk non performed behaviours: pointing, clapping hands intra co-occurring behaviours: right shaking / left shaking/ legs inter co-occurring behaviours: mouth gesticulation / stimulus sequenced patterns: left shaking®right shaking®gaze alternate behaviours: vocalization / trunk full embodiment event: 61,00"-100,00" (duration: 39")

Figure 2: Visualization of 6 month-old Filipe clip – ex: narrative of full-embodiment behaviours

It is relevant to observe the complexity of inter co-occurrence of behaviours between Filipe and the teacher near him. We can notice a long event of full embodiment where the infant performed seven behaviours simultaneously, engaging with teacher behaviour. The infant's vocalizations alternated with mouth gesticulation when the teacher performed rhythmic stimuli.

CLIP 5:

	Filipe
11 months clip duration: 175,60"	long duration behaviours: 1- trunk 2 - gaze, shaking hands, right pointing, vocalization short duration behaviours: mouth gesticulation non performed behaviours: left pointing, clapping hands, legs intra co-occurring behaviours: shaking hands / trunk inter co-occurring behaviours: teacher vocal stimulus/infant vocalization teacher gaze/ infant trunk teacher vocal stimulus/ infant mouth gesticulation sequenced patterns: trunk®right shaking®left shaking alternate behaviours: right shaking / left shaking full embodiment event: 131,00" - 174,00" (duration: 43,00")

We observed the co-occurrence of performed behaviours, especially the synchronicity of infant vocalizations and teacher vocal stimuli, suggesting a "musical dialogue" between them. It is relevant to remark the amount of short vocalizations produced by the infant, until the beginning of a full embodiment event on 43,00".

CLIP 6:

	Filipe
13 months clip duration: 52,80"	long duration behaviours: 1 - legs 2 - shaking hands short duration behaviours: clapping hands non performed behaviours: mouth gesticulation, pointing, vocalization intra co-occurring behaviours: gaze/right shaking/ left shaking/trunk/legs inter co-occurring behaviours: stimulus / gaze, shaking, legs, trunk, clapping sequenced patterns: right shaking®left shaking trunk®legs alternate behaviours: clapping hands / trunk full embodiment event: 39,00" – 49,00" (duration: 10,00")

The infant showed a relevant performance of clapping hands. He did not produce any vocalization, or even any movements of mouth gesticulation. His behaviours focused on gross motor coordination, as right /left shaking hands, or legs/trunk. Significantly, there was also a high number of inter co-occurring behaviours between infant and teacher.

Results showed that in each clip there are behaviours that often occur and there are others that do not occur at all. Then, we distinguished two indicators: a)"performed behaviours" in the clip and b)"non performed behaviours" in the clip. The "performed behaviours" indicator includes: long duration behaviours – the behaviour indicators with a longer duration in the clip; short duration behaviours - the behaviours indicators with a shorter duration in the clip; intra co-occurring behaviours – behaviours that were performed in the clip at the same time by the subject (infant or teacher) with a minimum duration of two seconds and with a minimum frequency of two events (i.e., two situations; inter co-occurring behaviours - behaviours that were performed in the clip at the same time by both subjects (infant and teacher) with a minimum duration of two seconds and with a minimum frequency of two events; alternate behaviours – those behaviours that are performed alternately, and never simultaneously, with a minimum of three events in an clip; sequenced patterns of behaviours – behaviours that are sequentially performed at least on two situations in a clip; full embodiment events – moments with a minimum duration of 5 seconds where the most part of behaviours of one subject (infant or teacher) were performed at the same time. In some of those full embodiment events both subjects (infant and teacher) performed a sequence of intra and inter co-occurring behaviours building a narrative (according to Trevarthen's definition).

DISCUSSION

Results indicate the construction of a "body narrative" with a specific temporality, a rhythmic organization of behaviours and full embodiment events where the infant seems to dialogue with the musical stimulus and with the behaviours performed by adults.

Filipe showed longer full embodiment events (39", 43", 10") and complex intra and inter co-occurring behaviours. His vocalizations could be observed in the video shot at 6 and 11 months of age but not at the 13 months. Carolina never

performed vocalizations in the observed clips. Her observed communication suggested motor embodied character. Mouth gesticulation appeared in both infants closely related to vocal behaviours: during vocal stimuli, we observed infants performing vocalizations or mouth gesticulation; it seems to be a motor behaviour developed before vocalizations.

Our observations also indicate sequenced behaviours: one of the most frequent sequence patterns was gaze ® shaking hands/arms ® trunk ® legs, which means a spatial body sequencing from top levels to bottom.

We conclude that a musical session is a propitious context for the development of motor and communicative skills. In a musical context, an infant can construct a "body narrative" as an act of communicative intentionality. Rhythmic manual activity entrains the coordination of the oral system, and "both were linked with emerging speech and language (…) all cognition grows from perception and action and remains tied to it, body, world and mind are always united by these common dynamics." (Iverson & Thelen1999 p. 37).

In this study we observed and discussed the importance of an "embodiment" outlook.

Embodiment may present different couplings of behaviours, depending on individual differences. Future studies should continue to clarify the construction of such couplings of behaviours in response to music.

As the Ancient Greeks assumed, "Musiké" is a dynamic that involves the whole body. That can be observed very early in the story life of human beings.

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IN EVERY CHILD IS A COMPOSER!

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ABSTRACT

In the Sound Playground everyone can be a composer - even without musical training. The Sound Playground consists of unique, high-tech sound installations that easily connect to the creativity and imagination of children. Children discover sounds through dancing, drawing, analysing and exploring. It offers different ways to work with sound and music, following Howard Gardner's ideas on 'Multiple Intelligence'. Every child is intelligent in their own way, and they are encouraged to use this intelligence with five different installations in the Sound Playground.
At the OMNI, an installation in the shape of a musical toadstool, music can be made by tapping and combining 108 coloured squares. On the Kosmix dance floor, children compose by dancing upon white spots that trigger sounds. At the XenaX, children can draw and create graphic scores with a special sensor pen. On the SonOrb, sound fields are built by placing colored balls into white pedestals. Replacing and rotating these balls creates a variety of sounds. All of these sounds come together at the CyberCorner: the computer nerve centre where children can create their own hit song.
The Sound Playground is unique, the only initiative of its kind in the world, and has been a great success since the first workshop in 1999. 450 workshops are organised per year for over 6000 children, who attend both as individuals and school classes. For more than ten years, the Sound Playground has researched the ways in which young children can be stimulated to compose, and how games can be used to develop musical compositions. The music teachers of the Sound Playground have developed numerous compositional games for each sound installation, and for each target group. Children from six years and up learn in a playful manner that there is more to music than the sounds they know from televi-

sion and radio. Our goals are to enrich the musical world of children and open their ears to unusual sounds, all in co-operation with other children. During the workshop, children have to work together, listen and give space to one other, deliberate, and convey their ideas within the group. This makes the Sound Playground very effective, as it approaches the social as well as musical aspects of creative education.
The Sound Playground is the heart of the education department of the Muziekgebouw aan 't IJ in Amsterdam.

KEYWORDS
Improvisation, composition, conducting, play, co-operative learning, electronic installations, graphic scores, multiple intelligence, performing, sound art, computers, imitation, technology, working together.

INTRODUCTION

The Sound Playground is the heart of the education department of the Muziekgebouw aan 't IJ in Amsterdam. Here, everyone can make music, even without prior musical training. In the Sound Playground, children from the age of six may get to grips with music making and composing.

This article will begin with a description of the Sound Playground, and its musical installations. It will then go on to outline its working methods, with examples. This shall be substantiated in a scientific context. The article will be closed with the Sound Playground's own vision of the future.

DEFINITION OF THE SOUND PLAYGROUND AND ITS INSTALLATIONS

The Sound Playground consists of unique, high-tech sound installations and computers that easily connect to the creativity and imagination of children. The installations have been developed by an international team of sound artists and technicians. The sound clips and samples used within the installations have also been developed through a wide pool of respected composers. Some installations offer the possibility to switch between sample selections; this enables the Muziekgebouw aan 't Ij to easily relate to current festivals and concerts, by loading the relevant 'sound-banks' into each installation.

The mission of the Sound Playground is to give all children a relevant and memorable musical experience. Every child is able to come and discover, create, learn and develop him/herself through play in the Sound Playground!

OMNI

At the OMNI, music can be made by tapping upon 108 coloured squares, and combining the sounds that they make. The OMNI, in the shape of a musical toadstool, was developed by Patrice Moullet.

XENAX

The XenaX is an electronic 'drawing table', consisting of four segments that fit together to form a circle. There is a tablet screen on each segment, which may be drawn upon with a special pen. One may therefore create graphic scores, in a playful manner. The XenaX was developed by Yvonne Boelens, Edo Paulus and Marien Hogerheijde.

SONORB

The SonOrb consists of a formation of pedestals, and a selection of coloured balls, each with their own sound. By placing a ball into a pedestal, both sound and light are triggered. The sound is distorted by rotating the ball. An entire composition can be built by combining and layering the sounds from multiple balls. The SonOrb was developed by Edo Paulus in collaboration with the Sound Playground.

KOSMIX

The KosmiX is a 5x5 metre2 dance floor, covered in 64 white spots of differing size. Children can compose by dancing over the spots; when a spot is covered by a foot or a hand, a sound loop is triggered. The KosMix was developed by Danny de Graan, Marien Hogerheijde and Edo Paulus.

SENNA

Senna is a video sample instrument, where children can make an audio-visual collage from YouTube fragments, working individually or in groups. This collage consists of four layers: a beat, a melody, a bass line and a storyline, each connected to a video clip. The children are also able to process, distort and mix their collages live, whilst it is being played back.
Senna was developed by Eboman.

CYBERCORNER

The CyberCorner consists of four computers, where children may work in pairs. We give workshops on how to compose a short yet complete piece, for example using the program 'GarageBand'.

WORKING METHODS

Creativity and experience are the central concepts in the Sound Playground. The workshop leaders – all experienced music teachers - create a safe environment where a child may explore their own musicality in a creative and unhindered manner. In the Sound Playground, children learn in a playful way that there is more to music than the sounds they know from television and radio. Our goals are to enrich the musical world of children and open their ears to unusual sounds, all in co-operation with their peers. During the workshop, children have to work together, listen to each other, give space to one other, deliberate, and convey their ideas within the group. This makes the Sound Playground very effective, as it approaches the social as well as musical aspects of creative education. This also makes the Sound Playground the ultimate opportunity to experience the intrinsic and extrinsic values of music in education.

The children work in small groups at sound installations that they have never seen before, and have no idea of how they work. After a short, concise demonstration, they can immediately get to work, either in pairs or groups of up to eight. Each group of eight children is led by a Sound Playground music leader. The children then get to know sounds, noises and styles of music that they may never have heard before. These sounds could be (singing) voices, sounds of musical instruments, noises from daily life, fragments of existing compositions or samples of electronic music. The sounds from the installations expand the sound-world of the child, and form an alternative to the existing range of music available. In the Sound Playground, children learn together that non-musical noise can also be used to make a composition. It all depends on how they build and arrange the sounds, through working together on their new creation.

Children learn through play. Knowledge is developed by each child in his/her own way, through experience in a social environment. The learning objectives achieved in this manner are indeed musical, but go much further than just a

musical context. The team of music teachers in the Sound Playground have spent the past years developing numerous compositional games for each sound installation, and for each target group.

For example, the OMNI installation utilises conducting games. First, we explain what a conductor is: he is the leader of an orchestra, he does not use words, but rather gestures. He uses these gestures to communicate where a piece begins and ends. The group may deliberate upon what the appropriate gestures could be. The children may take it in turns to be the conductor. They guide the other children in tapping rhythms upon the OMNI, and listen to whether each new sounds fits into the whole. If it does, the next child may join in. If not, another sound may be chosen. In this playful manner, a composition is created. At first, most children acting as a conductor let the other children all play at the same time, before later discovering how to organise the sounds they make. It is the role of the workshop leader to clearly demonstrate, through play, that the children must open their ears tand really listen, in order to make beautiful music.

On the XenaX, one may search for sounds using a special pen. These sounds may be notated on paper, by drawing over where the sound was with a colouring pencil. The child can then remember where each sound is, using shapes such as lines, dots, arrows and spirals. A composition can then be accurately plotted by arranging these exact sounds into an order. The result is a graphic score, which may be subsequently played by anyone. It is also possible to make a drawing first, and then listen to how it sounds – working the other way around.
The name 'XenaX' is a reference to the French-Greek composer Yannis Xenakis. Her was one of the first composers to work with both computers and graphic scores.

The Sound Playground works without conventional music notation. Children both with and without previous musical experience, instrumental lessons or the ability to read music all begin at around the same level. School teachers therefore find the Sound Playground a very suitable place to bring their class, to follow single or multiple workshops. Children may make a record of their composition not with standard notation, but with graphic scores. This form of notation is not only useful for simply remembering how to play a composition, but enables the children to reflect upon both their own work and that of their classmates.

THEORETICAL SUBSTANTIATION

New realms may be explored in the Sound Playground both by discovering together, and learning by doing. Its concept therefore connects well with educational innovations such as co-operative learning. This learning process does not follow the traditional teacher-pupil model, but lets the child develop by gaining his own experiences, and through working with others. As outlined above, children work in groups in the Sound Playground. Every child takes on a different role, which also changes during the session. Every child is essential within the group, and as a collective, they are all responsible for the end result (Evelein, 2007).

Today's theories of co-operative learning also fit with the learning theory of social constructivism (Kohnstamm, 2002). Learning to play on the installations is an active process: the children are required to constantly think about what they are doing, and the role of the workshop leader is to continue to stimulate this process. This challenges the children by continually adding to their existing knowledge, eventually encouraging an adjustment in their way of thinking. During a workshop, there is plenty of room for tasks and subsequent reflection, such as during the introduction, the break and the evaluation. The working methods in the Sound Playground encourage an interaction between the participants and the workshop leaders. The Sound Playground connects with the social, cultural and historical context of the child, allowing them to be continually involved and absorbed throughout the learning process.

In the Sound Playground, 'working together' means being inspired by your classmates, and the sharing of ideas. The ideas of another may be reinforced by actively trying them out in the group – a learning method that is incredibly effective. Experience orientated learning, both from the child's peers and the leaders that inspire through example, is strongly related to the theory of Vygotsky. His theory postulates that social interaction is the most important element in the cognitive development of a child. He states that all psychological processes are social in origin: we always require communication and mutual influence in the process of our development, with language as an essential element (Vygotsky, 1978). These psychological processes occur during interactions both between the child and an adult, or between children themselves.
Next to this, the working methods of the Sound Playground relate to the mul-

tiple-intelligence theory of Howard Gardner, who distinguishes eight different forms of intelligence. These are all addressed during a workshop in the Sound Playground, not only by working with the installations, but through teamwork, communication and evaluation. A workshop develops both verbal and non-verbal communicative skills, complementing the interpersonal and intrapersonal intelligence. Visual and spatial intelligence is addressed through working with the SonOrb, where the pitches of sound are visualised through pillars of varying heights. Motoric intelligence is explored through the Kosmix, the XenaX, the SonOrb and the OMNI. Coordination and synchronisation of movement are important for the creation of a composition in a group setting. The Sound Playground gives much attention to conducting and working with a group-leader during the creative process. Children learn how to translate their own musical opinions and ideas of a logical structure into hand gestures, which allow everyone to realise the overall composition in a unified way. Finally all installations offer audio-visual interest; for example, at the XenaX, sketched shapes are transformed into sounds, which may themselves be associated with non-musical noises.

The development of a child through imitation, and their internalisation of these imitated skills is displayed in the Sound Playground, as children assume the behaviour of the workshop leaders demonstrating the sound installations. This can be seen in the possibilities of movement upon the Kosmix, sound creation on the XenaX, and the copying of rhythms and beats on the OMNI. Children can also adopt gestures and adapt them in order to lead the group as a conductor. Aside from imitating their workshop leader, children also may learn by following their peers. Swanwick and Tillman have developed a spiral-model of the sequence of a child's musical development (Hargreaves, 1995), based upon an analysis of 745 compositions by British schoolchildren between the ages of three and nine. The spiral consists of four ascending loops: control, imitation, imagination and meta-cognition. Each loop moves between two poles: the individual and the social aspects of composition and creation. Children between four and nine are mostly in the imitation-phase, followed by the imagination-phase. This shift from one phase to the next occurs via the development from imitation influenced by personal creativity, to imitation influenced by cultural conventions. This spiral-model is also reflected in the Sound Playground.

According to Vygotsky, a good teacher enables a child to develop past his existing level by always remaining one step ahead, in what he names the 'zone of proximal development' (Kohnstamm, 2002). This comes to the fore in working methods of every installation in the Sound Playground. The workshop leader shows the child how an installation may be played, through showing, demonstrating, giving an example. Then it is the turn of the child. This creates a stage where quality control is exercised by both teacher and pupil, working together. Finally, by internalising what was at first imitation, the responsibility and control is gradually assumed by the child. The workshop leader is then able to move to the background, in a 'scaffolding' role, offering support and stimulation only as necessary.

The location of the Sound Playground in the Muziekgebouw aan 't IJ is extremely befitting. This concert hall is the venue in The Netherlands for contemporary composed music. The Sound Playground fits seamlessly with this concept; here, children are the creators of their own musical ideas, instead of reproducing existing compositions.

The Sound Playground is unique, the only initiative of its kind in the world, and has been a great success since the first workshop in 1999. 450 workshops are organised per year for over 6000 children, who attend both as individuals and school classes. For more than ten years, the Sound Playground has researched the ways in which young children can be stimulated to compose, and how games can be used to develop musical compositions.

If there were more Sound Playgrounds in existence, more sound-artists would be encouraged to plough their efforts into the development of interactive installations. These installations would then be able to travel around to other Sound Playgrounds, giving more variety to each centre. There would be more music teachers involved, which would also lead to a greater variety of working methods for the installations, subsequently deepening the field interactive installations in music education, and increasing our knowledge in this area.
The Muziekgebouw is extremely proud of the Sound Playground, and looks forward to welcoming groups of children for years to come. However, it would be fantastic if other Sound Playgrounds could exist across the world. If this was so, more children could experience this form of music education, and discover for themselves what music can do to you.

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ANALYZING REACTIONS OF TODDLERS IN MUSIC CONCERTS DESIGNED FOR A SIX MONTH TO THREE YEARS OLD AUDIENCE

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ABSTRACT

Music concerts for babies and infants is a relatively new practice in early childhood music education. The Department of Music of Ionian University in Greece, organized the first reported series of music concerts for babies and toddlers (6 month to 3 years old) in the country. The concerts took place in Corfu island during November and December 2012. University music students performed for approximately 35 to 40 minutes, offering recitals with a range of musical instruments combinations and music styles. These concerts were designed in a way so that listening experiences of toddlers and their parents would involve two different styles of listening: unguided listening with free participation, and listening along with suggested and demonstrated accompanying activities. These activities included clapping, sway, a variety of body movements, stepping, dancing with colorful scarves, balloons and ribbons, as well as playing with percussion instruments.
This paper focuses on the analysis of toddlers' reactions to music concerts, taking in account both listening settings. There were two groups of toddlers that followed a sequence of three concerts each. Each concert offered a different listening experience: one with free participation, one with suggested activities and one with mixed audience including older children. Infant's attention and reactions to music was video-recorded and analyzed in two manners: a) through a naturalistic observation of the two groups and b) through a systematic observation of selected toddlers that were chosen as case-studies. Infants' reaction to concert music varied depending on the musical environment in which they are raised, their personal musical inclination and their mood at any specific moment, among other parameters. In this paper, the reactions of children are analyzed using five main categories: a) infants' engaged look towards the music source (music instruments and/or performers), b) their demonstrated enjoyment, c) their level and quality of participation

in the suggested activities, d) the interaction with their parent/s, and e) their interaction with other children of the group. The series of music concerts for toddlers aimed to offer a rich musical experience to both children and parents attended. It also aimed to give some ideas to parents on how to play creatively and musically with their children alongside music listening, and encourage them to share moments of pleasure and artistic enjoyment.

KEYWORDS
Music concerts, infants, babies, reactions to music, music listening

INTRODUCTION

The growing interest in early childhood music development along with some interesting findings towards the understanding and music preferences of babies and toddlers inspired us to design a research project on music concerts for babies. The project was implemented by the Music Department of Ionian University in cooperation with the Corfu Medical Association.

The whole design and organization of the project served the initial purpose, which was to offer an alternative and informal recital environment so that both babies and their parents could express their natural reactions towards music. This also enabled us to observe and monitor different layers of behaviour and reaction, such as interaction among babies, babies and parents, babies and musicians, babies and music, their enjoyment, and so on.
Both design of the project and its observation took into consideration several findings from previous research, which will be demonstrated in the literature review chapter.

LITERATURE REVIEW

Related literature suggests that rhythm is a predominant characteristic of music to which babies and toddlers seem to respond naturally. A previous research by Demany, McKenzie, & Vurpillot (1977) supported that babies even at the age of two months old are able to identify rhythmic patters and differentiate them from simple time sequences. Babies are also able to identify rhythmic patters from music pieces they are listening to (Philips-Silver & Trainor, 2005).

Baruch and Drake (1997) showed that babies at the age of two to four months old are able to identify small differences in sound sequences when music is played in a moderate tempo. However, they cannot identify differences in very fast or very slow tempi. Apparently children's tempo preferences change according to age, so that older children show a distinct preference for faster tempi (Baruch et al., 2004). Conrad, Walsh, Allen, & Tsang (2011) examined music preferences related to tempo among six to seven-months old babies as well. Lullabies and game-songs in various foreign languages were used in this research; results measured how often babies turned their head towards the sound source. According to the results of the study, babies showed a preference for fast tempi in game-songs, with no preferences for slow or fast lullabies reported.

Another important research supported that babies' exposal to sounds with complicated harmonies, rhythms, dynamic changes and unexpected development and cadences could prove overwhelming for them (Papoušek, 1996). On the contrary, babies prefer expected simple melodies and harmonies, such as those that are usually found in lullabies (Schwarz, 2004). Naturally, all related research supports that babies show a clear preference for their mother's singing voice (Lecanuet, 1996; Trehub et al., 1997; Trehub & Trainor, 1998; Bergeson & Trehub, 1999; Milligan et al., 2003; Oldfield et al., 2003; Shenfield et al., 2003).

It has been established that even very young infants, unable to make higher-level learned groupings, are still able to make primitive groupings of acoustical events - just as they are able to see shapes, outlines, and colorus of visual objects without knowing what they are (see Trehub and Trainor, 1993; Fassbender, 1996, pp.76-80). From an evolutionary point of view, this grouping mechanism makes sense, because sounds that are related in this way (i.e., close in time, or similar in pitch or quality), tend to come from a single sources in the environment, and it is in any organism's survival interest to be able to accurately identify sound sources (Snyder, 2000, pp.21)

Nawrot (2003) supports that infants (5-9 months old) have a perception of the affect and the emotional content of a piece of music, perception similar to those of preschool children (3-5 years old) and adults (university students). Infants seem to prefer listening to happy music; however Ilary & Polka (2006) conclude that

infants listen attentively to much more complicated music than we commonly think.
Primitive grouping processes always function in the same way: we have little control over them. Basic features, such as frequency, amplitude, and boundaries where events begin and end, are detected in the earliest stage of processing, feature extraction, which extracts cues that can be recognized by higher level processing (long-term memory) (Snyder 2000, pp.32).

Mechthild Papoušek (1996) analyses how important it is for parents to participate with encouragement, emotional engagement and support in their babies' daily music life. Suggested activities include listening to well-performed rehearsals of music, learning through imitation, frequent practicing of partial skills until they become automated, and innumerably repetitions of basic familiar pieces (Papoušek, 1996, 108). It is also important for babies to accompany music with complementary activities through which they can express their musicality. For example, infants' intuitive ability to move and dance with music, as well as to play with percussion musical instruments can enhance considerably their engagement in music.

Movement is a natural activity for babies and infants: walking, running, skipping, hoping, jumping, hand-clapping, and gestures of children's play experiences are pathways to musical understanding. Movement is vital, fundamental and natural in children's music education. It is most effective in facilitating learning, because it activates their kinesthetic sense and permits children to use their body expressively during any music experience (Shehan, 1990, p. 364).

As soon as newborns manage to be able to grasp things, they can play percussion instruments to satisfy their desire for sound-making and at the same time to build coordination between ear, eye and hand. Gradually children of 18 months and more can accompany the singing of adults with their instruments. Around the age of 2 they begin to synchronize their movements with the rhythmic pulse in short bursts and irregularly, until their beats on percussion instruments becomes more continuous and regular (Tafuri, 2008, p. 152-153).

The idea of music concerts for babies and infants is a relatively new area of research that is implemented in various countries (Kaminska & Kortas, 2009).

Our research focused on examining babies' reaction to a number of parameters of music performance, in different ways that are analyzed in the methodology section that follows.

METHODOLOGY

Taking into account all the different parameters that the literature review indicated, along with our initial goal of creating an environment with minimum intervention, we designed a total of five concerts involving two different participant groups. Group A participated in two concerts that took place in the Community Centre located at the Corfu Medical Association building; the first one was primarily undirected, while for the second one a music education student demonstrated certain movements and activities designed to accompany the concert. Group B also participated in two concerts that they were reversely designed; the first one was directed and the second one was not. Both groups A and B participated in the same fifth concert that took place in a small music hall usually hosting jazz venues. In this last concert the whole family of participants was invited along with siblings regardless of age. All accompanying material that was used in the previous concerts was available for free use by all attendants. This material included Orff percussion instruments, balloons, and scarves.

The performers of all five concerts were students of Ionian University's Music Department, with the majority of them being performance students in various areas. The recitals presented three different repertoire programs; each of the first two programs was presented in both groups in different times and days. For example the first recital was presented on a Saturday afternoon in group A with no directed activities and the same recital was presented on a Sunday morning with group B with directed activities. The reverse schedule was used for the second recital program. The final recital program was presented on the final concert on a Sunday morning.

Each of these programs aimed to include a wide variety of musical styles, such as classical music, jazz, pop, and seasonal (Christmas) music. It also aimed to include a wide variety of instrument combinations, such as duos with flute and piano, clarinet and piano, piano and percussion, piano and violin, trios with clarinet,

trumpet and piano, piano four-hands, and jazz saxophone quartet accompanied by a singer. The repertoire also aimed to include a wide variety of tempi, moods, familiar and unfamiliar pieces.

At the beginning of each concert, parents were instructed to abandon their formal notions of recital attendance, and were encouraged to allow their children to express themselves in any way they chose, and to participate themselves in any way they found appropriate. In this respect, they were asked to sit on the floor in a semi-circle setting. Yet, a formal sitting setting with chairs was available for anybody who chose to use it. They were also instructed to minimize their verbal interaction with each other and with their children. The average attendance of each group was 15 infants along with one or both their parents.

The concerts were attended by parents (mostly), occasionally grandparents and students of the Music Department. In order to achieve a multi-angled observation there were several video cameras tapping musicians, children and parents (Custodero & Xu, 2008).

All concerts took place in November and December 2012. Several weeks after completion of the concerts, an observation group consisted of both authors along with a group of graduate and undergraduate music students1 watched the recorded material. Observation comments were based on five pre-conceived main categories: a) infants' engaged look towards the music source (music instruments and/or performers), b) their demonstrated enjoyment, c) their level and quality of participation in the suggested activities, d) the interaction with their parent/s, and e) their interaction with other children of the group. In addition, four observers were assigned to observe individual reactions in each recital. One observer was assigned to attentively observe a six-month old baby girl, one observer was assigned a fifteen-month old baby-girl, one observer was assigned a two and a half year old boy, while the last one was assigned a three-year old boy.

All observation comments were discussed openly in the group, resulting in general qualitative observations that apply to all the different concerts and settings, as well as individual findings resulted from particular settings or particular babies-toddlers. The major findings will be discussed in detail in the following section.

1 Zoe Parisi, Eleni Papari, Vassia Kyritsi, and Ioanna Karapanou.

FINDINGS

INFANTS' ENGAGED LOOK TOWARDS THE MUSIC SOURCE (MUSIC INSTRUMENTS AND/OR PERFORMERS)

Infants' engaged look towards the music source in these recitals was influenced by several factors. First of all, the change of instrumentation - something that occurred several times in the course of the first four recitals - seemed to grasp their attention. On the contrary, the last recital was the most impressive orchestration-wise performed by a large group consisted of a saxophone quartet, singer, clarinet, piano, flute and percussion instruments. Despite the groups' overall impressive presence, babies and infants were indifferent to the musicians after an initial short-lived demonstrated curiosity directed particularly towards the shiny and loud saxophones. A remarkable interest was noted in a piece for tambourine and piano performed in the first 2 recitals: most babies and infants were captivated by the drumming effect, which soon led to individual exploration of the instrument, as some infants tried to imitate the performer's sounds. It should be noted that this particular piece (Paliev's Study) was the only work from the three programs that was composed upon irregular and complex rhythms.

Secondly, children's music background significantly affected their attitude towards the music making procedures. In the case of the fifteen-month old girl whose parents are both professional musicians, the interaction with all instruments and performing musicians was direct and interactive; as a matter of fact for a large part of all concerts the girl was standing next to the musicians instead of the semi-circle setting, trying to play their instruments while they played.

Furthermore, children's previous concert attendance seemed to have created an already preconceived notion of the "proper" attitude. Two 3-year old girls who were sitting on chairs instead of participating in the semi-circle setting they observed attentively the recital in an "adult-like" manner.
Overall, the major outcome of the comparison among the different settings (with or without directed activities) was that when babies and infants were not directed to participate with movements, instruments etc., they observed more attentively the musicians. However, in all cases this attention was interrupted soon by toddlers who - directed or not - chose to move actively by dancing, walking, and exploring the environment. In addition, the attendance to the music source that lacked personal involvement and participation, also lacked in energy, enthusiasm, smile and laughter that were evident in the directed attendance settings.

DEMONSTRATED ENJOYMENT

Children's demonstrated enjoyment was expressed in a variety of ways: they danced, clapped, laughed, played with instruments and scarves, and were eager to experiment with the musical instruments, either during or after each performance. Aspects of the enthusiasm were apparent in all concerts regardless of the setting. However, it seemed that it was easier for both children and their parents to channel their desire to actively participate when they were given the means and directions to do so. Having said that, it should be noted that each new activity, and especially each change in the accompanying materials resulted in a disassociation with the music happening for several minutes, during which significant noise, talking, and lack of coordination was observed. The audience was able to re-focus their attention to the music two to three minutes after each change.

The Orff percussion instruments were a constant source of joy for both parents and children. Children experimented with all of them as they exchanged them constantly, and parents demonstrated to their children the sound making mechanism for each one of them. The downside of their use was that the age span of the participants resulted in different reactions: Babies from 6 months to 2 years old merely explored the sounds, while 2 to 3 year olds were able to synchronize their instruments with the rhythm of the performed piece. As a result, it was difficult to assess the level of enjoyment towards the Orff instruments or towards the participation in the music making process with the Orff instruments.

The use of scarves seemed to make parents and especially mothers happier than the children. We believe that the reason for that was that scarves enabled parents to use them as centre-pieces for small choreographies; thus they gave them the inspiration to actively direct their children's participation instead of waiting for ideas from the music educator in charge.

LEVEL AND QUALITY OF PARTICIPATION IN THE SUGGESTED ACTIVITIES

Children's level and quality of participation was largely determined by both their age - as analyzed above - their personality, and their parent's active involvement. Regardless of age it was evident that whenever the parents were active themselves, either by dancing, playing, clapping, etc., children were more enthusias-

tic with the activity and music itself. Babies in particular, whose mobility is still limited, were absolutely dependent on their parents rocking and moving in order to actively participate in any way. In the case of the six-month old baby girl observed, the active participation of both her parents - especially through rocking and humming of the melodies - resulted in an impressive and unexpected level of participation, since the baby did not complain, cry or show any signs of discomfort.

The level of participation was also largely dependent on the particular parameters of the performed music: with the exception of Brahms Lullaby, a piece familiar to all children since it is a nursery toys' favorite, children showed a distinct preference to pieces with a predominant rhythmic element. Any dance-like piece, such as Joplin's Entertainer and Bizet's Habanera initiated higher mobility and increased rhythmic involvement. In some cases even children younger that 2 years old made efforts to participate rhythmically in vibrant pieces. Children's relation to the rhythm pulsation was very apparent in the case of one of the performances of Debussy's Little Negro: the musicians (piano and flute) started their performance with a brisque allegro tempo, but in the course of the piece they unfortunately dropped the tempo to a moderate andante. The children respectively showed an initial enthusiasm that gradually diminished until it turned to absolute indifference by the end of the piece.

It should be noted that the level of participation was interrupted through some poorly designed gaps in-between the pieces. The observation outcomes signify the importance of continuity in the music process, because even a minute-long break caused the loss of concentration and initiated activities usually loud and unrelated to the whole music event.

Finally, since the concerts were designed for early afternoon and morning sessions, it should be noted that morning concerts proved more successful in terms of participation, energy and enthusiasm by both children and parents. We believe that several elements contributed to this: The morning concerts fitted better the toddler's time schedule of naps and feedings, parents were more rested on Sunday mornings than on Saturday evenings, and the natural morning lighting of the rooms contributed to the energy and joy.

INTERACTION WITH THE PARENTS

Children's interaction with their parents depended largely on the children's personality, level of comfort among a strange group and level of active involvement from the parents' side. Some toddlers (particularly the two individually observed boys of 2 and a half and 3 years old) were very active, and moved freely in the whole area mainly through dancing and jumping without seeking their parent's presence. Other toddlers, even when they could easily walk, chose to remain close and in constant physical contact with their parents.
In other cases - especially when parents or grandparents chose to sit on the chairs rather than on the floor, children seemed hesitant to join the rest of the group in the semi-circle; thus they stayed on their seats. In one such case, the grandfather left with his 10-month old granddaughter when she began to cry after sitting still 15 minutes into the concert.

As mentioned above, any kind of demonstrated enthusiasm from the parental side resulted in an increased level of enthusiasm from the children's side. The only interaction among parents and children that was disruptive was the excessive use of cameras that flashed constantly interfering with the recital venue.

INTERACTION WITH OTHER CHILDREN OF THE GROUP

Children's interaction with each other was determined by their level of mobility, and it was obviously greater for older children. It increased significantly when accompanying materials and particularly Orff instruments were distributed. This initiated a constant exchange of the instruments among them, which in general happened in good spirits. Some siblings played with the expected intimacy reacting often in the same manner, but in general since most directed activities were not organized for groups, children did not form groups in the course of them. Occasionally there would talk or address each other, but in all honesty most talking originated from their parents.

CONCLUSIONS

The outcomes of this study were consistent with several aspects of the related literature. First of all, it was apparent that all babies and toddlers used their body in any way they could in order to participate in the music happening regardless

the directed or undirected activity setting. Additionally, the age of two (years) seems to be a landmark age for toddlers to synchronize their movements with the rhythmic pulsation. The rhythmic element in general is of utmost importance for children's participation and concentration during a music concert. Toddlers particularly favour strong beats that signify vibrant rhythmical pieces, as well as up-lifting steady tempos. Finally, parents' participation in any musical activity determines children's level of participation, sense of comfort and enjoyment.

This particular research has outlined several aspects that need to be taken into consideration when designing baby concerts. Aside from carefully designed recital programs, such concerts should include a variety of different instrumentations creating a number of different tone colors and sonic experiences. Additionally, musicians need to be careful to create the minimum possible breaks between each piece, since babies and toddlers lose their focus to music even with a few second-long sound pauses. However, regardless of the level of enjoyment, percussion instruments would be more beneficial to be provided in similar age groups, since each age group uses them in a different manner. Furthermore, detailed instructions should be given to parents concerning the minimization of their verbal communication and their active involvement in all activities. Finally, special consideration should be given to scheduling issues, such as time and place of each concert venue, as these parameters affect significantly children's alertness and enjoyment.

Since all concerts included tonal music based on predominately western harmonies and simple rhythms, in future research it would be interesting to investigate children's reaction to music not commonly associated to young listeners: atonal, ethnic, music with rhythmic complexities and so forth.

We believe that the series of music concerts for toddlers offered a rich musical experience to both children and parents that attended them. Apart from offering moments of pleasure and artistic enjoyment to both of them, it enriched their musical communication and gave ideas to parents on how to play creatively and musically with their children alongside music listening at home. It also can be a starting point for the music community to reconsider broadening the age span of its audience.

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THE ATTITUDES OF SWEDISH PRESCHOOL LEADERSHIP TOWARDS MUSIC – SUPPORTIVE OR RESTRICTIVE?

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ABSTRACT

This study concerns three preschools situated in a multi-ethnic area in Sweden in which almost all the preschool children are multilingual. Two of these preschools use music as a tool for stimulating language and social development, while the third preschool has no particular focus on music and serves as a comparison.
The purpose of this paper is to discuss how the leadership at these preschools has impacted the didactic choices made.
At these preschools a number of teachers formerly felt a lack of self-confidence and competence in teaching music. They used to be on the periphery, but are now competent actors in the heart of the community. This learning process is linked to the preschools in question being communities of practice led by the principals (Lave & Wenger, 1991; Wenger, 1998). The preschool teachers' narratives show that they formerly thought music to be an activity reserved for people with a special gift or a talent. Now they see that they are competent enough to use music in their daily work as a tool for language development, social training, and, above all, to bring joy to the preschool. However, the preschool teachers avoid saying that the musical activities also have an impact on the ability to develop musical skills. The inspiration the leadership has brought to each institution is of crucial importance for music activities to be a part of the daily work. But in a way this influence also has been restrictive. The preschool teachers only describe music as a tool. Other functions of music remain in the background.
Didactic objectives are vital for the legitimization of all pedagogical intentions and pursuits. And since the Swedish preschools' steering documents state that music should be a part of the preschool agenda it is important that the leadership at preschools encourage preschool teachers to see that musical activities also have an impact on the ability to develop musical skills.

INTRODUCTION

This study concerns three preschools situated in a multi-ethnic area in Sweden in which almost all the preschool children are multilingual. Two of these preschools use music as a tool for stimulating language and social development, while the third preschool has no particular focus on music and serves as a comparison. The preschool teachers at the two music-preschools emphasize that music activities enable the children to participate at times when their spoken language is not sufficient. However, before the music preschools adopted teaching based on music some of the preschool teachers had felt a lack of self-confidence and competence in using music as an activity in the preschool setting. They had an idea that it is only those who have a special musical talent or who had a higher education in music that are able to teach music in a proper manner. The study therefore addresses questions of self-confidence and competence in teaching music.

AIM

The purpose of this paper is to discuss how the leadership at these preschools had impacted the didactic choices made.

FINDINGS

The analysis shows that:
The leadership has had a great impact on the development of the music profiles. The leadership has shown the importance of the work, not only in a convincing speech but also, more importantly, in action. This influence has been both supportive and restrictive.

THEORETICAL PERSPECTIVES AND METHOD

This study rests on three theoretical frameworks that contribute different dimensions to the research, and in this study also serve as the method: hermeneutics, ethnography, and socio-cultural theory. The hermeneutical perspective used

here holds that the search for knowledge, our interpretation and understanding of what we encounter, is central in the world in which we live. The ethnographic research approach is based on a search for knowledge within a given context, and emphasizes that interpretation plays a significant role in our understanding of what we are facing (Agar, 1996; Bjurström, 2004; Hammersley & Atkinson, 1995; Wolcott, 2008). From a socio-cultural perspective, learning and development are considered to be an on-going process that takes place through people's participation in different social and cultural activities (Lave & Wenger, 1991; Wenger, 1998; Rogoff, 2003; Säljö, 2000; Vygotsky, 1978, 1999).

Lave and Wenger (1991) emphasize that learning is a process of increased participation in different communities of practice, referring to the concept of legitimate peripheral participation, which takes in account the fact that participation is first legitimately peripheral but increases gradually in complexity. In this process of learning and development, the person changes on an individual level, as does the community of practice in which the person is involved. In this view, learning is connected to who a person is, and who she or he becomes in a process of participation in different communities of practice (Lave & Wenger, 1991, p. 95; Lave, 2000, p. 60). Wenger (1998) states that the foundation of learning must be found in the communities of practice where people are involved and that learning is central in every social practice and always changes our ability to take part. Learning is therefore not only linked to pedagogical situations. Everything that happens in a community of practice is relevant for learning, and can be seen as a resource.

DATA COLLECTION

Data was gathered in a two-part data collection process, which entailed interviews and observations of preschool children and teachers in action.
Eleven preschool teachers, three principals, and a language teacher were interviewed, and observations were carried out during 12 consecutive days at each preschool over the course of a period of two years, from 2008 to 2010. The focus in the interviews was on the preschool teachers' thoughts, actions, and narratives, while the observations of the daily work at the preschools gave meaning to the narrative from another perspective.

LEADERSHIP AT SWEDISH PRESCHOOLS

Preschools in Sweden are explicitly goal oriented, and both principals and preschool teachers have a great influence on how to reach the goals. In such an organization it is important to share common values, ideas and understanding of the work (Riddersporre, 2010). Research has also shown that successful leaders have the ability to implement theory into practice and they often demonstrate the value of their ideas through participation (Gill, 2006). The assumption in this study is that the leadership is a social phenomenon where leaders and followers create the leadership together (Hughes; Ginnet & Gordon, 2009). Therefore both principal and preschool teachers´ point of view are analysed.

RESULTS

The inspiration the preschool leadership brings to each institution is of crucial importance for the didactic choices. The principals often attend the same courses as the other staff, and at staff meetings they sometimes come up with new ideas concerning activities at the three pre-schools. The fact that the principals at the music-preschools choose to participate in different musical activities has been an important element in convincing all the preschool teachers to take part in the musical activities. Their leadership shows the importance of the work, not only in a convincing speech but also, more importantly, in action. The interviews made clear that some of the preschool teachers at the music-preschools felt a lack of self-confidence and competence in singing and playing percussion instruments among the children before these preschools started to use music as a tool for language development. It is obvious that the ability to attend various courses in music has been crucial for their ability to take part in the daily work at these preschools.

The teachers' narratives show that they thought music to be an activity reserved for people with a special gift or a talent. Now the preschool teachers at the music preschools also can see that they are competent enough to use music in their daily work as a tool for language development, social training, and, above all, to bring joy to the preschool. Teachers who felt a lack of self-confidence and competence in teaching music used to be on the periphery, but are now competent

actors in the heart of the community. This learning process is linked to the preschools in question being communities of practice (Lave & Wenger, 1991; Wenger, 1998). A comparison to the third preschool shows that some of the preschool teachers at this preschool feel a lack of self-confidence in singing and playing among the children. Unfortunately they neither ask for courses in music nor are they offered any. The leadership at this preschool are focused on other areas and subjects of interest.

MUSIC ACTIVITIES AS A TOOL

The musical activities at the two music preschools are well organized with a focus on the social aspects of music as a tool for stimulating language and social participation. There is a firm belief among the preschool teachers that it is important for children to participate in language-developing activities and that various musical activities boost the children's aspirations and confidence about participating. The atmosphere allows the children and preschool teachers to express themselves spontaneously in music. Yet the aim of the preschools' musical activities is not to develop musicality as such. The preschool teachers at the music-preschools avoid saying that the musical activities also have an impact on the ability to develop musical skills.

To sing different songs is definitely a way to experience the language. The musical activities also give the children examples of how to act in various situations. For example, when a song begins, everyone is expected to join in, and when the song ends, everyone is expected to be silent and listen to what comes next. This dialogical pattern of acting and listening provides an example that can be transferred into other types of situation, be it listening to a story, going to see a play at a theatre, or just listening to an instruction. In this way, musical activities serve as examples and support by dint of their structure. These activities therefore also have a role as tools for inculcating discipline. Musical activities, in the way that they are employed in these contexts also support participation. Collaboration in such exercises enables children to learn together—from one another and from the structure of the exercise. The musical activities transcend boundaries as well: preschool teachers, children, and their parents can bring music from all over the world to the preschool. Listening to different types of music is therefore a part

of these preschools' own culture. The various musical experiences become a resource for the community. The children are always allowed to use, for example, percussion instruments spontaneously in their free play—and it seems easier for a child who has difficulties with the spoken language to participate in non-verbal play such as playing an instrument. The conclusion is that music can generally be considered to function as a way of enabling children to participate in a communicative way. Various musical activities are recourses that increase children's aspirations and self-confidence about participating, which in turn can also support their language development.

MUSIC - NOT ONLY A TOOL

But the analysis shows that music also has an aesthetic function that is obvious in the preschools' musical activities. The preschool teachers consider it important that children can have musical experiences, they also bring attention to different musical elements such as: high or low tones and pace or volume in different music activities. Still music is not in focus when they describe their teaching. My interpretation is that they have gained the confidence to sing and play, and to use music as a tool in their daily teaching but they still do not have the musical self- confidence to express that the musical activities they offer to the children are also of importance for musical development. In a way they still think that someone with a musical talent or someone with a higher music education would not accept what they are doing as proper music education.

Therefore the preschool teachers provide a simplified description of the music activities. They express that singing or playing is important and that everyone can take part. Just sing or play and it will develop language. By comparing the manner in which they speak about the way spoken language can have an impact on language development, this simplified speech about music becomes even clearer. They explain that language is not expected to fall in to place only by talking to the children. Instead the teachers emphasize the importance of naming objects, talking about what is happening in everyday activities, of illustrating fairytales and stories with pictures, of making an effort to have a clear and distinct pronunciation. They also highlight the importance in expressing themselves linguistically correct in all conversation with the children.

The taken-for-granted and simplified descriptions of the music-making seems limited to the understanding of what the preschool teachers are doing. It has led to a particular discourse that music is a tool for language stimulation or social inclusion, even though the music activities actually have a more extensive function. These communities of practice have created a discourse that hides other functions of music.

THE LEADERSHIP

The principals have a great influence on the didactic choices at these preschools. The result of the study therefore shows that principals need to pay attention to their role as leaders. Their role can be both restrictive and supportive. Competence in one subject can exclude competence in another. If no one at a preschool has an interest in a specific subject, that subject can be relegated to an insignificant place in the preschool agenda, and vice versa. There is no particular focus on music at the third preschool, and it is accepted that only the teachers who are confident in singing and playing for example percussion instruments among the children do so.

The principals also influence the way the preschool teachers describe their teaching. The discourse that music has a positive impact on, for example, language development and the social climate are obvious at these music preschools, and the principals have had an impact on that. Next step is to grasp—and express—that music-making is also important for musical development. Such argumentation would more strongly defend the place of music in the preschool curriculum. It would also make the preschool teachers aware of what they really do. That said, the preschool leadership also has opened-up opportunities. The leaders have offered courses in music to all teachers at the music preschools— crucial for the development of these preschools. The music learning process is clearly connected to the preschool as a social practice.

CONCLUSIONS

Didactic objectives in which content, methods, and goals are debated are vital for the legitimization of all pedagogical intentions and pursuits. Teaching music requires practical skills, musical knowledge and confidence to describe what is hap-

pening in didactical terms. It takes time to become competent and comfortable in teaching music. And since the Swedish preschools' steering documents state that music should be a part of the preschool agenda the principals need to make sure that all preschool teachers have musical knowledge, practical skills and the confidence to sing and play in the preschool setting. Preschool student teachers also, must receive a qualitative education in music. Consequently, it is important that music becomes a standard subject in the preschool teacher education programme in Sweden, since it unfortunately is not.

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INFORMAL LEARNING SEQUENCES IN PRIMARY SCHOOL TEACHER EDUCATION – EFFECTS AND CHALLENGES

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ABSTRACT

For several years informal learning practices in music have widely been discussed. The findings of Lucy Green's research (2002) have been explored in school classrooms, but what about teacher training? –
There seem to be several reasons for integrating informal learning sequences in teacher education for young children. On the one hand, a future teacher can develop her versatility if she experiences music by improvising, forming and composing. On the other hand, being experienced in musical creation leads future teachers to the ability to realise musical ideas, not only of their colleagues, but later also of the children they are teaching. The class as a whole may temporarily become a "band", led by a teacher who is experienced in inventing and forming sounds. The ISME conference of the year 2012 showed some issues regarding a creative teacher training that can as well be part of an early childhood teacher training. Currently there seems to be some endeavour in music education for finding new forms of training new teachers.
The experimental process on informal learning sequences in teacher training was accompanied by a research project. It was carried out on the assumption that the composing process happening amongst those peer groups in the "garage band"- setting would empower the students to be able to talk about different musical phenomena and to be able to grasp specific musical situations in a quicker and in a more creative way.

KEYWORDS
Teacher training, informal learning sequences, teacher as composer, creative processes amongst peers

INTRODUCTION

Teacher training at universities in Switzerland is often done in a rather conservative way. The necessities for changes in teaching strategies at university level seem to be less pressing than it may have been in high schools. This situation is probably based upon the fact that the students choosing to become teachers form a group of persons who are easier to be taught than high school students.

Up to 2008 most of the teacher training institutes in Switzerland only knew the generalist teacher for kindergarten and primary school. Furthermore our institution provided the same musical training for kindergarten and primary school teachers. We required a minimum of basic knowledge in sight-reading and music theory, and those who were not trained in these subjects knew that they were responsible for learning this content on their own. – Thus music was taught to all students, regardless of their prior experience. Classes were often quite diverse, students who were classically-trained met pop-musicians as well as young people who would label themselves "unmusical". Under these circumstances singing and voice training made some sense but more than that I had the impression that it would be beneficial to reinforce the musical creativity, the band-leader qualities and the compositorial thinking of the oncoming teachers.

The training allocated three terms of music, each containing two or three lessons a week. The first term was mainly a repetition of rhythmic and singing skills with a certain focus on teaching children, whereas the second one was a purely didactic one. The third term should give the students some experience in using their instruments and the Orff instruments. Under these circumstances it was possible to design a teaching plan that gave the possibility to open up for informal learning sequences.

The main aims of these three terms could be summarised in the following way:
1st term: The future teachers work on their role of becoming a model for the children in voice and rhythmic matters.
2nd term: The future teachers start to understand that music didactology (Nielsen 2005) differs largely from other didactologies, where cognitive processes are the main focus of attention.
3rd term: The future teachers work on their role of becoming a model for the children in playing instruments and also in improvising and arranging.

OPENING UP FOR INFORMAL LEARNING SEQUENCES

When starting their teacher training, most if not all of the students would say that they like music, however they would not all like musical courses. Partly this seems to refer to some timidity when singing alone or playing an instrument in front of others. It may also be the case that prior bad experiences with being exposed in a performance remain active for quite a long time in a young adult person. For these two reasons it might be less stressful if young people would work in little groups, where they all would have to play, all could risk mistakes and all could add to the forming process of a new piece.

In addition to this, when I designed this new teaching term on the basis of informal learning, I was guided by the following hypothesis.

I supposed that the students organised in little bands with the task of creating some performance on a theme would gain more from the teaching than when being taught with traditional methods. Furthermore I believed that if we would gain the themes from music history, the oncoming teachers would catch certain relationships between the children's musical activities and our cultural background. Finally I assumed that the negotiation in the band plus the given themes for the performance uses and trains the musical vocabulary in an almost natural and communicative way. A teacher may enhance her abilities to spur a musical discourse in her later professional life, even in a class with first to fourth graders.

During the limited span of one term (13 weeks but only 8 meetings with regard to the described project) it was of course not possible to go into depth with the highly elaborated compositorial ideas that our western music culture has generated. Provided that we needed ideas to be useful in the classroom, I tried to extract some features of eight historical epochs that could be adopted with groups of improvising children. The general task for the student bands was to create an arrangement, possibly on a children's song, that embraced the following attributes.

1st meeting: Gregorian Music
using the example of melodic movements
2nd meeting: Medieval Music
using the example of organum (bourdon) and hoquetus

3rd meeting: Renaissance
using the example of dance rhythms and multiple choirs
4th meeting: Baroque
using the example of counterpoint and terrace dynamic
5th meeting: Classicism
using the example of pulsating basses and the Mannheim Rocket
6th meeting: Romanticism
using the example of fairy tail scoring, extended dynamic and the leitmotiv
7th meeting: 20th century: Impressionism
using the example of layers of timbres
8 th meeting: 20th century: Breakup /drastic change of the role of the composer
using the example of aleatoric and minimal music

The pilot study was conducted in the following way: The students had to listen to a piece of music at the beginning and at the end of the course. They heard a piece written by Juan Garcia Esquivel, Mini Skirt, interpreted by the Kronos Quartet. During and after the listening they had to write down all the musical ideas and associations they heard. For the following eight meetings the students were invited to listen to some salient musical examples of the diverse epochs. Thereafter they gathered into "garage bands", in groups of four or five where they should develop some children song arrangement using the specific features of the presented music example. The guideline was to be ready to perform after about 35 to 40 minutes. The performances where videotaped. The presentation showed a compilation of inspiring ideas produced by the students.

After eight meetings in bands following the impulses above, and each meeting closing with a small performance of every group, the students had to listen to the piece of Esquivel afresh. Again they had to write down all the musical ideas they heard. A clear outcome showed that they detected more musical ideas in the presented music after the eight meetings.

THE MAIN RESEARCH

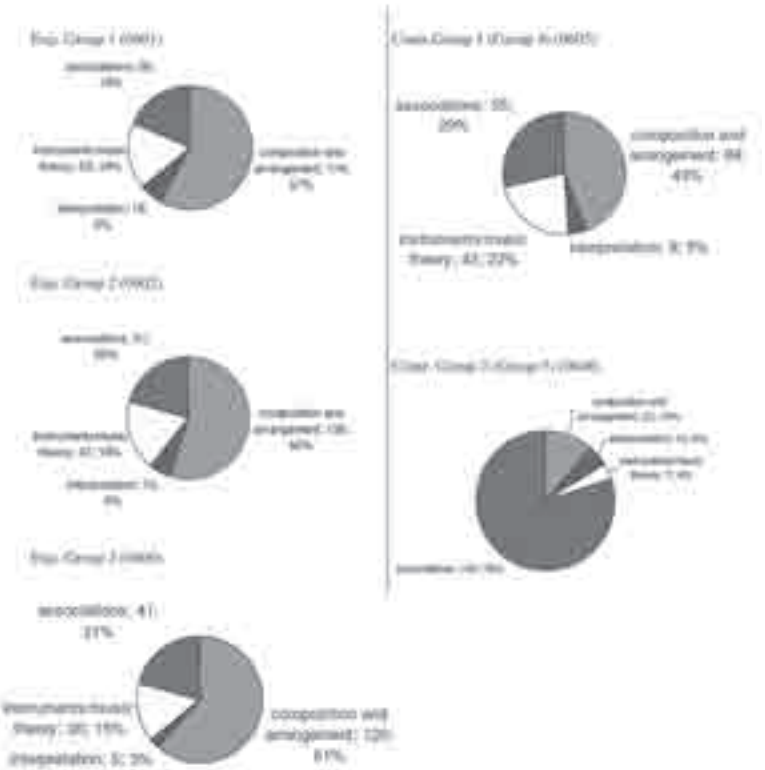
Having realised that the students showed a certain growth in their perceiving abilities I was curious whether a control group without this particular informal setting would have the same perceiving abilities after the third term. So aside from playing the piece of Esquivel to the three groups who followed the course with the informal settings, I decided to play it also to two different groups who followed the traditionally designed course.

All the five student groups (3 experimental and 2 control groups, 12-15 persons per group) where asked to listen to the piece three times. Within this second inquiry both groups heard the piece the first time but after term three. Verbally they where invited to "write down all musical ideas they perceived". Nevertheless it was to be expected, that they would slightly misunderstand the given task and also write down all ideas the music would give them … in other terms, they would also write down all the associations the music evoked.

RESULTS AND EVALUATION

The collection of words showed, that the groups did not differ in the total number of words they wrote down. For further evaluation this collection was sorted into four groups:
1. (blue) **Terms in relation to composition and arrangement,** such as: "repetitions", "bass rhythm like raindrops", "fill-ins …"
2. (violet) **Terms in relation to interpretation**, such as: "happy", "bouncing", "easy" "jocular"
3. (yellow) **Notions of instruments and music theory**, such as: "strings", "dissonances", "triad"
4. (green) **Associations**; such as: "they tell a story", "cat and mouse", " a joke"
I was mostly interested in the number of terms that were realised by group 1 (blue), as this would give us a hint that the students had a vocabulary that could be useful when improvising with children. In the meantime, associations (green) like "joke" or "story" or "funny words" would be much less helpful when trying to talk to children about musical shaping or forming.

The following diagram shows the difference between the five groups.
Group 1, 2 and 3: experimental groups. Group 4 and 5: control groups



The statistics show a rather clear result for the number of composition and arrangement terms in the groups with experience in the informal learning. However, the difference between group 4 and the experimental groups was not very noticeable.

CHALLENGES

I hope that within some years it will be possible to contact the persons of this research again. My main questions to them would be focussed on the sustainability of this very short, one-term experiment.
Do they remember the informal sequences as something special during their

training?

Do they improvise with the children in school?

Do they use their compositorial and arrangement ideas when working with children?

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SINGING IN THE ISRAELI PRESCHOOL

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ABSTRACT

Singing constitutes an integral part of the preschool's daily activity. Songs reflect society's ideals and values, and a particular culture's song repertoire alters according to changes in society's ideology (Kahanovitz, 2010). Gluschankof and Shachar (2004) found that no common repertoire of children's songs could be identified in Israeli preschools, and no clear overt criteria exist for its selection. Additionally, contemporary Israeli preschool teachers tend to seek modern trendy songs, especially on holidays (Kahanovitz, 2010; Amir, 2012). As a music educator and researcher, teaching future preschool teachers, I was occupied with the questions: what is the current repertoire of children's songs in Israeli preschools, and which songs do my early childhood student-teachers encounter in their practicum? The research objectives were to discover which songs are considered nowadays obligatory in Israeli preschools according to mentor preschool teachers, what characterizes the chosen songs, and whether there is a common repertoire. Additionally the research aimed to investigate whether mentor preschool teachers in Israel are aware of the Ministry of Education's instructions on this issue and apply them in practice.
The research was conducted during 2012 by me, the college music teacher, and my students of the Early Childhood Education Department in "Ohalo" Education College, Israel. The research population consisted of mentor preschool teachers from the north region of the country. The research tools were a questionnaire, specially tailored for this study, and observations. Responses were analyzed statistically using SPSS software, and content analysis of responses to open questions and observation findings.
Findings indicated that the mentor preschool teachers who participated in the study have a common repertoire of children's songs. Chosen songs are decades old. No new songs (from the last decade) were chosen for holiday song lists. Most respondents were unaware of Ministry of Education instructions, but their natural choice of songs complied with its recommendations.
The gap between descriptions in the literature and these research findings may be explained by the research population's characteristics: senior experienced conservative preschool teachers, working in the northern peripheral region, and serving as mentors, whose pedagogical attitude might reflect and more closely resemble Ministry of Education policy.

KEYWORDS
Preschool, preschool teacher, singing, songs repertoire, culture

INTRODUCTION

As part of their education studies in colleges of education, prospective early childhood educators learn music courses. These courses include study of children's song repertoires. Different questions arise concerning the contents that should be included in these courses, such as: should the traditional cultural heritage repertoire be taught, or is it preferable to focus on contemporary materials? Nowadays, when so much musical material is readily accessible to everyone, is it still relevant to teach a musical repertoire or would it be more useful to focus on developing the student-teachers' aesthetic musical abilities and their capability to select high quality repertoire? What is a 'good' children's song? Who determines which songs should be included in the traditional repertoire? What do the preschool teachers retain and transfer to their work in the preschool from the college's music lesson?

As a music educator, teaching future preschool teachers, I find myself occupied with the questions: which repertoire of children's songs is currently sung in Israeli preschools? When my students enter the preschools, what kind of singing experience do they 'encounter'? And which of the needs that emerge from the current situation in the field can be answered by the present college musical training program? These widespread issues relating to song teaching in present-day formal education settings in Israel initiated this study. The research sheds light on some of these issues.

BACKGROUND AND LITERATURE REVIEW

As the dominant educational figure in the preschool, the preschool teacher is expected, among other areas of responsibility, to include singing in her educational work. The songs that she chooses and teaches in the preschool are sung by the group in the setting of an assembly, on the teacher's initiative. This activity constitutes a particular and defined type of preschool singing activity, distinguis-

hed from personal spontaneous singing by the children when 'playing with song' during their free activities (Young, 2006).

Already in the 1970s, the renowned Israeli music educator, Emanuel Amiran, delineated the preschool teacher's responsibility to impart Hebrew song in Israeli preschools (as cited in Kahanovitch, 2010). He specified that the song collection should be varied as possible and includes a selection of good songs which possess musical qualities that make it comfortable for children to sing.

An additional illustration of the significance that was attributed to the role of the preschool teacher concerning singing in the preschool, decades ago is presented by Haim Guri, in his description of his mother in 2003:

> "She was a sad woman. It was difficult for her, since she did not work in the profession that she wanted. She studied in a Hebrew seminar for preschool teachers in Odessa under Yechiel Halperin, the father of the poet Yonatan Ratosh. She wrote Hebrew beautifully. She could have been a wonderful preschool teacher. She loved children and she was soft and warm, but she did not know how to sing and because of that they didn't allow her to be a preschool teacher" (Lam, 2003).

Gluschankopf and Shahar (2004), who investigated the place and role of the preschool teacher in the musical life of an Israeli preschool, found that in practice each preschool teacher chooses songs according to her own personal preference and there is no guiding hand from the authorities concerning the choice of a song repertoire for Israeli preschools. Moreover, the reality in the field reveals that current preschool teachers tend to adopt contemporary songs, even if they do not comply with standards learned during their musical training as student-teachers. According to Kahanovitch (2010) the education college courses teach a canonic repertoire and ignore the contemporary repertoire that in most cases is preferred by the preschool teachers. Often, in practice, teachers prefer to produce spectacular events with contemporary musical materials and additional trimmings, attempting to 'impress' the parents, who have the privilege to choose between different preschools (Tal, 2004).

In a study that examined the development of songs in Israeli preschools from 1930 to 2010, Kahanovitch (2010) investigated to what extent the changes that occurred in children's songs in the preschools reflected changing ideologies in local culture. As a test-case she focused on the preschool Chanukah repertoire between the years 1930-2010. She found that changes that had occurred in Israeli society were reflected in contemporary Chanukah songs in all periods. Ka-

hanovitch claims that in the past children sang an ideological Zionist repertoire of songs written by authentic poets and composers, yet today songs creation is essentially motivated by financial considerations.

In another study which examined what had been conserved and what was innovative in the Chanukah song repertoire employed in preschool Chanukah parties, Amir (2012) found that there was a commercialized industry of holiday songs that produces an infinity of new musical materials and transient 'hits' that disappeared in the following year. Moreover, it was found that preschool teachers tend to demand that music teachers teaching in the preschools should participate in on-going private courses and workshops to update the musical material that they bring into the preschool. Amir notes that most of the new songs are characterized by texts with shallow language and contents, and melodies that are influenced by popular culture: Oriental, rap, trance etc. Amir questions the extent of balance between 'conservation' and 'innovation' in the modern preschool holiday song repertoire. She asserts that:

> "A holiday represents a sort of crossroads where past culture is presented in an experiential manner, and simultaneously the present is experienced while [also] looking forwards to the future. Alongside our commitment to transmit the cultural heritage of the past to the younger generation, we select and choose to continue what we feel is good from the past, while simultaneously making room for new cultural creation" (Amir, 2012).

In the context of songs sung at preschool parties and celebrations, it was found that parents do not know the new songs repertoire, making it difficult to create an inter-generational bond, while traditional songs have a marginal role in these parties. Amir concludes that

> "it seems that the preschool teachers' desire to shape the party in a 'contemporary spirit' (with regard to tempo and noise) is in line with the aspirations of 'the holiday song industry' to produce profits by manufacturing new songs".

In recent years the music education supervisors in the Israeli Ministry of Education have published pamphlets and discs presenting collections of songs recommended for teaching in the preschool: "A song for you for early childhood" (2009) and "A song for you for early childhood – holiday songs" (2011). Each pamphlet includes a disc. The editors indicate that criteria for the choice of songs included: songs that are relevant to the child's world, songs suitable for the children's vocal abilities, songs with short texts and simple rhythm, and with a restricted tonal

range tune. Emphasis was given to presenting professional artistic performances on the discs. The pamphlet includes the songs (words and notes), information concerning the authors and composers of the songs, and sets of activities for each of twenty classical Hebrew children's songs. It is unclear though, to what extent these collections reach the preschools and to what extent Ministry of Education recommendations are applied in the musical work of formal early childhood education in Israel.

AIMS OF THE RESEARCH

The objectives of this research were to discover which songs are considered obligatory in preschools in Israel according to mentor preschool teachers, what characterizes the chosen songs, and whether there is a common repertoire. Additionally the research aimed to investigate whether mentor preschool teachers in Israel are aware of the Ministry of Education's instructions on this issue and apply them in practice.

METHOD

The research was conducted during 2012 by the music teacher, and students of the Early Childhood Education Department in "Ohalo" Education College, Israel. The research population consisted of 37 mentor preschool teachers from the north region of the country. The research tools were a questionnaire, specially tailored for this study, and observations.
In their responses to the questionnaire, the preschool teachers declared and listed their preferred repertoire of children's songs. The observations added the perspective of what happens in terms of singing in their preschools, in practice. The collected data were analyzed statistically using SPSS software, and responses to open questions and observation findings underwent content analysis. The selected songs were classified into different categories according to the textual content subject and their chronological age. The first broad classification was a division between holiday songs and everyday songs. Holiday songs were classified according to the specific holiday which they represented while everyday songs were divided according to the following categories: songs on nature and

seasons, songs expressing happiness and celebration, me and my family, the daily agenda, prayers and entreaties to the Almighty, friendship songs, Zionist songs, songs with a generally educational content. The songs were also divided according to chronological classification by the following categories: 'old' songs- over 50 years old, 'contemporary' songs- 10-50 years old, and 'new' songs – up to 10 years old. An additional category was 'songs from the Holy Scriptures'.

RESULTS

As noted, the research participants were all Jewish female preschool teachers' mentors for the students in the early childhood stream in the "Ohalo" Academic College of Education. This population does not constitute a representative sample of all preschool teachers in Israel, thus it is important to detail their characteristics: average age – 46.2 years, and 18.5 average years of professional experience. Most of the teachers had a first academic degree (86.4%) and most were native-born Israelis (94.6%). The research was conducted in Jewish preschools and the distribution of the teachers by religiosity was: 54.1% - secular, 21.6% - religious observance, 9% - traditional observance.

With regard to holiday songs, the questionnaires reveal that close to half (49.2%) of the holiday songs recommended by the teachers were 'old' songs (over 50 years old), 39.5% were 'contemporary' songs (aged 10-50 years) and 11.1% were 'songs from the holy scriptures'. Not a single new song (from the last decade) was included in the teachers' recommendations for holiday songs.

The holiday most frequently mentioned was Chanukah. The most frequently mentioned holiday songs by festival were: Chanukah (Festival of Lights) – 14.9%, Rosh Hashana (New Year) – 13.8%, Succoth (Tabernacles) – 11.6% and 15th Shevat (Festival of New Trees) – 11.4%. All three most frequently selected songs for each holiday appear in the recommended song list published by the Ministry of Education. It was clear that the preschool teachers that participated in the research shared a common repertoire of holiday songs.

With regard to everyday songs recommended by the teachers in the questionnaires, the largest category was 'songs on nature and the seasons' – 27.4%. The other categories chosen in descending order were: educational content – 15.1%; songs expressing happiness and celebration – 9.9% prayers and entreaties to the Almighty – 9.6%, me and my family – 9.6%; daily agenda – 9%; friendship – 8.2%;

Zionism – 7.9%; Sabbath and holiday songs – 3.3%. It is interesting to note that there were cases in which some teachers noted a song as an everyday song while others defined it as a holiday song.

As to the age of the selected everyday songs, the findings were: 'old' songs– 65.8%; 'contemporary' songs– 20.8%; songs from the Holy Scriptures – 7.7% and 'new' songs– 5.8%.
In contrast to the picture that appeared for holiday songs, the list of everyday songs includes a wide range of songs, some of which appear in the list recommended by the Ministry of Education. Additionally, in contrast to the holiday songs' list, the selected everyday song list included 'new' songs. In relation to the question of Ministry of Education policy and recommendations: 73% of the teachers believed that the Ministry of Education provides instructions concerning children's songs recommended for teaching while 27% believed that there are no such instructions. 48.6% of the teachers claimed that they consider the Ministry of Education instructions while 51.4% claimed that they do not consider these instructions.

There were no large differences between the choice of songs by secular teachers and those of traditional teachers. There were differences between the choices of these two groups and those of the religious teachers.
The observation findings validated and reinforced the findings from the questionnaires. The observations also found that 'old' songs were the largest most often selected category. All observations were performed by the students during their week's practicum in the preschools and since there were no holidays during that week, the songs described in the observations were all everyday songs. An observation usually constitutes a "snapshot", recording a given time in the preschool experience. It is interesting to note that there was a recurrent phenomenon in the observation reports whereby the students noted in relation to the 'old' songs' that it was obvious that the children knew the songs from their previous preschool experiences and it seemed that they were used to singing them. In these cases the records provided information about the past, beyond the time of the observation. "the song was familiar to the children" (Orr), "the preschool children sang the songs and it was clear that they knew the words of the songs and had sung them before" (Hodaya), "the children know the words of the songs and began to sing them happily and enthusiastically" (Alyn). The observation findings clearly show that the 'old' songs were widely used in the preschools.

CONCLUSIONS

This study, which was conducted in the Northern peripheral region of Israel in the academic year 2012 among mentor preschool teachers, revealed that there is a common musical repertoire of children's songs for the preschool teacher participants. Most of the songs are decades old. These findings contradict the picture described in the current music education literature in Israel, arguing that no common repertoire of children's songs could be identified within Israeli preschools. Additionally, in contrast to the situation described in the literature, this research population recommends and prefers to teach and sing 'old' holiday songs in the preschool and do not seek modern 'trendy' songs.

The reasons that may contribute to this gap are:

- Geographical location – the preschools are situated in a peripheral region and may be less in touch with modern materials that exist in the education system in central Israel.
- The teachers' average age is high and maybe they remain faithful to a classical repertoire that they learned years ago.
- The teachers who participated in the research had been selected to serve as mentors – this group may more faithfully follow Ministry of Education policies than the general preschool teachers population.

It was found that the 'traditional' teachers' choice of songs was closer to that of the 'secular' teachers than that of the 'religious' teachers.

Additionally, it transpired that most of the preschool teachers were unaware of the Ministry of Education's lists of recommended songs; nevertheless their choices were in line with these recommendations. Interestingly, there is a similar profile of choice of songs among the teachers who claim that they consider the Ministry of Education recommendations and those who claim they do not consider these recommendations.

In conclusion, this research presents findings that contradict those appearing in research literature concerning musical education in Israel. In order to be able to draw conclusions concerning the issue of the contemporary songs repertoire in Israeli preschools, it is recommended that further wide scope and comparative research should be conducted in both the central and peripheral regions of Israel, at the same given period of time and using the same methodology, to examine and compare the repertoires of songs sung in Israeli preschools in the different regions of the country.

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TOWARDS SENSITIVE MUSIC TEACHING. PATHWAYS TO BECOMING A PROFESSIONAL MUSIC EDUCATOR.

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ABSTRACT

This research (Huhtinen-Hildén, 2012) aims to deepen our understanding of the process of forming the professional identity of the music educator and the professional knowledge needed, and also the support and possible interventions needed in facilitating student´s learning.
This qualitative research has its theoretical framework in existential phenomenology. 10 students from the music educator study programme were interviewed and their meaningful learning experiences and important moments of insight were analyzed applying the method of descriptively oriented empirical hermeneutic psychology.
In addition there is a secondary theme in this research, which brings information through an action research approach by studying the work concerning the developing of the pedagogical approaches, content and curriculum for this specific pilot programme.
According to the research results what appears to be crucial for learning to teach music is the formation of the individual pathway and thereby the possibility to facilitate the process of developing an individual's professional knowledge landscape and professional identity. Student´s experiences illustrate the important aspects and elements of the professional identity formation process. The professional skills and knowledge are gained through learning spirals, the deepening circle that starts from the experience and through reflection leads to awareness and further more to setting new goals for learning. The result of this spiral is an integration of the different forms of knowledge essential for the professional music educator. Important factors for the spiral are the learning environments that nurture it, an experimental learning approach and collaborative learning with meaningful others as reflection surfaces. The key findings in developing the education formed in this research project are shown in the model of interaction between the educational structures and the student´s learning.
The results of this research initiate a need for defining the special kind of pedagogical tacit knowing needed in teaching music. A new concept of professional expertise in music teaching emerges in this research that will help us in developing the profession. This is called pedagogical sensitivity. This professional approach that highlights learner-centered music

teaching is needed in different contexts in the field of music education and in promoting well-being with music related activities in the community.

KEYWORDS
Music education, teacher education, curriculum development, teacher education programs, meaningful learning experiences, teacher competencies, knowledge base for teaching, professional identity

INTRODUCTION

Successful music education can have a great impact on a learner´s life. It can be supporting, enriching and give meaningful learning experiences. It can also support development, which reduces anguish, shame and guilt to name but a few symptoms and gives children or young students a chance to grow into their own personality. (Kurkela, 1993, p. 314-315.) There are also other kinds of results related to so-called education in music. We all are aware of misuse of teacher´s power, low self-esteem as a creative, unique music maker and feelings of being not good enough. What kind of Higher Education would nurture the growth of the future music educators to a direction that would enable them to meet the needs of each learner in music teaching contexts?
My interest in this topic has risen in the professional context of music education and has been nurtured by my work as a senior lecturer in music education and a developer of curriculum reform in the degree programme in Music in Helsinki Metropolia University of Applied Sciences. I have also worked as a director of the CultureBridge-EU project, which has given me insight into the importance of wider learning environments while studying to become a music educator. This interest towards the formation process of becoming a teacher has led me to the research and doctoral dissertation "Towards sensitive music teaching. Pathways to becoming a professional music educator" (2012).

BACKGROUND

MUSIC EDUCATOR´S PROFESSIONAL IDENTITY

Literature offers multiple understandings of the concept of professional identity and according to Beijaard, Meijer and Verloop (2004) a shared definition for the concept of teacher´s professional identity is hard to identify (see also e.g. Regel-

ski, 2007; Woodford, 2002). Despite the different approaches they have found some important features that are essential for teachers' professional identity. Beijaard et al. (2004) highlight four main features derived from research on teachers' professional identity:

1 **Professional identity formation can be seen** not only as an answer to the question "who am I?", but also steered by the question "who do I want to become?" It is a dynamic, ongoing process. (Beijaard et al., 2004; also Heikkinen, 2001; Ropo, 2009.)
2 **Professional identity is implying both the person and the context.** Athough every teacher develops his or her own teaching culture, they relate to some extent to the context. (Beijaard et al., 2004.)
3 Beijaard et al. (2004) note that a teacher´s **professional identity consists of sub-identities that are more or less harmonized.** I interpret this as a dy namic process aiming to find a balance between these identities. This balance between different parts of our professional identity is something we need to work on when we encounter new challenges at work. According to Beijaard et al. (2004): "The more central a sub-identity is, the more costly it is to change or lose that identity". Research concerning music teacher training or music teachers' professional identity formation is implying that music teachers' professional identity often consists of very contrasting or competitive sub-identities. Research is widely lifting the tension between being/becoming a musician and being/becoming a teacher (see, e.g. Bernard, 2005; Bladh, 2004; Froehlich, 2007; Roberts, 2004; Thiessen & Barrett, 2002; Welch, Purves, Hardgreaves & Marshall, 2010; Woodford, 2002).

   This underlying dilemma can also be addressed through positioning (cf. Langenhove and Harré, 1999). What kinds of positions are naturally offered to us, and are there some new positions that are harder to reach? Music teachers/educators are often being positioned as lesser-artists or lesser-experts. A career as a music teacher is not always seen as demanding or tempting as being a performing artist. Furthermore becoming a teacher may also seem or feel like a failure if the goal has been to achieve a career as a performing artist. Becoming aware of these underlying tensions during studies is very important, because otherwise these impressions constrict the idea of the profession and the possibilities for a wider professional identity and knowledge.

(cf. Bouij, 1998.)

These possible conflicts within the professional identity of a music teacher suggest paying attention to the underlying perceptions and values of teachers'. A professional music educator needs to be conscious about the responsibility and power of the teacher. A teacher, who leads his /her student to achieve something he wanted to reach himself, can be manipulating the student for his own purposes. The contrasting situation can be imagined with the teacher giving his best for the student to use for his/her own purposes. This demands mature and responsible pedagogical thinking and awareness. (Sinkkonen, 2009, p. 292.)

(4) **Teacher´s own activity in the formation process** of the professional identity **is essential.** This can be compared to the constructivist view of learning. In that sense
"professional identity is not something teachers have, but something they use in order to make sense of themselves as teachers"
(Beijaard et al., 2004).

An interesting approach to teacher´s professional identity is faced in Connelly´s and Clandinin´s writings (see Connelly and Clandinin, 1995; 1999 see also Connelly, Clandinin & He, 1997). They see teacher´s knowledge, context and identity being somewhat inseparable. Connelly and Clandinin studied teacher knowledge and found out that the participating teachers trying to answer questions about teacher knowledge were more concerned with who they were as teachers. It seems like knowing as a teacher doesn´t really exist without being and acting as a teacher. Connelly and Clandinin (1999, p. 3-4) have called the narratives of teachers' "stories to live by", the narrative understandings of knowledge and context.

I have found the thought of professional identity and professional knowledge forming the landscape for the professional to act and be very elemental for understanding the experiences of the students. Becoming a music educator can be seen as a dynamic process of negotiating experiences in a dialogue with one's social and cultural environment and significant others (cf. Côté & Levine, 2002; Heikkinen, 2001; Ropo, 2009; Wenger, 1998). We have the need for a coherent nar-

rative of ourselves. Hänninen (2004) in the model of narrative circulation, divides the told narrative from the inner and lived narrative. Heikkinen (1999, p. 279-280) brings out the fact that narratives of ourselves can also be non-verbal or artistic acts or constructions (for example painting, building a house or teaching).

TEACHERS' PROFESSIONAL KNOWLEDGE

The concept about teachers' professional knowledge is more or less problematic. It has been defined in multiple ways (see, Carter, 1990; Munby, Russell & Martin, 2001; Tynjälä, 2004; see also Pembrook & Craig, 2002; Woolfolk Hoy et al., 2006). There are also findings in the field of music illustrating different viewpoints related to music teachers' professional knowledge and how these are influencing education (see e.g. Bladh, 2004; Froehlich, 2007; Thiessen & Barrett, 2002; Welch et al., 2010).

Bereiter (2002) introduces six kinds of personal knowledge: stable knowledge, implicit understanding, episodic knowledge, impressionistic knowledge, skill and regulative knowledge (Bereiter, 2002, p. 137-148; see also Bereiter & Scardamalia, 1993).

Integrating theory and practice has been emphasized in the field of research in education and developing expertise (see, e.g. Bereiter, 2002, Eraut, 2004; Tynjälä, 2007; 2008; 2011). Wenger (1998) suggests that acting in practice is inseparable from theoretical knowledge or thinking - their relationship is complex but interactive:

> "The process of engaging in practice always involves the whole person, both acting and knowing at once." (Wenger, 1998, p. 47–48.)

Eraut (1994) also emphasizes how meaningful learning takes place in using the knowledge in action (Eraut, 1994, p. 25–39; see also Loughran, 2006, p. 135)."The process of using knowledge transforms that knowledge so that it is no longer the same knowledge" (Eraut, 1994, p. 25). Also Schön's (1987) knowing-in-action concept sees practice and theoretical knowledge intertwining in professional action1

1 "Whatever language we may employ, however, our descriptions of knowing-in-action are always constructions. They are always attempts to put into explicit, symbolic form a kind of intelligence that begins by being tacit and spontaneous. – For knowing-in-action is dynamic and "facts", "procedures", "rules" and "theories" are static." (Schön, 1987, p. 25.)

(Schön, 1987; see also Eraut, 1995; Munby & Russell, 1989). Tynjälä (2007; 2008; 2011) defines a concept of integrative pedagogics. This principle states that, in any learning situation key elements of expertise (theory, practice and self-regulation) should be integrated. Tynjälä also emphasizes the importance of tutoring and reflection when developing new practices in Higher Education.

LEARNING

When focusing on the elements of becoming a teacher, we have to consider also what we mean by the concept of learning in Higher Education. This influences both the teaching practice and the curriculum. These underlying conceptions about learning also relate to thoughts about a learner: Is he/she more like a passive receiver or the object of the act of teaching or is he an active constructor of the new knowledge, interpretations and practices (see, e.g. Bereiter & Scardamalia, 2006; Bruner, 1996; Korthagen, 2001; Loughran, 2006; Tynjälä, 1999; 2008; Wiggins, 2007).

AIMS

This research aims to deepen our understanding of the process of forming the professional identity of the music educator and the professional knowledge needed, and also the support and possible interventions required to facilitate student´s learning.

The results of this study are widening perspectives on how to develop the education of future music educators' as an answer to the new requirements of the professional work life.

METHODOLOGY AND THE RESEARCH PROCESS

The research interests are:

1 The process of becoming a professional music educator
   a What kind of significant moments and experiences do students have during their studies?

b What is the value of these experiences for their professional development and for the perceptions of future working life?

2 Developing the curriculum

a How can Higher Education foster learning or what kind of support is needed in the study-process?

b What kind of approaches and tools can be found to solve problems and to support student´s learning?

The research process is illustrated in figure 1. It shows how research interests are related to two themes and approaches in the study.

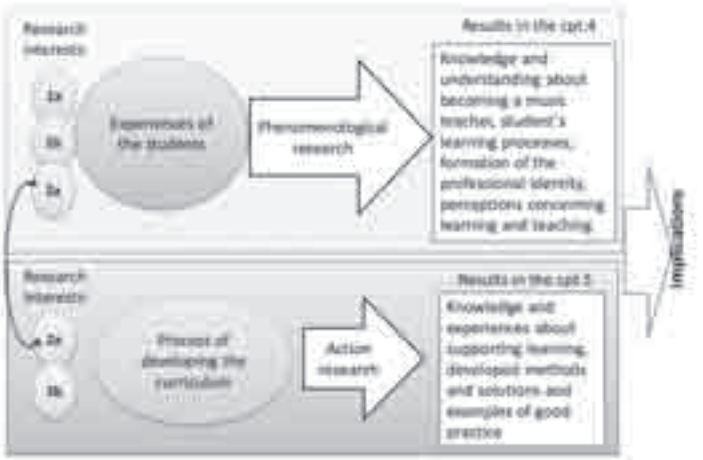

Figure 1. The structure and the methods of the research (Huhtinen-Hildén, 2012, p. 65)

PHENOMENOLOGICAL APPROACH:

This research has its theoretical framework in existential phenomenology and the aim of this qualitative study was to analyze meaningful learning experiences of interviewed music education students. As phenomenological research the focus of interest is in the meaning and significance of the phenomena, becoming a music educator *(cf. van Manen, 1990, p. 23)*.

The research material was gathered from 10 students interviewed from the pilot of the new music educator study programme that emphasizes the importance of learning environments, practices supporting learning and the broader view of

the music teaching profession and its demands[2]. Students´ meaningful learning experiences and important moments of insight were analyzed applying the method of descriptively oriented empirical hermeneutic psychology, especially adapting Perttula´s interpretation of Giorgi´s method (Giorgi, 1985a; 1985b; Perttula, 1995; 2009; Latomaa, 2009; see also Kosonen, 2001).

In the phenomenological analysis of the research the nature of students' narratives require a very crucial notion. The narratives are also non-verbal, inner and lived (see, e.g. Hänninen, 2004). The narrative interviews are not merely telling about identity formation, but are a reflection on the process of learning and becoming a teacher[3] - in a way both revealing and hiding the meanings at the same time (cf. Kvale, 1996, p. 53; van Manen, 1990, p. 26). The researcher is attempting to interpret these personal meanings from the narratives of the experiences, in other words understanding the meanings in the situation of the interviewed student (cf. Perttula, 1995; 2009).

ACTION RESEARCH APPROACH:

In addition there is a secondary theme to this research, which brings information through an action research approach (see, e.g. Carr & Kemmis, 1986) which studied the development of the pedagogical approaches, curriculum and content for this specific pilot programme (music educator specializing in early childhood music education and community music).

RESULTS

THE FORMATION PROCESS OF A PROFESSIONAL IDENTITY

The results of this study offer interesting information about the music educator students´ identity formation process: the key themes or areas where the narrative

2 Students graduate with a Bachelor's degree in Music specializing in Early Childhood Music Education and Community Music. In 4.5 years, the students will complete a minimum of 270 ECTS credits, including teacher qualifications (60 credits) certified by the Finnish Ministry of Education. Bachelor of Music graduates can apply to Master's degree programme after they have acquired two years of work experience in music education.

3 "The first thing that often strikes us about any phenomenon is that the words we use to refer to the phenomenon have lost some of their original meaning" (van Manen, 1990, p. 58).

formation of the professional identity takes place.
This is shown in the figure 2. These seven areas also illustrate the direction in which these future music educators steer their professional learning.
This figure is the overall picture of all the analyzed experiences and every individual student would have a different kind of picture, maybe not consisting of all of the circles.[4]

Figure 2 The areas of the interviewed music education students' professional identity formation (Huhtinen-Hilden, 2012, p. 118)

These seven groups of narratives have been formed through analysis. Each one of them consists of experiences focusing on a key theme in the identity formation process.
The results describing the process of professional identity formation suggest some changes in the definitions of 'professional music teacher/educator'.

The students' experiences emphasize the following new areas of activity, connected to the professional identity 1) application of arts education methods to promote well-being in society, 2) interaction and group dynamics as the context of education, and 3) using the art of teaching to create a learning situation in

4 Krzywacki (2009) refers to the importance of the ideal that is directing the development of the professional identity, image of the ideal teacher. This can be compared to the individual pictures of the interviewed students in this research.

which art is created in a collaborative, participatory process.

One of the interviewed students describes her pedagogical aims as a teacher as follows

> "…that music would be something meaningful and important for the individual touching every cell of the body... That music would be part of everyday life."

In addition, she expresses great doubt as for whether a teaching attitude of this kind can evolve without the teacher's own similar experiences of shared creativity in a group as a student. (Huhtinen-Hilden, 2012, p. 122,148.)

FACILITATING THE FORMATION PROCESS OF THE PROFESSIONAL LANDSCAPE

As a result of this study the dynamic process of becoming (and later being) a music educator is seen as **a continuous formation process of personal professional landscape** (see figure 3).

Figure 3 The model of interaction between the educational structures and the student´s learning (Huhtinen-Hildén, 2012, p. 218)

According to these research results what appears to be crucial for learning to teach music is the formation of the individual pathway and thereby the possibility to facilitate the process of developing an individual's professional landscape that consists of one´s professional identity and different forms of teacher knowledge.

The professional skills and knowledge are gained through learning spirals, the deepening circle that starts from the experience and through reflection leads to awareness and furthermore to setting new goals for learning (cf. e.g. Dewey, 1916/MW 9; 1915/MW 8; Kolb, 1984; Korthagen, 2001c; see also Hakkarainen et al., 2005; Rodgers, 2002). In these research results supportive experiences and becoming aware of what one has learned enlighten this circulation process (see figure 3).

According to the analysis the learning often was fastened to a specific experience, thought, moment of insight or feeling, which thus carried a special meaning. This essential experience seems to support and steer the process of learning, give motivation and meaning. The direction in the learning spiral is thus a journey both inside the learner and outside towards others and the context. Important for the students in learning to become a teacher is therefore the reflective knowledge about their own learning process, which leads to a better capacity for analyzing and being aware of the learning and also setting new goals in the learning trajectory (cf. Calderhead, 1988).

The result of this spiral is an integration of the different forms of knowledge. Essential factors for the spiral are the learning environments that nurture it, an experience-based learning approach and collaborative learning with meaningful others as reflection surfaces.

The key findings in developing the education formed in this research project are shown in the model of interaction between the educational structures and the student´s learning (see figure 3). The results suggest that also the Higher Education institutions and practices must be seen as a system capable of development and learning. The learning environments, pathways for learning and the support and tutoring needed in these must adapt to the needs of students' learning spirals. This process of continuous learning enables the student to become the best possible music educator that his/her own interests and aptitudes make possible.

In other words the role of education is actually creating these experiences and moments of insight, which make students aware of their own learning. This is realized in a two-way, supportive interaction. The student may be unaware of the learning tasks that he/she could benefit from and needs facilitating actions by a teacher or the group of learners (cf. scaffolding). With this support it is possible to find the optimal level of challenge that will give the positive learning experience and motivation to learn more (cf. zone of proximal development, Vygotsky, 1978). It is only after these kinds of facilitated learning experiences (cf. supportive experiences) when the student is able to direct his/her own learning pathway. During the pathway to becoming a professional music educator the level of independency varies over the process.

The results highlight the importance of integrating the different forms of knowledge (cf. Bereiter, 2002, p.137-148). The meaningful learning experiences of the students´ clearly show the need for the holistic experiences in learning which implies this being also a crucial aim for education (cf. becoming an expert Bereiter & Scardamalia, 1993, p. 91–107; integrative pedagogics Tynjälä, 2007; 2008; see also Lindblom-Ylänne & Lonka, 1999; Thompson, 2007).

The traditional educational practices have tended to separate different forms of knowledge, this stresses the importance of developing new practices in Higher

Education. Along with this is the challenge to develop suitable structures, practices and curriculums (cf. Hildén et al., 2010; Korthagen, 2001a; 2001b; Loughran, 2006; Tynjälä, 2008).

CONCLUSIONS- TOWARDS PEDAGOGICAL SENSITIVITY

According to the results of this study being a professional music educator takes the form of a complex system, which is in a constant, dynamic process (cf. Froehlich, 2007[5]). The pathways to becoming a music educator thus seem to be a journey to discover this multidimensional process and to perceive oneself in it. In this professional picture there are also elements that are more unconscious: the professional knowledge that is verbal by nature is just one level of it. There is a large and vital level of expertise - the tacit professional knowledge and knowing - steering our professional thinking and actions. (cf. Hakkarainen et al., 2005; Loughran, 2006; Toom, 2006; 2008).

As a conclusion derived from the results of this study I will illustrate the integrative model of professional knowledge and knowing needed in music teaching (cf. Bereiter, 2002; Toom, 2006; Tynjälä, 2007; 2008; 2011) that intertwines with the professional identity thus forming the professional landscape (cf. Connelly and Clandinin, 1995; 1999 see also Connelly, Clandinin & He, 1997). This is shown in the figure 4. The different forms of knowledge have to be integrated in a way that allows the use of them in pedagogical moments. The results in this research initiate a need for defining the special kind of pedagogical tacit knowing. In this research this is defined as **pedagogical sensitivity.** A new concept of professional expertise in music teaching will help us in developing the profession.

5 Froehlich (2007) describes the process of pedagogical thinking and actions as follows: "The Paradox I am interested in lies in the fact that to be called professional also means one must be willing to question and let go of routinized behavior when the situation calls for it. In the other words, shifting freely between routinized and non-routine actions makes the truly professional decision-maker." (Froehlich, 2007, p. 10.)

Figure 4 The Integrative model of professional knowledge and knowing needed in music teaching (Huhtinen-Hilden, 2012, p. 230)

In this research students have described this tacit knowing by the expressions like "presence in a pedagogical moment, dialogue and interaction". It seems to be an essential part of every interviewed student´s pedagogical values.

The attempts to find words to describe the tacit knowing; leading with music, non-verbal or interaction through arts activities illustrate the professional landscape of a music educator. Toom (2006; 2008) describes tacit knowing as the use of teacher's practical knowledge in a pedagogical moment, finding how and what to do in a challenging moment, understanding the meanings of the actions.

I have called the tacit knowing of a music educator: pedagogical sensitivity, because this element in professional knowing can be compared to the similar element in parenthood (see, e.g. Ainsworth, Blehar, Waters & Wall, 1978 see also Arola, Paavola & Körkkö, 2009; Kivijärvi, 2003). Pedagogical sensitivity leads us to see teaching as interaction, a dialogue, learner-centered process and a learning that includes also teacher's and learner's possibilities for growth and change[6]. This involves seeing the pedagogical moment and learners from a broader perspective and thus finding fruitful pedagogical actions at the moment.

6 "Pedagogy is a fascination with the growth of the other" (van Manen, 1991, p. 13).

The concept of pedagogical sensitivity can be compared to "pedagogical thoughtfulness, a multifaceted and complex mindfulness toward children" (van Manen 1991, 5-10) and it also relates to the "mission level" of teaching introduced by Korthagen (2004, p. 90). The presence of "heart and mind" in the pedagogical actions are referred to in many sources (cf. Skinnari, 2007; Uusikylä, 2003). I also would describe pedagogical sensitivity as sensitiveness towards the professional landscape, the continuous negotiation discovering oneself as a part of it.

The results indicate that the broader personal professional landscape (professional identity and the different forms of professional knowledge) of future arts educators is a crucial element not only in a learner centered teaching of music or arts, but in using arts in new contexts promoting well-being and working in multidisciplinary professional settings.

The wider and more flexible is the professional identity of the music educator, the better the professional competencies are to meet the needs of the working life and continuous professional learning. The Higher Education of these future professionals should be able to support professional growth in a new way.

If it succeeds, music learning and music related activities will be a great resource for supporting growth, development and well-being in different stages of life in society.

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CHILDREN OF 0-3 YEARS AND PARENTS: MUSICAL COMMUNICATION AS THE FAVOURED DISCOVERY AND MEETING CHANNEL

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ABSTRACT

When a parent participates with his/her child, from 0/3 years, in a music lesson, they enter into a particular environment, where the spoken voice summons a magical and emotionally charged atmosphere, which is easy to experience for the child, but unknown for the adult.
The target of this project, beyond the exquisitely musical side of growth and enrichment of the "vocabulary sound" of the child, is to recall a latent sensitivity in the adult, based on a type of communication distant from the daily. Games, glances, smiles, caresses, "loud voices" and moments of silence are ingredients useful for the realization of a musical recipe based on the well-being of the child-parent pair.
"Cikibom" is a book created from the Italian project "Nati per la Musica", which goal is to spread the musical culture between children from 0 to 6 years.
In "Cikibom" the "word sound" (syllabic approach "sound"), takes a prominent place: it is to emphasize the musical discourse and to stimulate the vocal production of the child.
The proposal aims to reach the child's ear, with rich sounds and rhythmic combinations. These stimuli should be as many and as different as possible, to enrich the sonic vocabulary of children and encourage music discovery. In this way, parents are "active" models for their child: they participate in singing and dancing with the music educator, promoting the development of a magical atmosphere, where silence and empathic communication are the foundations of this proposal.

KEYWORDS
Vocal Interactions, word sound, emotions, emphatic communication, discovery and meeting

BACKGROUND

Even before birth, children are active and coherent co-actors in communicative exchanges with their mother.
Already in the womb the child responds to external stimuli like sounds and touches: the child feels the heartbeat of the mother, sucks his own finger, responds to tactile stimuli, such as the mother's caresses on the belly, and reacts to sound stimuli such as the voice of the mother, the prosody of her language, the kind of music she listens to.
Many evolutionary psychologists consistently show that the psychic development of the individual is not so much determined by biological factors, but from early learning procedures which take place during the fetal stage, and in the first months of life.
These early learning procedures, which are responsible for the progressive construction of mental structures and mental functions, are defined by the relationship of the foetus, and subsequently, of the baby, with his/her mother and caregivers, and by the environmental feelings which he/she experiences.
Mother-child interactions and communications during the first months of life are possible because the infant, from birth, possesses intersubjectivity (i.e. defined as "primary ability" by Trevarthen). This ability is apparent even before the development of verbal communication, and of symbolic processing.
Trevarthen (1997) defines the primary intersubjective ability as a knowledge that is genetically determined: the child shows it in many ways, for instance, through early imitation ability.
Bowlby (1988) highlights the creation of the mother (adult) – child bond, their "synchronization", and the subsequent development of the personality of the child. He stresses how the development of different styles of attachment depend on the complex dynamics occurring between the child, with his/her own temper, and the mother, or the reference adult, which are characterized by different abilities to create relationships. Therefore, it is clear that each adult-child couple interacts in its own way.
The three main factors influencing this interaction are: the social context, the personality of the adult and the characteristics of the child.

Baby and parents are influencing each other from birth. Sullivan (1947) explained this phenomenon as a "contagion", since through the baby-parent interactions children can feel the maternal tension, which can cause different reactions in

the child. The contagion happens mainly through body signals, during physical contact, which can affect the quality of the baby-parent interaction.
The early stage of communication between children and parents is like a "proto-communication": the increase of interactions increases the intentionality to interact more, the attention of the child becomes more flexible, and finally, as the child increases the ability for symbolic representation, there is the shift from non-verbal to primary-verbal communication.
The adult, by interacting with the child, becomes his/her social reference, and creates an emotional communication, which will become particularly useful for the child to get over insecurities and fears.
This kind of communication is not expressed as an imitation. In fact, even though children perceive adults as models, their reactions to particular situations can differ from adults' reactions.
Betherton (1985) states that the social context implies the sharing of mental processes. Additionally, he highlights that young children are able to perceive the physical and psychological presence of other humans, and this would be the first indication that children are able to recognize the mental identities of other individuals.

AIMS

To work on the parent-child relationship through musical communication means
i) to emphasize distinctive features of each couple, but still taking care of the single individuals that compose the dyad, and
ii) to create strategies of interaction and musical growth, which are personalized and unique for each couple.
The Italian project "Born to the Music", which is dedicated to the dissemination of music to children from 0 to 6 years, has been promoted by the Cultural Paediatricians Association (ACP) in collaboration with the Center for Child Health (CSB) and the Italian Company for Music Education (SIEM).
Aims of the project have been i) to disseminate knowledge in the field of neuroscience about the relationship between music and the cognitive development of the child, and ii) to provide guidance, and stimulate studies, on how to expose children to non-occasional music during their early months of life, and in the prenatal period. The project "Born to the Music" also aims to inform

and sensitize parents, paediatricians and educators to the importance of the acoustic experience and of musical practice for the overall development of the individual.
In 2011 the paediatrician Dr. Constantine Panza, the director of the Municipal School of Music "G. Rinaldi" in Reggiolo (Reggio Emilia, Italy), Paolo De Gaspari, the musician Antonella Chiuchiolo, and the teacher Marina Ielmini, started a provincial coordination group, in the province of Reggio Emilia. The book "Cikibom", published in 2013, is the result of the combination of the knowledge and experience of these four experts. This book proposes original and traditional music dedicated to children from 0 to 3 years and to their parents.
The target of the book "Cikibom" are families. In fact this book should be a useful tool for parents to practice communication and self-expression through music, also taking into account the "tonic-emotional" communication which is typical of children.

Music has a unique and irreplaceable role in the overall development of the individual. It affects the mood and the deepest emotions, it feeds spirit and mind, and it is also fun, a game, and a tool to develop the expressive and creative skills of a person. Music is a real form of communication which acts from the very beginning of a child's life, and allows them to interact with others and with the environment.
To play music at home, by voice and sounds, strengthens the emotional adult-child bond, and is a source of well-being.
The quality of the musical environment, where the child grows up, has a deep effect on the subsequent ability to understand, learn and love music.
Music helps children to develop their ability to listen and observe the acoustic environment, to listen to themselves, to the others, and to express ideas and emotions; it increases the development of imagination and creativity, and expands children's communication, as well as their attention, concentration and memory.

To live in a challenging environment, where it is possible to have the opportunity to enrich communication through the musical language are unique opportunities of growth for children. These experiences strengthen the parent-child bond, which become unique, and offer equal opportunity of interaction to the actors involved in the musical activity.

DIDACTICAL APPROACHES

It is common to consider a child in the age from 0 to 3 years as an individual with no abilities, needing to be protected and "educated". However, from birth, the child shows unique skills and talents, and is an aware and active partner in the communication within a family.
The educational approach, which is used in music lessons dedicated to children 0-3 years and their parents, takes into consideration the uniqueness of each individual involved, and bases the work on the relationship between partners, on the unusual type of communication used during the lesson, i.e. music, which is playful and expressive. Vocal expression as well as gesture and expressive movement, are fundamental in this educational approach.
Parents are specifically asked to avoid the use of verbal communication to interact with their child during the musical moment.
Adults are welcome to use other ways of communication, instead of verbal language, such as direct or indirect body language, looks, facial expressions, direct physical contact, massages which can be accompanied by special "musical" devices with melodies.
It is well known that children, even before they understand the meaning of a communication, perceive the quality of that communication, and the way it is shared; therefore it is important to offer to the parent-child couple a musical environment of quality, which is respectful of the times and the needs of every single individual.
It is necessary to assume that the same music can cause different reactions in different children: some music can be fun and enjoyable for one, while being a source of boredom and annoyance to the other. These different reactions of the participants to the musical stimuli are taken as starting points for the construction of the subsequent musical proposals.

During music lessons dedicated to children 0-3 years, the parent-child couple are given the opportunity to become familiar with unusual music, which can be different from what they are used to listening to on a daily basis. The melodies are built not only using major and minor modes, but also by using the traditional modes, such as the doric, ionic, phrygian, lydian, or the mixolydian.
In this context, silence is considered a musical element of high importance: it facilitates the internalization of the stimuli offered to both adults and children,

and gives the opportunity to elaborate and share the musical experience for both participants. Furthermore, and more importantly, only silence offers the couple the opportunity to build their own personal musical thought, which first originates from imitation, and then from the elaboration of what they have heard and experienced. This playful approach enhances attention in the participants and is a distinctive feature of further repetitions and variations of the original proposals. The presence of musicians further enriches the vocal work.
Usually the music lessons dedicated to children of 0-3 years and their parents are managed and coordinated by a single teacher; however this work is supported, enriched and enhanced by the presence of other musicians in the room, each with specific skills: the standard material supplied by the musicians is composed of a keyboard, a clarinet or saxophone, and different drums.
Hence, the child with his parent is completely immersed in a world of music, where they are free to choose whether to participate or to observe, to share emotions and feelings, and where they can express themselves freely through an unusual language, which is rich and engaging i.e. the musical language.
Music is a language and like any other language it is also assimilated and learnt by immersion.

PEDAGOGICAL THEORIES

The structure of a music lesson dedicated to children of 0-3 years and their parents, as planned by the Provincial Coordination group of Reggio Emilia for the project "Born to the Music", includes the adaptation and customization of different musical methodologies, which are combined with technical-scientific knowledge regarding the child and her/his cognitive-developmental growth.
The presence in the coordination group of the paediatrician: Constantine Panza, emphasizes and reinforces the various methodological choices made by the musicians.
In particular, each lesson is based on specific assumptions: it should be a concrete musical experience, which is experienced by the whole body, and based on the fusion of vocal and body expression.
The participants, both children and parents, are guided through a musical itinerary where the creative elaboration procedure is encouraged and stimulated by improvisation, and by customizing the various proposals on the basis of the individual performances of the children.

The body becomes the primary instrument: the touch of the hands of the parent on the child's body transmits signals which are unique sensations, and strengthens the bond within this dyad, making it unique and irreplaceable.
The indirect communication of the "listening" experience to babies, in which the visual sense is not fully developed, through the body (the touch of the hand of the parent on the child's body, gentle caresses or soft beats), represents a major opportunity to internalize and take part in the musical activity.

After some time, the involvement of the body in the musical activity stimulates different faculties such as concentration; memory; reflection; spontaneity and creativity.
In addition to the body, the voice plays a very important role: it is used from the first stage of verbal communication in children until articulation of words, being based on "nonsense cells" or on "Sonorous Words"
The term "Sonorous Word" indicates syllabic combinations which are original and musical and includes not just sounds but also silence.
The silence enhances concentration, helps to synchronize the activities, is the basis to develop listening abilities, and helps to increase self- and others'-understanding.
The voice is the first exploratory tool available to experience the world surrounding the child, perceiving its individuality in comparison with the other children. The voice supports the rhythmic experience, and facilitates physical and mental coordination through the physical-cognitive maturation.

IMPLICATIONS FOR FUTURE WORK

The book "Cikibom" created by the Provincial Coordination group of Reggio Emilia is part of a wider Italian national project, called "Born to music." This national project involves not only the schools, nursery and children's music schools which directly participate in it, but also includes libraries, paediatric studies, hospitals, and family centres.
All the actions promoted by this project are varied and heterogeneous, depending on the context and needs: there are initiatives to sensitize families and medical staff, and to promote courses for pregnant women, in addition to activities performed in hospitals, nurseries, kindergartens and primary schools.

Additionally, music workshops for children and parents, which include insights and reflections, are organized at music schools and accredited facilities.

Finally, different initiatives are activated for educators and entertainers specialized in childhood, in addition to initiatives in libraries.
Specifically, the work experience of the Provincial Coordination Group of Reggio Emilia started in the Municipal School of Music "G. Rinaldi" in Reggiolo.
The creation of a music course dedicated to children from 0 to 3 years and to their parents gave the stimulus for an in-depth study of the approach to music in this age, and led to the creation of the music collection "Cikibom."
The book "Cikibom" is a musical journey born from the expertise of the members of the Provincial Coordination Group.
The Municipal School of Music "G. Rinaldi" in Reggiolo (Reggio Emilia), started a collaboration with the library "Falco Magico" in Carpi (Modena) during the academic year 2011/2012, by adhering to the activities of the national project "Born to Music"
The music programme offered in this collaboration, which was structured in six weekly meetings, was enriched and supported by meetings with paediatricians, and by moments of collective reading, specifically dedicated to children from 0 to 3 years, which were organised by the library. This experience was positive and involved a large number of families.
The combination of meeting with paediatricians and with having the direct musical experience allowed parents to understand the importance of music in the cognitive, social and emotional development of their child.
Courses for children from 0 to 3 years and for their parents, have been organised also for the scholar year 2012/2013, at the Municipal School of Music "G. Rinaldi" Reggiolo (Reggio Emilia), and at libraries in the province of Modena.
Our expectation for the future is to continue our successful experience through the here presented approaches, since we are convinced of the importance of music for the individual as well as the collective development of children, and of the parents-child relationships.

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INTERACTIVE TECHNOLOGIES IN THE INSTRUMENTAL MUSIC CLASSROOM: A CASE STUDY WITH THE MUSIC PAINT MACHINE.

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ABSTRACT

In this paper we describe a nine-month longitudinal study in which twelve children (1st and 2nd grade) learned to play the clarinet. Six of the children received instruction with an interactive music system, called the Music Paint Machine. This educational technology allows a musician to make a digital painting by playing music and by making various movements on a coloured pressure mat. The aim of the system is to support instrumental music teaching and learning by stimulating musical creativity, by promoting an embodied understanding of music and by supporting the development of an optimal musician-instrument relationship. The overall goal of the longitudinal study was (1) to integrate the Music Paint Machine in instrumental music instruction in order to develop good practices with the system and (2) to investigate the possible effect of instruction with the system on the learning process. The study adopted a non-equivalent control groups design with several pre-tests and a post-test. To measure the effectiveness of instruction with the system, children were administered the Primary and Intermediate Measures of Music Audiation (Gordon, 1986) as pre- and post-test. Furthermore, pre-tests were organised to map possible confounding variables, such as personality, home musical environment, motor skills and self-regulation skills. No statistically significant differences were found between the control and intervention group. Dealing with the complexity of a real-life educational setting and with the requirements of the quasi-experimental design, this study has provided insights on methodology (design, measures, analysis) in music educational technology research. As such, it can contribute to the further development of this branch of educational research.

INTRODUCTION

The emergence of new technologies has always led to new possibilities for teaching and learning. In particular, the increasing computational power and embedded computing continuously change the way we interact with computers and learn (Dourish, 2004). The traditional desktop computing is increasingly complemented and possibly even gradually replaced by a new breed of computational systems (iPads, smartphones) in which mouse and keyboard are exchanged for other types of sensors and controllers. Evidently, this offers new possibilities for the design of educational technologies and applications.

In the domain of music education, an emerging trend is the development of interactive systems that offer active ways of engaging with music, using the multimodal nature of the musical experience as a basis for visual, sonic and bodily interactions. Some of these systems focus on instrumental teaching and learning. They monitor a musician's playing and provide auditory and visual feedback on music and movement (e.g. Larkin, Koerselman, Ong, & Ng, 2008; Ng, Larkin, Koerselman & Ong, 2007; Brandmeyer, Hoppe, Sadakata, Timmers & Desain, 2006; Howard, Welch, Brereton, Himonides, De Costa, Williams & Howard, 2004; Welch, Himonides, Howard, & Brereton, 2004). Interactive music systems are assumed to stimulate the musical learning process for several reasons, such as: the engagement of multimodal processing capabilities (e.g. de Jong, 2010; Sweller, Van Meriënboer & Paas, 1998), the use of objective performance measurement (e.g. Hoppe, Brandmeyer, Sadakata, Timmers, & Desain, 2006; Howard, et al., 2007), the stimulation of student autonomy and self-regulation (Carneiro, Lefrere & Steffens, 2011), the creation of a powerful learning environment (e.g. Jonassen, Campbell & Davidson, 1994), and their appeal to the daily life world of young people (e.g. Burnard, 2007; Folkestad, 2006). As such, interactive music systems have the potential to contribute to a constructivist approach to instrumental teaching and learning. This approach is embodied and extended in the sense that new interactive technologies intervene with the multimodal aspects of perception and action that underpin how to play a music instrument.

However, the belief in a didactic potential of interactive music systems needs to be substantiated on the basis of empirical studies. At this point we believe a critical stance is needed in relation to feedback, use of technologies, pedagogi-

cal model, and intervention studies. Due to the stimulation of multiple senses, feedback systems may cause a degrading of learning due to cognitive load (e.g. Sadakata, Hoppe, Brandmeyer, Timmers, & Desain, 2008; Thorpe, 2002), dependency (e.g. Ronsse, Puttemans, Coxon, Goble, Wagemans & Wenderoth, 2011; Schmidt, 2008) and the stimulation of an internal focus (e.g. Wulf & Lewthwaite, 2009). Furthermore, innovative educational technologies may be used for the sake of the technologies and at the cost of the pedagogical goals. They can support a 'schoolish' master-apprentice model of traditional instrumental music teaching (Bowman, 2002; Hennessy, 2001; Lehmann, Sloboda, & Woody, 2007). Last but not least, there is a lack of longitudinal interventions studies that show the effectiveness in using interactive music systems for learning. Studies are often based on one-shot experiences, a limited number of participants and a lack of statistical analysis that supports the findings. Therefore, studies are needed that take these issues into account and that pave the path towards full-blown intervention studies.

In this paper we address these issues on the basis of our work with the Music Paint Machine, an interactive music system that translates the combination of music and movement into a creative visualization, i.e. a digital painting. To avoid as much as possible the above-mentioned pitfalls, the design and implementation of the Music Paint Machine has been embedded in a framework that addresses pedagogy, technology and intervention (see also Nijs, Moens, Lesaffre & Leman, 2012a).
Goals at these three levels guided the iterative process according to which the Music Paint Machine was designed and arrived at its current state. Although our study does not realize a full-blown intervention study, we believe that it contributes to that goal.
In the following sections we first shortly explain the system, then we report on our intervention study with the Music Paint Machine.

THE MUSIC PAINT MACHINE, A SHORT INTRODUCTION.

The Music Paint Machine (henceforth: MPM) is an interactive music system that allows a musician to make a digital painting by playing music and by making

various movements on a pressure-sensing coloured mat. A detailed description is given elsewhere (Nijs et al, 2012a). Here we shortly describe the aims and features of the system.

EDUCATIONAL GOALS OF THE MUSIC PAINT MACHINE

Our overall objective is to enhance instrumental learning using the MPM as a facilitator for creativity, understanding, and control. Consequently, the MPM should invite learners to be playful with musical parameters (e.g. Deliège & Wiggins, 2006; Kratus, 1991) and enhance the occurrence of an optimal experience (e.g. Addessi & Pachet, 2005; Csikszentmihalyi, 1990; Woszczynski, Roth, & Segars, 2002). An experimental study with the MPM has shown its potential to induce this kind of experience (Nijs et al, 2012a, 2012b). In addition, we aim at supporting an embodied understanding of music (e.g. Leman, 2007; Bowman, 2004) by integrating body movement as an essential component of musical expression and by providing a multimodal experience in which body movement and music converge into a common visual stimulus, i.e. the digital painting. The MPM invokes a variety of non-instrumental movements and as such stimulates bodily involvement. Based on the embodied music cognition paradigm (Leman, 2007; Bowman, 2004), it is believed that this appeals to the bodily basis of music learning. Finally, we aim at supporting the development of an optimal relationship between musician and musical instrument by using the combination of movement and music to control the multimodal interaction. The design concept of the system is based on a philosophical investigation of the musician-instrument relationship (Nijs, Lesaffre & Leman, in press). A key inspiration of the system is the notion of original motility and its importance for (musical) perception (Merleau-Ponty, 1945). These goals are reflected in the four basic features of the system.

BASIC FEATURES OF THE MUSIC PAINT MACHINE

A first feature concerns the creative use of visual feedback. The system visualizes in real-time parameters (e.g. intonation, loudness) of the music that is being played as well as how the musician moves while playing (e.g. turn, bend). However, the visualization of music and movement is more than mere visual feedback on aspects of playing music. It invites users to creatively use movement and music in order to obtain a personalized outcome, namely the digital "painting". Consequently, the visualization can be considered a creative output that results from the expressive intentions of the musician (see Fig. 2.1.).

Figure 2.1 An example of a creative output of playing with the system. For Figures in colour, see: www.musicpaintmachine.be

Therefore our visual feedback differs from most existing interactive systems where visual feedback is most often in the form of symbolic representations (see Fig. 2.2 for some examples).

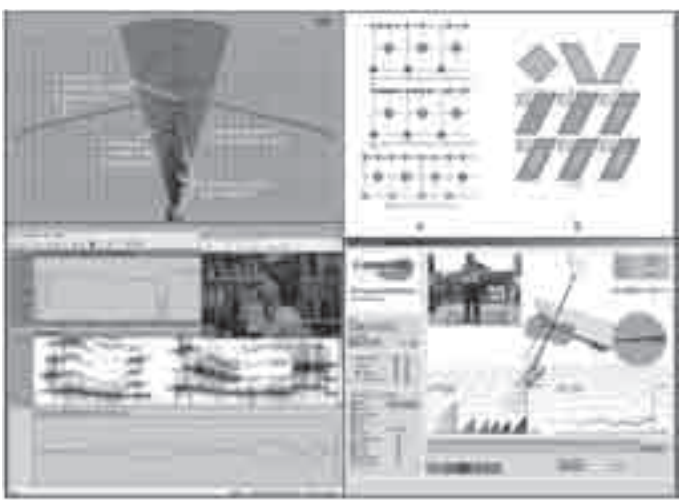

Figure 2.2. Some examples of the kind of visual feedback that is used in interactive music systems. Upper left: Seeing Sound (Ferguson, 2006) - Upper right: Practice Space (Brandmeyer, Hoppe, Sadakata, et al., 2006) – Bottom left: WinsingAd (Howard, et al., 2007) – Bottom right: AMIR (Larkin, Koerselman, Ong, & Ng, 2008)

A second feature concerns body movement as controller of the system. By inviting the learner to actively use a variety of body movements, the system goes beyond the corporeal dimension of merely instrumental gestures.

As such, it introduces a variability of movement, the deployment of which is believed to stimulate the development of body awareness and to increase enactive -– knowledge, i.e. knowing in and through the body (Juntunen & Westerlund, 2001; Schmidt, 1975; Schöllhorn, 2000).

A third feature concerns the system's adaptability to a variety of didactic practices. The software of the MPM allows designing all kinds of practices to support different educational goals. For example, the mapping from music and movement to visual parameters is flexible. In addition, the ranges of mapped parameters (e.g. loudness, tessitura) can be adapted. As such the system allows the teacher to create a learning context that appeals to but also challenges the current skill level of the learner.

A fourth feature concerns the control of conditions for optimal experience, using the features defined above. These conditions are: a balance between skills and challenge, clear goals every step of the way and unambiguous feedback (Cszicksentmihalyi, 1990).

LEARNING TO PLAY THE CLARINET: AN INTERVENTION STUDY WITH THE MPM.

In this section we describe a study with the MPM, in which 12 children learned to play the clarinet during nine months. The goal of the study was to develop good practices with the MPM in the classroom. In addition, we wanted to test the effectiveness of instruction with the system in supporting the musical learning process.

METHODS

PARTICIPANTS

Twelve children (first and second grade, six boys and six girls) and one teacher (the researcher in this study and first author of this paper) participated. Seven children were grade one and five children were grade two.
Most of the children's parents were highly educated. The researcher-teacher

received formal training in music performance and music teaching. He was a clarinet, saxophone and ensemble teacher for fourteen years.

DESIGN

This study was conducted during nine months. In order to investigate the possible effect of instruction with the MPM, a non-equivalent control groups design was used. Six children were non-randomly (based on parents' demands, gender and grade) assigned to the intervention group and received instruction with the support of the system (see Table 3.1).

	Age	Grade	Gender
Control Group A	7	2	m
	6	1	f
	7	2	f
Control Group B	6	1	m
	6	2	m
	6	1	f
Treatment Group C	6	1	m
	5	1	m
	7	2	f
Treatment Group D	7	2	f
	6	1	f
	5	1	m

Control Groups			
Gender	#	Grade	#
m	3	1	3
f	3	2	3

Treatment Groups			
Gender	#	Grade	#
m	3	1	4
f	3	2	2

Table 3.1. Assignment of the children to the control or treatment group aimed at an equal distribution with regard to age and gender.

All children were pre-tested and post-tested. In Table 3.2, a diagram of the experimental design is shown.

NR	O	X	O	X	O	X	O
NR	O		O		O		O

Table 3.2. Diagram of the experimental design of the study. Groups were non-randomized (NR). The study used four (quarterly) measurements (O) of music aptitude as dependent variable. In between the measurements, children received instrumental music instruction. The treatment group received instruction with the Music Paint Machine (X).

It was hypothesized that instruction with the MPM (independent variable) would enhance the development of tonal and rhythmic aptitude (dependent variable) (Gordon, 1986).

PROCEDURE

Participants were recruited through a large-scale information campaign in local schools. An information letter and a website were provided with detailed information on the study (e.g. organization, requirements, compensation). There was no selection procedure. All parents who enrolled their child signed an informed consent.

Prior to the instruction, parents were administered three questionnaires in which they reported on their child's self-regulation skills (Schwarzer, Diehl, & Schmitz, 1999), home musical environment (in-house designed) and personality (Mervielde & De Fruyt, 1999). Furthermore, the children participated in two standardized tests: music aptitude (Primary Measure of Music Audiation; Gordon, 1986) and children's motor skills (M-ABC-2; Henderson, Sugden, & Barnett, 2007).

Lessons were given once a week for a period of 9 months, with the exception of school holiday weeks. Children attended class in groups of three and received instruction during one hour. The learning content for both the control and the intervention groups was kept the same as much as possible.

Throughout the nine months of instruction, several variables were repeatedly measured: the child's practice time per day, parental support per day, classroom experience and music aptitude (every three months).

RESULTS

DEVELOPMENT OF GOOD PRACTICES

The weekly use of the Music Paint Machine has led to several good practices with regard to the use of visual feedback and movement. These practices can be categorized into free exploration, guided exploration and direct instruction. Free exploration consisted of sessions in which learners were completely free to make a digital painting. Figure 3.1 shows some examples of digital paintings that resulted from the free play sessions.

Figure 3.1. Some examples of "paintings", made during free exploration.

Guided exploration was based on activities with game cards that contained specific tasks with regard to different musical, movement and visual parameters. In Figure 3.2, some examples of these game cards are presented.

Figure 3.2. Four examples of flashcards that were used in musical games to develop musical skills and to stimulate musical creativity.

Direct instruction activities consisted of consecutive sessions in which learning content was gradually built up based on carefully designed practices with the system. Figures 3.3 and 3.4 give two examples of the many designed practices.

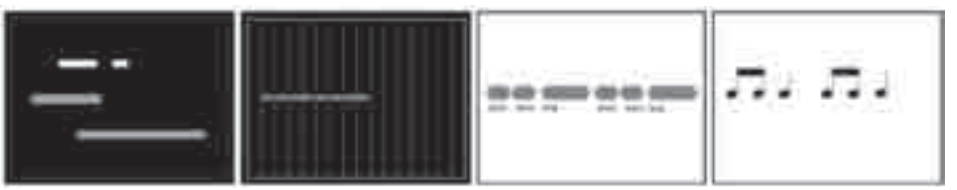

Figure 3.3. Painting duration & rhythm: an enactive basis for symbolic representation. First students learn about long and short, then the learn how to "measure" duration, then learn rhythmic patterns and, finally, they learn about notation.

Figure 3.4. Playing scales with the Music Paint Machine. The split screen allows comparing two paintings (e.g. visualization of scales) and finding possible

mismatches as an opportunity for learning. Here the mismatch concerns the position of a semitone in a major scale. The visual pattern of the second scale (Fmaj) differs from the original (Gmaj) while it should be the same pattern of tones and semitones. This mismatch was a motivation to learn a new note (B♭).

EFFECTIVENESS OF INSTRUCTION WITH THE SYSTEM

The results of the PMMA pre-test show moderate scores in most groups. In table 3.3 the mean percentile scores are presented.

PMMA	Tonal		Rhythmic		Composite	
	M	*SD*	*M*	*SD*	*M*	*SD*
All	60.75	38.86	62.83	23.34	62.08	30.45
Control Group	63.50	44.67	74.50	9.71	69.00	32.16
Group A	***89.67***	8.33	***80.00***	6.00	***88.00***	5.00

Table 3.3. The mean scores and standard deviations of the PMMA pre-test.

An initial difference exists between the control group and the treatment group, showing a moderately higher music aptitude for the control group. This difference is larger with regard to the rhythmical aptitude. Standard deviations of both the control and treatment groups are rather large, indicating the heterogeneity of the group. Clearly, Group A stands out with a high score (80th percentile or above) for both tonal and rhythmical tests. The standard deviation of this group was rather small in comparison to the other groups, indicating the homogenous nature of this group. However, a Mann-Whitney U statistic did not reveal a significant difference between the control and treatment group.
With regard to the development of the children's music aptitude, differences can be found between the control (ID = 1 to 6) and intervention (ID = 7 to 12) groups. Table 3.4 shows the scores of both PMMA and IMMA when categorized as low (1), average (2) or high (3).

student ID	Tonal				Rhythmical				Composite			
	T1	T2	T3	T4	R1	R2	R3	R4	C1	C2	C3	C4
1	3	3	*3*	*3*	3	3	*3*	*3*	3	3	*3*	*3*
2	3	3	*3*	*3*	3	3	*3*	*3*	3	3	*3*	*3*
3	3	*2*	*3*	*3*	2	*2*	*2*	*1*	3	*3*	*3*	*2*
4	1	3	*3*	*3*	2	3	2	*3*	2	3	*3*	*3*
5	3	*3*	*3*	*3*	2	*3*	*3*	*3*	3	*3*	*3*	*3*
6	1	2	3	*3*	2	2	3	*3*	1	2	3	*3*
7	3	3	*3*	*3*	2	3	*3*	*3*	2	3	*3*	*3*
8	1	1	1	2	2	2	2	2	2	2	2	2
9	2	2	3	3	2	2	2	2	2	2	2	2
10	2	2	1	2	1	2	1	2	1	2	2	2
11	3	3	*3*	*3*	3	3	*3*	*3*	3	3	*3*	*3*
12	2	3	3	*3*	2	2	2	*3*	2	2	3	*3*

Table 3.4. Scores of both the PMMA (regular) and IMMA (italic) transformed into three categories: low score (1; 20th percentile or lower), average score (2; between 20th and 80th percentile), high score (3; 80th percentile or higher) (3).

In the control group, two children were administered the IMMA already from the second test and additionally the other children from the third test on. The sixth child of the control group also took the IMMA in the post-test. In the experimental group, three children were administered the PMMA throughout the whole study, which indicates that they did not reach the 80th percentile of the PMMA (Gordon, 1986). Two children of the treatment group took the IMMA from the third test and one in the post-test. These results also show that children with a high score from the beginning, except for one child (ID=3), keep scoring high in the next tests, regardless which test (PMMA or IMMA) has been administered. Children with a low score in the pre-test show a different result. Some children (ID = 4,6,12) have an increased score; some children (ID = 8,10) show a more stabilized score. At the end of the nine months, most children (75%) were administered the IMMA test. Although scores of the PMMA and IMMA cannot be compared, the shift from PMMA to IMMA indicates that development music aptitude progressed. Three children (25%) were still administered the PMMA. The mediocre scores of the three children (all part of the treatment group) who were administered the PMMA throughout the whole study suggest a rather low aptitude of these three children. Yet, the high standard deviation has to be taken into account. One of the three children had a high score (93) for tonal aptitude. Table 3.6 shows the mean and standard deviations of the post-test.

	Tonal		Rhythmic		Composite	
	M	SD	M	SD	M	SD
CGr - IMMA	95.33	5.43	70.00	33.02	83.17	26.44
GrA	96.33	2.31	63.33	50.58	74.67	38.70
GrB	94.33	8.08	76.67	5.77	91.67	5.77
TGr - PMMA	56.33	33.95	50.67	19.01	45.33	26.08
TGR - IMMA	99.00	0.00	76.67	23.63	91.67	10.12
GrC - PMMA	59.50	47.38	60.00	14.14	48.50	36.06
GrC - IMMA	99.00	-	95.00	-	98.00	-
GrD - PMMA	50.00	-	32.00	-	39.00	-
GrD - IMMA	99.00	0.00	67.50	24.75	88.50	12.02

Table 3.5. Mean and standard deviations of the post-test. Because results of the PMMA and IMMA cannot be compared, scores are differentiated.

To investigate the influence of possible confounding variables, a correlation analysis was performed between the different measures and the P/IMMA scores. Findings indicated a positive correlation between singing behaviour and results of the tonal pre-test test, between the personality aspect 'perseverance and results of the tonal pre-test, and between the personality aspect 'concentration' and scores on the rhythmic pre-test. A negative correlation was found between the personality aspects 'anxiety' and 'irritability' and the scores for the tonal pre-test. Due to the small sample size and the mixture of PMMA and IMMA scores in the post-test, it was not possible to perform a correlation analysis to investigate the relationship between the potential confounding variables (e.g. HME, personality) and the post-test.

DISCUSSION AND CONCLUSION

In this study, a specific educational technology, the Music Paint Machine (MPM), was integrated in instrumental music instruction. The first aim of the study was to design good practices with the system.
The weekly lesson preparations and the experience of using the system during instruction led to different practices (free exploration, guided exploration, direct instruction) that were carefully designed in function of specific learning goals. They were tested and refined throughout the study.

The second aim of this study was to investigate whether instruction with the system could positively influence the developmental music aptitude of the children.

It was hypothesized that providing instruction with the MPM would contribute to the establishment of a rich musical environment in which the development of music aptitude can be stimulated. Although for most children a progress in the scores on the P/IMMA was found, some children's scores showed a fluctuating effect and one child's score even degraded continuously. No significant differences between the control and intervention group were found. However, in line with a study by Tai (2010) results suggested that singing behaviour has an effect on the scores of the PMMA. Results also suggested a relationship between facets of personality (e.g. concentration, perseverance) and the PMMA score. Personality has been linked before to music aptitude, in particular to Cattell's personality factor intelligence (Schleuter, 1972). We believe that these results shed light on the occurrence of variables that might influence the scores on the aptitude test and as such urge caution with regard to the interpretation of its results. Another point of attention with regard to the use of these tests is the fact that results of the PMMA and IMMA cannot be compared (Gordon, 1986). Because most students progressed towards a PMMA score above the 80th percentile, they needed to do the IMMA as post-test instead of the PMMA. As such and because of the limited number of participants, it was not possible to perform a correlation analysis to investigate the relationship between the potential confounding variables (e.g. HME, personality) and the scores for musical aptitude. Therefore, it remains inconclusive whether the changes that occurred in the children's scores are due to instruction with the MPM. Further investigations are needed.

Next to the aforementioned limitations, this study had other limitations. One limitation concerned the use of the system. Students were not able to use it at home. Arguably this affected the results. Being able to use the system at home might reinforce its influence on the development of music aptitude. A second limitation was the limited number of participants (n = 12). This affected statistical power. Nevertheless, we believe that working towards a full-blown intervention study was worth the effort. A third limitation concerned the system itself, which is a proto-type and sometimes didn't work as expected. However, besides these limitations, the presented study has provided several insights and outcomes that are important for further research.
First, conducting the study led to insights with regard to the focus of the study (effectiveness of the technology) and to the adopted method (design, measures). It became clear that it is necessary to focus on the transformative impact of

technology (see also: Beckstead, 2001; Kiesler, 1992). It also became clear that the control group design has many benefits in educational technology research but needs to be conducted in function of investigating processes (transformative impact) and not only products (amplicative impact).
Second, didactic practices have been designed that can be used to conduct future experiments. These practices are further developed in collaboration with other teachers through currently ongoing follow up studies. The further development of the MPM's software will entail the design of ready-to-use modules based on these practices.
Third, in this study video footage of all lessons (132 hrs) was made. A follow up observational study will be conducted in order to complement current data. This will allow studying how the integration of an educational technology such as the MPM affects the different components of instruction, i.e. student behaviour, teacher behaviour, student-teacher interaction and materials (Kennel, 2002). It is expected that different behavioural measures will also provide insights on the results of the repeated measurers used in this study.

To conclude, this study investigated the integration of an educational technology in a naturalistic instrumental music classroom setting. Although we knew in advance that the limited amount of children participating in this study (due to all kinds of practical concerns) could not be considered to be representative for our statistical tests, we believe that our study went a step further than the lab experiments that are more commonly in this research domain. Dealing with the complexity of a real-life educational setting and with the requirements of the quasi-experimental design, this study has provided insights on methodology (design, measures, analysis) in music educational technology research. We believe that our approach holds a promising potential to conduct ecologically valid music education intervention studies.

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OBSERVING ADULT – CHILD INTERACTION IN A CATALAN LAP GAME

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ABSTRACT

The aim of this paper is to present the construction process of an observation form for the study of adult – child interaction in a traditional lap game from the Catalan repertoire. The aim of the research where this study is framed –contextualised in a Teacher Training and Innovation project applied to a network of kindergartens of the area of Barcelona- is to have a deeper understanding of the daily musical situations that take place in a group of 1 to 2 year-olds in school setting. The research follows an emerging process where the video is the main data collection tool. The analysis is designed in two perspectives in order to tackle, on the one hand, what happens during one school day and, on the other hand, how one activity, specifically a lap game, is developed over the time the research is carried out. As part of this second perspective of analysis an observation form is designed, validated by experts and applied as a research analysis tool. The development of this form runs in parallel to the establishment of two-categorisation guides, one for the musical mode and another for the gestual, spatial and linguistic modes. What is presented is an analysis tool that considers the multiplicity of communicative modes that are involved when playing a lap game. In addition, the amount of detail that the form collects allows us to think about these kind of games as solid foundations for musical knowledge and, consequently, to re-value these treasures of our traditional repertoires and include them in our daily interactions with children.

KEYWORDS
Analysis tool, early childhood, observation form, lap game, qualitative research

THEORETICAL FRAMEWORK

OBSERVATION AS A TOOL FOR LEARNING AND RESEARCH

The child learns in a global way through observation, appropriation and participation in the real situation into social relationships (Molina, 1997). While interacting with the surrounding world s/he takes an active part in the construction of his/her abilities, capabilities and knowledge (Pérez, 2011a).

Observation is also an important research tool that allows us to study learning processes especially in the absence of language. (Parncutt, 2006). As Custodero (2005) points out, it is precisely systematic observation that will give researchers information about subjective phenomena from preverbal children. Taking as a starting point the studies of flow from Csikszentmihalyi, Lori Custodero created the observation form FIMA (Flow Indicators in Musical Activities; Custodero, 1998) that was refined later on (R-FIMA, Custodero, 2002).

LAP GAMES AND MULTIMODAL COMMUNICATION

Music and games are perfect allies to create enjoyable interactions. They enhance our emotional side while providing the actors with shared essential cultural aspects. It is usually adults who intuitively engage young children in musical activities where physical contact has a central role. Lap games are one of these games. But beyond physical contact, lap games imbue us in an environment where words, space, sounds and body language have a role. It is a multimodal interweaving where each communicative mode enriches and enables learning.

We know that children with whom we play lap games rapidly gain audacity and sense of humour. They soon start to demand these games using energetic vocalisations, singing parts of them and/or doing exaggerated movements that have to do with the game (Trevarthen & Malloch, 2002).

Finally, lap games provide us with a fruitful context to observe real and meaningful learning situations where children participate in an active way. As pointed by

Lew and Campbell (2005) the components of the games will work as learning indicators.

CONTEXT AND START OF THE RESEARCH

In 2006 the City Council of a city from the Barcelona area asked a group of experts from the Universitat Autònoma de Barcelona to design and to put into practice an Innovation and Teacher Training Project in Music Education in Early Childhood. This project was applied in a network of Escoles Bressol[1] (EB) in this city (Malagarriga & Pérez, 2007).

We provided a musical theoretical background in order that teachers following the project could make the most of the time the project lasted and, apart from learning a lot of structured resources, were able to do music in their classrooms while developing a proper way of thinking about it. We wanted to provide tools to enable them to plan their own activities and at the same time make them aware of what they were doing specially in musical terms. This project has been developed in two phases. The first phase lasted two years and involved the whole network of EB with nine different centres, which means that more than 80 practitioners followed it. For the last year of the project a new EB was taken as pilot centre. The aim was then to bring music near to children's daily lives designing a specific didactic programme for each of the three levels of the EB. Several observations about children's behaviour and lots of tests and validations proposed in many teachers' team meetings were carried out to decide what would be the direction and features of the proposals.

All these circumstances pointed out the necessity and at the same time the opportunity to transform the framework of purposes and organisational settings to the raising of a research that could be a PhD.

1 In Catalonia, an EB –which would be literally translated as 'Cradle School' into English- is an educative institution that provides schooling for children from 4 months to 3 years-olds. This period is considered Educative Stage and it is supported by a proper curriculum that determines the educational aspects that should be achieved and indications about the way to proceed. The education between these ages, from 0 to 3 year-olds, is not compulsory. Parents can choose if they want to educate their children in those centres or not but the great majority of families use them.

AIMS AND METHODS

To carry out the aim of the research, to have a deeper understanding of the development of daily musical situations that take place in a class of two-year-olds, we decided to follow an emergent research process. As pointed by Guba and Lincoln (1994) and Rossman and Rallis (1998) among others, a research that is emergent is developed from the data obtained from its course. It is a design that Tójar (2001) features as open and flexible.

This is qualitative research that takes a group of 13 one-to-two-year-olds from the presented pilot EB as a sample. The main data collection tool is the video recording and the analysis is carried out following two perspectives: a vertical one and a horizontal one. These are explained in more detail in the proceedings of past conferences (Pérez, 2011b; 2012a; 2012b) and in my thesis dissertation (Pérez, 2011a).
In this paper I am going to focus on describing the process of the construction of the tool to analyse the activity with the lap game "Salta Miralta", correspondent to the horizontal perspective.

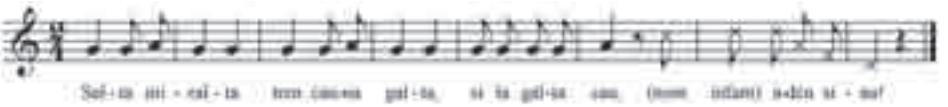
THE HORIZONTAL PERSPECTIVE OF ANALYSIS: THE CONSTRUCTION OF THE FORM

Firstly, I segmented the song[2] into four motifs: (1) Salta miralta (2) trenca una galta (3) si la galta cau (4) name of the child adéu siau! Then I listed the musical elements included in the song to see how they were treated in each of the motifs. Then, I described the categories that should be analysed for every motif (Pérez, in press). This would be the essence of the form.

Eventually, this tool went through a validation test carried out by three experts that analysed the same four clips successfully. Once I got their results, I applied what would be translated into English as Inter-observer reliability code (Confiabilidad individual, Hernández et al., 2006 in Blanch, 2010) where individual reliability is the result of dividing the number of units coded correctly by the observer among the total number of analysis units. The results can be seen in Table 1. To

2 Salta Miralta lap game.

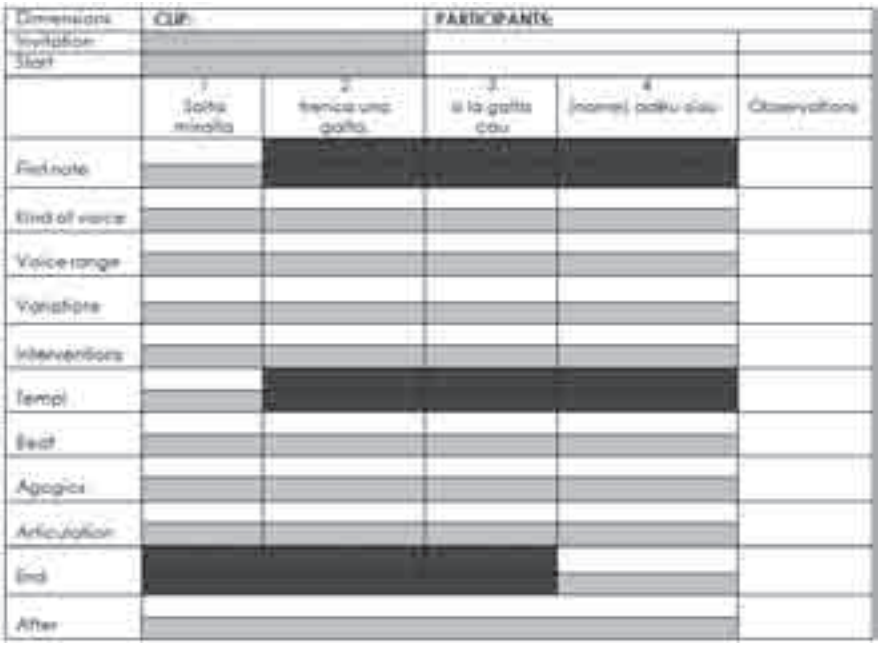
know the total reliability, following the same authors, it is necessary to add the results of the individual reliability of the three experts and divide it among the total number of them, three in our case.
The results of this operation can be seen in the right column of Table 1, which shows the form is reliable.



	Clip 1			Clip 2			Clip 3		Clip 4			Reliability
	e1	e2	e3	e1	e2	e3	e1	e3	e2	e3	e4	
Invitation	1	1	1	1	0.75	0.66	0.66	0.8				0.89
Start	0.6	1	0.6	0.66	1	1	1	1	0.6	0.6	1	0,79
First note	1	0.66	1	0.8	1	1	0.8	1				0.94
Kind of voice	1	0.75	1	1	0.75	1	0.75	1	1	1	1	0,93
Voice range	0.6	1	1	1	1	1	1	1	1	1	1	0.94
Variations	1	1	1	1	1	1	1	1				1
Interventions	1	1	1	1	1	1	1	1				1
Tempi	1	1	1	1	1	1	1	1				1
Beat	1	0.6	0.6	0.75	0.75	0.75	0.6	1				0.84
Agogics	0.2	0.66	0.66	1	1	0.8	1	0.6	0.6	0.6	0.6	0.69
Articulation	0.6	1	1	1	1	0.5	0.75	1				0.90
End	0.6	0.6	0.75	0.75	0.75	1	0.75	1	1	1	1	0.82
After	1	1	1	1	0.5	1	0.8	1	1	1	1	0.87

RESULTS

After the validation test I obtained the final observation form (see Table 2). As can be seen, in the first column are the musical elements and keywords (dimensions) to be analysed in each of the four motifs of the Salta Miralta, which are displayed one by one in the next four columns. It ends with an observation cell that allows the addition of more information if required. The dark cells indicate that information cannot be gathered in these motifs. As it is noticeable, each dimension has two rows in which to write down the information: a grey and a white cell. One is to collect data from the child and the other from the adult, in case there is a dyad in the clip you are analysing. It is important to stick to the chosen option during the analysis so you can then easily go through the participants in every clip.



The categorisation guides (one for the musical mode and another for the gestural, spatial and linguistic modes) to be used in conjunction with the observation form explained here, can be found in Pérez (in press).

FINAL REMARKS

Observation is an important tool to designing activities that are appropriate and coherent with the actual competences and interests of the children, as well as to track its application and to assess the process. The form designed by and for this research allows us to carefully observe what happens while you do a lap game with a child, or when s/he plays it in its own or with peers. At the same time, the thoroughness of the dimensions to observe emphasises the complexity of the actions required to play these games. A microanalysis is needed to understand and to value the magnitude of these daily treasures.

For the design of this form different communicative modes are taken into account because interaction is multimodal (Norris, 2004; 2006). This wide perspective allows us to study the real situation of lap games from its global complexity obtaining data for an inter-relational analysis. In addition, the thoroughness of the categories studied makes us value the amount of musical components that

the game has, e.g. beat, synchronisation of actions, use of different kinds of voice. This means that from a playful approach we are building solid foundations for music education. This verification makes us aware of the importance of the contents of lap games, bringing better quality interactions while we play them.

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STAFF AND PARENT VIEWS OF THE RATIONALE FOR MUSIC IN CHILDREN'S CENTRES: A QUESTIONNAIRE STUDY

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ABSTRACT

Children's Centres are widespread in England and comprise multi-professional staff teams seeking to work within a holistic framework with families with children aged 0-5 years. Centres are autonomous, and many favour evidence-based approaches to their work. Although group music sessions appear frequently on Children's Centre activity programmes, the rationale for their inclusion remains unclear. This study seeks to explore staff and parents' attitudes towards and perceptions of parent-child group music-making activities. My doctoral research project has a mixed-methods design and comprises a qualitative interview study (including both parents and staff participants) which adopted a grounded-theory approach to the data analysis; a quantitative questionnaire survey employing two different instruments; and a quantitative comparative study using behavioural observational methods in which music groups were compared with other activities.

This paper presents findings from the questionnaire survey, which involved 49 staff and 91 parents. Seven thematic categories of the perceived benefits of music - Social, Emotion, Learning, Teaching, Links to home, Parenting, and Organisational – which had been identified in the interview study, were used as the basis of the design of the survey questionnaire. Initial statistical analyses revealed some significant differences between the expressed views of parent and staff groups, as well as between parents in different broad age groups. Staff members expressed more positive views about the perceived benefits of music for parents than were expressed by the parents themselves. Parents between the ages of 27-35 appear to express significantly more positive opinions on a variety of questionnaire items than did parents in both the younger and older age-groups. Some parents reported that music became more important in several ways in the home environment as a result of attending the music group.

The role of the music leader in early childhood group music provision in Children's Centres will be discussed, and practical implications for practitioners will be considered.

KEYWORDS
Mixed-methods, quantitative questionnaire survey, parents, multi-professional staff, parent-child music, Children's Centre

INTRODUCTION

This paper reports some results from phase two of a three-phase doctoral research project. The results have been selected to illustrate different participants' rationales for the use of music in Children's Centres. The doctoral project as a whole investigates staff and parents' attitudes towards and perceptions of a variety of theme categories about parent-child music groups (parent is used to mean primary caregiver). The latter are widely available in programmes of activities for families in the Centres. The project also investigates the specific benefits, if any, of music compared to two other group activities offered by the Centres.

In 1999, Sure Start centres in England were piloted in areas of deprivation with a view to expanding the provision available to families in those areas. Evidence from the EPPE project (Effective Provision of Pre-School Education) (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004) suggested that the integrated Children's Centre model was most beneficial to families with children under five. The Government decided to transform Sure Start into Children's Centres in 2005, with universal provision achieved in 2010. A Department for Education document (2013) describes the core purpose of Children's Centres as being:
"…to improve outcomes for young children and their families, with a particular focus on the most disadvantaged, so children are equipped for life and ready for school, no matter what their background or family circumstances." (DfE, 2013)
They provide a single place for five key services: early education, childcare, health, family support and help into work. The resulting teams contain professionals who may hold very different worldviews and notions of working with families (Anning, 2006).

Children's Centres provide a social, informal, learning environment where children under five and their parents engage in playful activities together. Their educational rationale draws on Vygotskyian theories of learning as a social activity within the 'zone of proximal development' (1971), on Bruner's notions of

'scaffolding' children's learning (Bruner, 1960) and on Rogoff's notion of 'guided participation' (Rogoff, 1991) as a means of learning cultural norms. The sharing of symbolic actions through music-making may enable children to focus attention, which assists with emerging communication (Camaionia, Aurelib, Bellagambaa, & Fogel, 2003). Learning in this context may also occur for staff members: 'situated learning' (Wenger, 1998) allows for roles and responsibilities to be challenged and shaped by team members sharing expertise and knowledge as they work in collaboration with one another across disciplines.

Research on parent-child music-making in the early years includes studies of music in the home, investigating the inter-relationships between musicality, early language and interpersonal skill development (Forrester, 2010). Furthermore, studies of 'communicative musicality', infant-directed speech, musical parenting and maternal singing have demonstrated that in spite of the changing nature of music in the home due to technological advances and the digitization of music, parents and young children still utilise song for interaction and communication (Custodero & Johnson-Green, 2008 ; Ilari, 2005; Ilari, Moura, & Bourscheidt, 2011; Papousek, 1996; Street, 2006; Trevarthen, 2000 ; Young, 2008).

Two studies from the field of music therapy focus on parent-child group music and have some helpful findings. Standley, Walworth & Nguyen (2009) investigated the effects of group participation on musical and cognitive development and found that those children who participated over several sessions significantly increased their developmental skill scores. The other study, by Nicholson et al. (2008), found that parenting behaviours were improved and nurtured by regular attendance at group music sessions. These studies demonstrate benefits to children and parents in a therapeutic, clinical setting.
Gudmundsdottir (2010) studied how parent-infant music classes benefitted a group of younger (19-23 years) as compared with older mothers (35-41 years). Although no statistically significant differences were found between the groups in terms of mothers' subjective mental wellbeing, nor in the results of the 'Singing Confidence' questionnaire as they were measured in the study (pp.307), the results overall were more positive than was expected. This study of a small sample of mothers with ages at both ends of the age-range included no investigation of the intervening age-group.

The evaluation of the Music Start Project (Clift, MacKenzie, & Bushell, 2006) inclu-

ded a postal survey of parents who were given a music pack to use in the home. Their results revealed benefits such as; a source of fun (98%); assisting language development (93%); developing an interest in music (88%). However, only 18% felt that music and singing contributed to a child's social development, which contrasted with the views of the early years practitioners who participated in the study (Ibid. pp.13).

The present study aims to provide evidence of the benefits of parent-infant music groups for both parents and children, and to do so with a large sample of parents from across a wide age range. The study will contribute new knowledge to the under-researched area of parent-child group music 'education' in the context of the Children's Centre.

PROCEDURE

The themes generated in the initial structured, open-ended interview study guided the design of the survey instruments. These instruments included questions to gain personal, factual information about others and about participants' attitudes (Bryman, 2012, p. 253). Test items were based on the words of the interview participants, with a variety of question types, including Likert scales, yes/no items and rank ordering of items. Two e-surveys were designed - one for parents and one for staff participants. Many of the items were the same in both, but were phrased according to the different perspectives. This allowed for comparison between datasets in the analyses.

Parent participants were recruited through two online, nationwide forums for mothers: Mumsnet and Netmums. Centres were invited to participate from rural, urban and suburban locations with Centre managers as the gatekeepers to their staff's participation. Fourteen Children's Centres requested a link to the survey. The thematic categories generated by the interview study and investigated throughout the survey instruments were:

- **Social** - "I think the socialisation is fantastic for her…just the participation of it." Parent 2
- **Emotional** - "…It brightens everyone up...It's a 'feel good' just being happy." Parent 3

- **Links to home** - "...we probably do more at home, play the CD in the car, do the songs at home..." Parent 1

- **Learning** - "…so they're modelling and copying at home what's done in the group which will help develop their social interaction and attachment and things." Staff 1

- **Parenting** – "…Giving their child time at home and tuning-in to them." Family Support Worker 1

- **Musical** – "…You get an eye for someone who may go on to play an instrument." Musician 1

- **Teaching** - "…I try to incorporate reflecting and responding to the children in my instrumental work…." Musician 3

- **Organisational** - "It's a brilliant way of getting families in – they feel welcome and comfortable and can find out about other sessions." Musician 2

DATA ANALYSES

Due to the positive skew of the data, non-parametric tests were applied. The Kruskal-Wallis test was used to indicate significant differences between groups of parents or staff, and post hoc Mann Whitney tests (with Bonferroni adjustment, if required) were subsequently used to determine where the differences were located (Pallant, 2007).

RESULTS: PARENT AND CHILD SURVEY

There was a total of 91 parent participants with ages ranging from 16 years to 46 plus. Nearly 90% of the parent participants were female, and 50% of the sample was within the 27 – 35 years age-group. The Office of National Statistics census information (2011) found that nearly half (48%) of all babies born in UK in 2010 were to mothers aged 30 years and over.

Kruskal-Wallis tests were used to test for differences between the three age groups on all questions, and the 6 significant results are plotted in Figure 1 below.

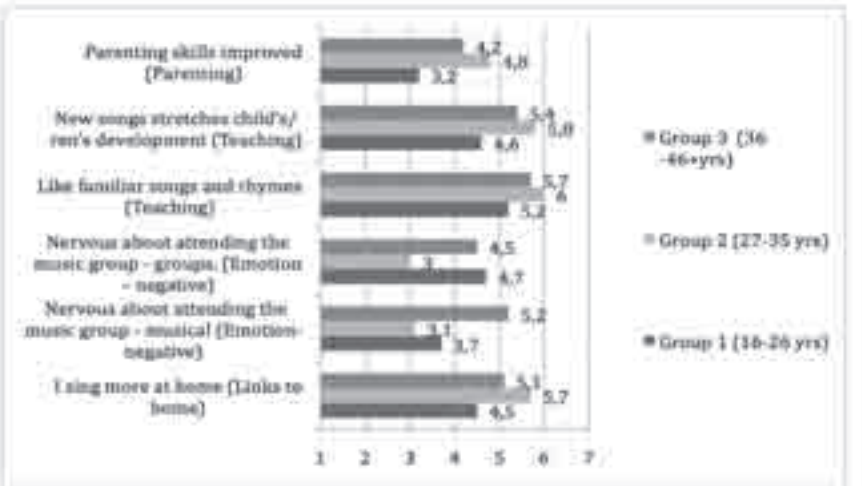

Figure 1 Mean scores of 3 age-groups of parents (Likert scale, 1= Strongly Disagree to 7= Strongly Agree)

Statistically significant differences were found between Group 2 (27-35 years) and Group 1(16- 26 years) for the following items (the theme category is shown in bold):

Q28 - My parenting skills have improved because of what I've learned at the music groups (Parenting): $X2 = 6.43$, $p < 0.040$, $U = 117.500$, $z = -2.691$, ($n = 49$) $p < 0.007$, medium effect size ($r = .38$)

Q25 – Using new songs stretches my child/ren's development (Teaching): $X2 = 8.449$, $p < .015$, $U = 141.500$, $z = -2.891$ ($n = 55$) $p < 0.004$, medium effect size ($r = .39$)

Q23 – 'I like having familiar songs and rhymes in the session' (Teaching) $X2 = 5.789$, $p < 0.055$, $U = 165.000$, $z = -2.459$ ($n = 55$), $p < 0.014$, medium effect size ($r = .33$).

Q8 – 'I sing more at home as a result of going to music group at the Children's Centre' (Links to home): $X2 = 5.831$, $p < 0.054$,

$U = 166.500$, $z = -2.405$ ($n = 55$), $p < 0.16$ (just significant with Bonferroni adjustment)

In addition, questions in the survey relating to parents feeling nervous about attending the music groups revealed significant differences between Group 2 and both the younger and older age-groups (the sample for Q 14 and Q15 comprises those respondents who answered Yes to Q13: `I was a little nervous about attending the music group')

Q15 – I was a little nervous about attending the music group because I am nervous of groups. (Emotion – negative) $X2 = 10.933$, $p < 0.004$

Group 1 ($n = 10$) and Group 2 ($n = 27$), $U = 63.000$, $z = -2.505$ ($n = 37$) $p < 0.013$ medium effect size ($r = .41$)

Group 2 ($n = 27$) and Group 3 ($n = 11$) $U = 64.500$, $z = -2.766$ ($n = 38$), $p < 0.006$, medium/strong effect size ($r = .45$).

Q14 – I was a little nervous about attending the music group because of my feelings about my musical ability **(Emotion-negative)** $X2 = 8.766$,

$p < 0.012$, $U = 65.000$, $z = -2.891$, ($n = 38$), $p < 0.003$, with a medium/strong effect size ($r = .46$)

The reasons why being in the majority age group has such a positive influence on attitudes and perceptions are unclear, and further investigation is required.
Just over one third (33%) of all children in the sample were aged 0-1 years, with 83% of all the children aged between 0-2 years. Clearly group musical experiences are selected for very young children in the Children's Centre. Only one significant difference was found between the age of the child/ren and participant responses; when parents were asked whether their child/ren's singing had improved, the majority of parents whose children were aged 0-1year scored this item 'don't know'- this was expected, because children of this age are unlikely to be singing in such a way that an improvement could be assessed. Neither were there statistically significant results associated with the number of children that parents brought with them to the music groups (20% brought more than one child, only 2% brought three children). Only one item showed a significant result in this respect: 'I'd like to take more of a leading role with my child/ren in the sessions'; $X2 = 6.087$, $p = 0.048$ - however with Bonferroni adjustment, the Mann Whitney tests between pairs of age groups showed no statistically significant differences.

RESULTS: STAFF SURVEY

The sample for the staff survey comprised forty-nine participants; half of these were Children's Centre staff, a quarter were Centre managers, and a quarter were musicians. Over ten percent of the sample were male, a higher percentage than is typical in early childhood education.

88% of the sample works in settings in which a specific music group is offered to families. It could be that those Centres which are 'music-active' selected to participate in this survey, and so this sample may not be representative of the population as a whole. One surprising finding was that 63% of Children's Centre staff and nearly 30% of managers were leading musical activities at their Centres. This has implications for the professional development of non-specialists to lead/facilitate musical activities.

As mentioned in the introduction, the following selected results explore only one or two questions from the survey instrument, namely those relating to the rationale for music groups in Children's Centres. The question: 'How important to you are the following reasons for attending/including music groups?' provided a ten–point rating scale for each of eight different possible items (the staff survey included an additional item 'demand from parents'), participants could select the same rating for more than one item. Figure 2 compares the responses of the staff and parent participants, and shows that both groups selected the same three reasons as being the most important for attending or including music groups.

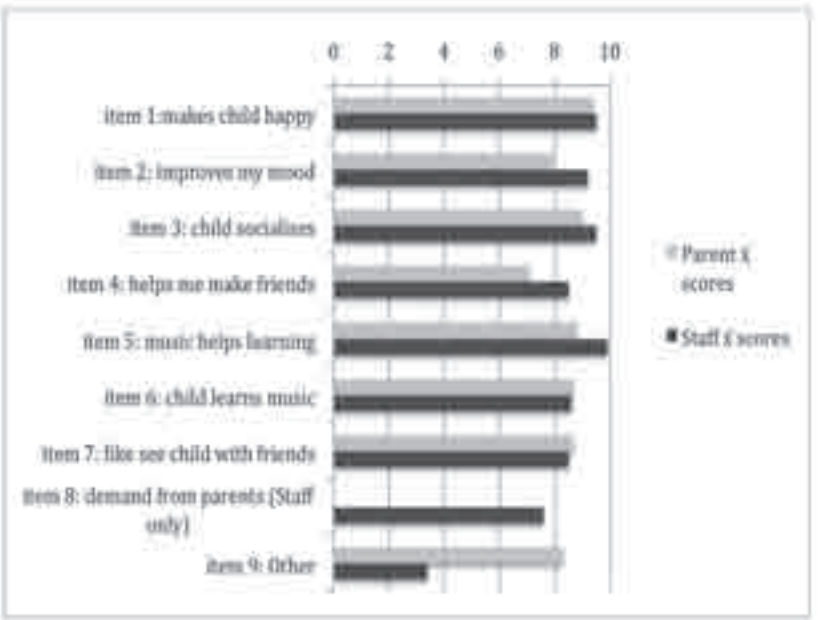

Figure 2: Comparison of mean scores - parent and staff responses to: 'How important to you are the following reasons for attending/including music groups?' (rating scale 1=not important, 10=very important)

Parents' most important reasons were as follows
(theme categories are shown in bold):

- Item 1: going to music group makes my child happy x =9.37 (n=82) **(Emotion-positive)**
- Item 3: music group is a chance for my child/ren to socialise in a group x =9.00 (n = 82) (Social)
- Item 5: music group helps children's overall learning x =8.83 (n=82) (Learning) Staffs' most important reasons were as follows:
- Item 5: music helps children's other learning outcomes x =9.86 (n=49) (Learning)
- Item 3: benefits to children's social development x =9.53 (n=49) (Social)
- Item 1: increases good feelings for children x =9.51 (n=49) (Emotion-positive)

Social, emotional and learning benefits are unanimously rated as most important by parents and staff for either attending or including music in the programme.

When the datasets for each item of this question were compared, statistically significant differences were found between staff and parent groups as shown below:

- Item 2: improves my mood/increasing good feelings for the parent (Emotion). Parents (M = 8.00, n = 81) and Staff (M = 10.00, n = 49) U = 1223.5, z = -3.882, p <0.00 with a medium effect size (r = .3)
- Item 4: 'helps parents make friends'(Social). Parents (M = 8.00, n = 81) and Staff (M = 9.00 n =49) U = 1335.5, z = -3.194, p < 0.001, with a medium effect size (r = .3)
- Item 5: 'music helps learning' (Learning). Parents (M = 9.50, n = 82) and Staff (M = 10.00, n = 49) U = 1186.0, z =-4.576, p < 0.00, with a medium effect size (r = .4)

In each instance staff were significantly more positive about the benefits of music than were the parents. This included both items relating to the benefits to parents. Staff perceived that parents would experience greater benefits to their mood and in making friends than did the parents themselves. Although the parents' scores were high (8 out of 10 for both items), the staff scores were significantly higher.

Another question (Staff Q20d) revealed a significant difference between the staff groups. The Children's Centre staff group valued the inclusive aspect of music groups significantly more than did the other two staff groups; X2 = 8.946, p < 0.011. After Bonferroni adjustment, a difference was found between Children's Centre staff =and managers, U=66.000, z = -3.114, p < 0.002, with a strong effect size (r = .55). However, when staff were asked in a separate question to rank items in terms of their importance, inclusive activity was selected by only ten percent of the total staff sample as the most important benefit. It would seem therefore that Children's Centre staff value it more highly than the other two groups, but not as the most important benefit of the music groups as compared with other items such as Interaction between adult and child (46% ranked this most important).

Those parents who used ideas from the Centre sessions at home found that music had become significantly more important at home as a result. This can be

seen from the responses to the four questions below, which compares those who answered 'yes' to the question: 'I've used ideas learned from the sessions at home' with those answering 'no':

- Q8 – 'I sing more at home as a result of going to music group at the Children's Centre' – Yes (n =60), x= 5.7, M = 6, No (n =8) x = 3.75, M = 3.5. U = 92.000, z = - 2.931, $p < 0.003$, (n=68) r =.36
- Q 9 – 'Using the songs during the day helps with the daily routine with my child/ren', Yes (n = 60), x = 5.18, M = 5, N0 (n = 9), x = 4.11, M = 4, U = 162.500, z = - 1.958, $p < 0.05$, (n=69), r = .24
- Q11 – 'Other members of the family sing more at home' - Yes (n = 59), x = 5.24, M = 5, No (n = 7), x = 3.71, M = 3, U = 101.500, z = - 2.238, $p < 0.025$, (n = 66), r = .28
- Q12 – 'music has become more important at home' - Yes (n=58), x = 5.03, M = 5, No (n=9), x = 3.67, M = 3, U = 124.000, z = - 2.564, $p < 0.010$, (n = 67), r = .31

All of the results above are statistically significant at the 0.05 level, with small/medium effect sizes (Cohen, 1998). The reasons why parents do not use the ideas at home are varied: it could be because these parents are already using a lot of music at home, or because some parents may lack the confidence to use the ideas away from the group environment. This highlights the value of attending a group session led by a practitioner at a Centre as this group of parents might not otherwise engage in any music-making with their child/ren.

DISCUSSION

These results give an indication of the rationale for music in Children's Centres. Both parents and staff value music groups for increasing good feelings for children, contributing to other areas of their development, and for their useful social benefits. Clearly, parental participation in music with their child/ren in the group setting has enabled parents to become aware of beneficial social aspects which the MusicStart evaluation did not find (Clift et al., 2006). Although parents were very positive about the social and emotional benefits for themselves, staff perceptions about these benefits were even greater. It seems likely that practitioners consider their work to be of great value, such that they perceive its impact to be greater than do families with whom they work.

The broad aims of music education, as suggested by Hargreaves and North (2001)are musical; personal; and social–cultural, and it would appear that music in Children's Centres is fulfilling these aims, albeit in a non-traditional learning environment. Parental participation guides children into culturally-acceptable norms of behaviour (Rogoff, 1991). With an accompanying 'expert' companion who already knows the conventions, children can be shown social mores and the expected rules of communication and interaction. The musical environment contains/scaffolds this social rehearsal, and provides a positive emotional landscape that enables the child to receive group praise and esteem by means of interaction and shared affect. The learning situation is enhanced by these conditions so that other developmental outcomes also benefit. These positive outcomes contribute to a child's readiness for school, an important part of the raison d'être of Children's Centres, and a key part of government policy for early years education as described in the quotation at the start of this paper (DfE, 2013). These results also highlight implications for the professional development of multi-professional staff members who are leading musical activities in their settings as non-specialist music educators.

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SEGMENTAL PROPERTIES IN THE VOCALIZATIONS OF BABIES (12-24 MONTHS OLD) IN RESPONSE TO SPEAKING AND SINGING STIMULI

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ABSTRACT

The question about the differences between spoken and singing voice has arisen repeatedly among those devoted to musical education in childhood. That is, it is unclear whether a baby's vocalization should be interpreted as language or music. This type of discrimination is complicated because of babies' tendency to explore and imitate vocally, which makes it difficult to establish boundaries between musical and linguistic responses. There is some consensus in the fact that musical vocalizations are observable even during the first twelve months of life. Nevertheless, research dealing with the comparison of those early vocal features among different stimulation contexts is lacking. Some interesting observations from this type of research with adult participants verify that the duration of vowels plays an important role when changing from spoken to singing registers. Moreover, recent research makes use of durational contrast indices in cross-disciplinary studies to compare musical and linguistic corpora. Surprisingly, these important aspects of the distinction between adult spoken and singing vocalizations have never been addressed with regard to infant singing development. In the present study, we have made use of computational techniques, linguistic and psychology knowledge in order to analyze babies' vocal productions regarding music and speech. Twelve infants, aged 12 months were observed every two weeks, during their second year of life aiming to investigate their vocalizations in response to speech and song. Accordingly to the experimental condition, free conversation and songs without words were used to encourage the child to vocalize. Sessions were recorded and infants' vocal productions were collected and coded for further analysis. The

results showed that infants' vocalizations in response to speech conditions display greater overall duration than the ones produced in response to singing condition. However, the length of nuclei was higher in the singing condition, which implies that, as with adult vocalizations, the vowel is longer than usual in speech. Our findings seem to indicate that singing elicits a specific infant vocal behavior. The occurrence of specific vocal responses to singing corroborates the existence of an early predisposition to act musically, reiterating the importance of an early musical enculturation.

KEYWORDS
Vocal Development, Singing Acquisition, Acoustic Analysis, Early Infancy

INTRODUCTION

The first months of a baby's life are rich with respect to the acquisition of communication skills, among which stands out the use of voice. The production of sounds attract mothers' interest, reinforcing communication between them (H. Papousek, 1996; M. Papousek, 1996; Van Puyveld et al., 2010). Even though these first vocalizations have been broadly investigated in linguistic contexts, there are few attempts to discuss the phenomenon relating it to the origins of musical development in children. For some authors, vocalizations with musical content are present in the infant's first years of life (Dowling, 1999; Fox, 1983; Gordon, 2000; Moog, 1976; Tafuri & Villa, 2002; Welch, 1994). These authors based their findings on the observation of infants in natural settings, arguing that infants' vocalizations contain musical characteristics similar to those found in the musical culture of their environment. Research on singing development has confirmed that the first vocal productions are mostly descending melodic lines (Moog, 1976; Fox, 1983; Dowling, 1999) and that singing vocalization consists, initially, in the use of isolated, mainly vocalic sounds. Although some of the previous mentioned authors have attempted to develop comparative analyses regarding the acquisition of spoken and singing voices, none of them is clear enough in what concerns the acoustic similarities and differences that are present. In contrast, in studies about adult voice, the acoustic characteristics that differentiate the spoken from the singing modalities are known. For example, the manipulation of the vowels has been identified as an important feature for the specificity of both modalities (Sundberg, 1987, 1999; Scotto Di Carlo, 2005; Patel, 2008). When changing from spoken to singing register, the duration of the vowels becomes raised, while the consonant part of a syllable tends to diminish (Scotto Di Carlo &

Autesserre, 1994).
As far as we know, this important acoustic feature was never addressed within the research in infants' spoken and singing vocalizations. Furthermore, studies focused on the development of the singing voice during the first years of life – as, for example, Tafuri & Villa (2002) – have mainly highlighted the spontaneous vocalizations. Such studies, while increasing the knowledge about children's vocal behaviour in musical contexts, make few references to the comparison between infants' linguistic and musical vocal productions. The present study was motivated by the need for such comparison at early ages, in which language and music begin to unfold as two determinant acquisitions of child development.
To investigate this, we evaluate babies' vocalizations in response to musical and linguistic stimuli, based on acoustic parameters.

METHOD

PARTICIPANTS

Twelve infants (7 girls and 5 boys), aged 12 months (M = 11,5, at the start of data collection) participated in this study. They were recruited through an announcement asking for volunteers, observed every two weeks, throughout their second year of life. The aim was to investigate infants' behaviour in response to speaking and singing. As a manner of compensation it was proposed to provide a set of music sessions for babies and parents, taking place after the final phase of data collection. Participants were not involved in musical guidance sessions for infants or in any specific music program for families at the time of their recruitment in the research.

MATERIALS

Accordingly to two levels of the experimental condition - speaking and singing - free conversation and three songs without words were used to encourage the child to speak / sing. The songs were composed purposefully for this study taking into account the importance of reflecting musical contrasts with regard to tonality and form. The sessions were recorded using 3 microphones (DPA 4060 Hi-Sens), suspended from the ceiling and the interface M-Audio ProFire™ 2626 (24bit/192kHz) with preamp (Octane™) and JetPLL technology to eliminate jitter, connected to an iMac 24"(2.8GHz / 8GB SDRAM / 640GB HD). The investigation used Audacity 1.3.9-beta to divide each period of children's vocal productions

into isolated vocalizations and also for labelling the sound samples. The acoustic analysis was based on the use of two related tools: first, Praat 4.4.04 (Boersma & Weenink, 2006) was used to establish highest and lowest levels for the detection of F0 curve; second, Prosogram (Mertens, 2004a, 2004b) was used to perform the automatic segmentation of the acoustic signal in sequences of syllabic nuclei.

PROCEDURE

Each baby was observed in 30 minutes sessions, every two weeks, throughout its second year of life. An experimenter presented the stimulus under two conditions - singing and speaking – in order to stimulate infants' vocalizations. In the speaking condition the stimuli alternated between linguistic interactions and moments of silence. In the singing condition, three songs and musical interactions based on each song were the stimuli. Vocal responses produced by the babies towards these stimuli were recorded. Collected material at babies' age of 12, 15, 18, 21 and 24 months were used in the present analysis.
A total of 662 vocalizations were collected, produced in response to speaking condition (N=449) and in response to singing condition (N =213). The final sample excluded vegetative and effort sounds and negative vocalizations (i.e., subjectively perceived as negative, such as whining, complaining and crying). The vocalizations were then obtained using the Audacity program and it included the entire acoustic signal between the end of the vocalization stimulus, produced by the experimenter and the end of the last element vocalized by the baby immediately before the new vocal stimulus.
Given the acoustic characteristics of the study and the use of Praat software, samples whose acoustic signal was too weak were rejected. For the acoustic analysis the measurements were based on spectrograms and waveforms generated by Praat 4.4.04 (sampling rate 44.1 kHz; F0's band detection established between 40-800 Hz with a band width of 200 Hz).

MEASURES

The beginning and end of vowels were obtained in order to calculate the duration of each vowel or vowels sequence, consonants and syllables. The analysis focused on the duration of the vocalizations (durvocal), the duration of the phonation part of the vocalization (durfonal), the determination of the number of nuclei per vocalization (nnucleos) and the average duration (in seconds) of the nucleus present in the vocalizations (dnucleos). The speed of the

speech/singing produced was also assessed (ratenucleos) calculated from the ratio between the nnucleos and the duration of a vocalization.

DESCRIPTION OF THE SAMPLE

Table I presents the distribution of the number of vocalizations collected in the experiment in relation to each condition and to gender.

	Speaking condition	Singing condition	Total		
Gender	n	%	n	%	
Masculine	116	55.24	94	44.76	210
Feminine	333	73.67	119	26.33	452
N	449		213		662

The total number of vocalizations for the speaking condition is more than twice the registered in the singing condition. The total number of vocalizations is much higher in the case of girls (N = 452) than boys (N = 210). The expression of this difference relates primarily to the large imbalance recorded against the number of vocalizations occurring in the speaking experimental condition between the two genders (male = 116, female = 333), since under the song condition the gender difference is less significant (male = 94, female = 119). The percentage of vocalizations is therefore an uneven behaviour when analysed taking into account the type and the experimental condition. The chi-square test allows us to reject the independence between gender and experimental condition [$\chi 2$ (1) = 21.491, ($p < 0.001$)], assuming the existence of an association between the two.

RESULTS

Table II shows that the experimental stimulus – speaking vs. singing – causes significant effect on the vocal duration (durvocal) ($F(1,660) = 9.77$, $p < .05$) and very significant effect on phonation time (durfonal) ($F(1,660) = 4.23$, $p < .01$), number of nucleus (nnucleos) ($F(1,660) = 12.20$, $p < .01$) and duration of nucleus (dnucleos) ($F(1,660) = 8.77$, $p < .01$).

Table 2. ANOVA test for the group of segmental variables analyzed in the vocalizations produced toward the experimental condition (Speaking and Singing)

	Sum of Squares	df	Mean Square	F
durvocal	9.77	1	9.77	5.04*
durfonal	4.29	1	4.29	8.19*
nnucleos	304	1	304	12.2*
dnucleos	019	1	019	8.77*
ratenucleos	83.3	1	83.3	2.09
p<.05				
*p<.01				

A linear regression was carried out aiming to analyse throughout a multivariate approach the quantitative influence of the child's age on the variables characterizing his/her vocalizations. The results are expressed in Table III.

Table 3. Multiple linear regression analysis including variables measuring segmental properties that were significantly related to independent variables' gender, experimental condition and age.

	Gender		Experimental condition			
	(Feminine=0, Masculine=1)		(Speaking=0; Singing=1)		Age	
	β	p	β	p	β	p
durvocal	0.139	0.219	-0.244	0.033*	-0.008	0.874
durfonal	0.017	0.774	-0.143	0.021*	0.019	0.010*
nnucleos	0.132	0.463	1.099	0.002**	0.043	0.275
dnucleos	0.002	0.573	0.012	0.002**	0.001	0.058*
ratenucleos	0.432	0.419	0.600	0.267	-0.179	0.003**
*p<0.05						
**p<0.01						

We found that age has a significant effect on the phonation time (durfonal) and nucleus' duration (dnucleos) ($p<.05$) and a very significant effect on the rate of vocal production (ratenucleos) ($p<.01$).

Figure I exhibits the values for durfonal, durvocal, nnucleos, dnucleos and ratenucleos, over time.

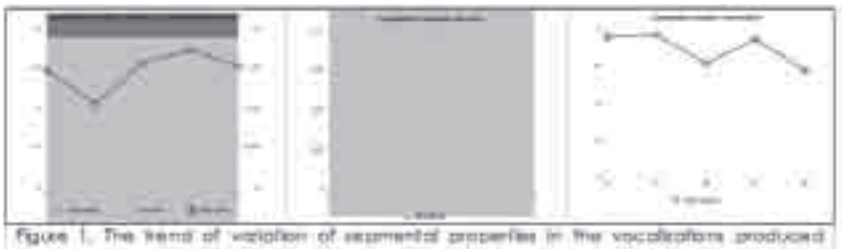

Figure 1. The trend of variation of segmental properties in the vocalizations produced towards singing condition. The average duration of a vocalization, the phonation time and number of nucleus over time (left); mean duration of a nuclei over time (middle); the rate of vocal production (right).

As expected, the duration of vocalizations (durvocal) and phonation time (durfonal) present similar trends of variation. It can be seen that, although the number of nucleus (nnucleos) increases in the period between 18 and 21 months, durfonal and durvocal decrease. This is due to the fact that also the nucleus' duration on this period (dnucleos) decreases. There is also a parallel increase of durvocal, durfonal and dnucleos between 21 and 24 months. The variable rate of vocal production (rateuncleos) decreases between 12 and 18 months. It is from this point that ratenucleos evolution depends directly on nnucleos' trend of variation, increasing between 18 and 21 months (nnucleos increases) and decreasing between 21 and 24 months (nnucleos decreases). In fact, Tukey's HSD post hoc multiple comparison tests confirmed significant differences for nnucleos between 15 and 18 months ($p = .001$) and between 15 and 24 months ($p = .023$). Figure 2 identifies the highest significant correlations we found, over time.

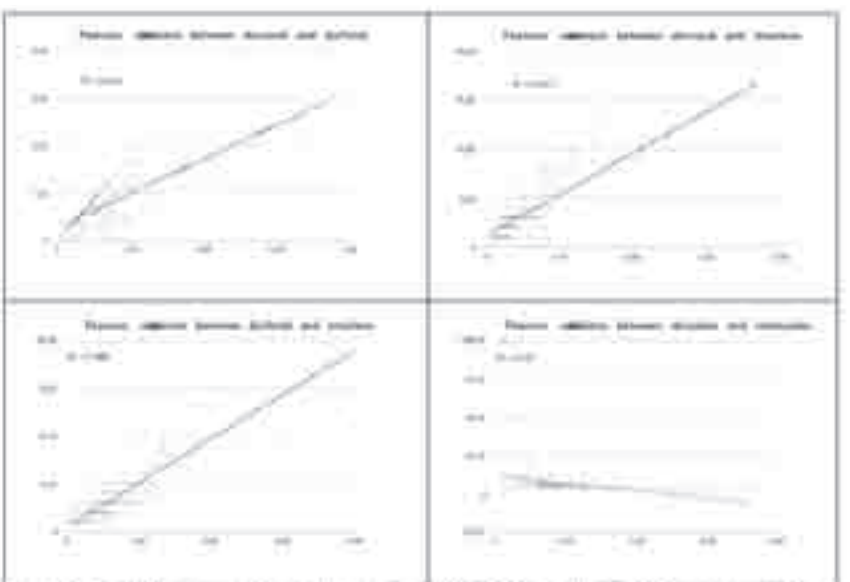

Figure 2. Pearson's correlations between segmental properties in the vocalizations produced towards singing condition, over time.

It can be seen that when durvocal increases both durfonal (R2=.48) and nnucleos (R2=.58) also increase. The correlation between durfonal and nnucleos is also positive (R2=.75). Finally, it can be seen that the correlation between dnucleos and ratenucleos is negative (R2=.12)

DISCUSSION

Results showed that babies' vocalizations produced in response to singing and speaking stimuli present differences in their segmental properties.
The fact that there was so clearly a higher number of nuclei in speaking condition suggest children's greater familiarity with the characteristics of verbal language, which may be due to the fact of a higher daily exposure to linguistic stimulation. As several studies document, vocal productions of this age are clearer and series of varied syllables become more numerous (Oller, 1980; Stark, 1981). In fact, in this study the vocalizations that were produced in linguistic context are longer than those produced in the context of a song. However, it is interesting to verify that the average length of the nuclei is higher in the singing condition. That is, despite the vocal productions in the context of a song being shorter, the average length of the nuclei is higher. Since the variable dnucleos is highly dependent on the vowels duration, this fact can be interpreted as a systematic prolongation of the vowels, when children vocalize in the singing context. These results confirm the observations of Dowling (1999), which revealed that, around 2 years old, there is greater prolongation of vowels in vocalizations in response to music compared to those produced in linguistic context. They are also in line with observations of Scotto Di Carlo (2005) on the intelligibility of adult singing voice, in which she notes that when singing, the syllable undergoes a substantial prolongation, which leads to an increase in the relative duration of vowels and a decrease in the relative duration of consonants. It is surprising that similar results could be found in infant vocal productions.

By observing the segmental properties of the vocalizations produced against singing stimulus, there were no clear trends of growth or decline in their values over time. The vocal production during childhood is a complex psychological phenomenon, which requires the acquisition and coordination of capacities at various levels (perceptual, physical, cognitive and articulatory), unlike linear

evolutionary processes (such as human height, for example). However, it seems that child's age influences both the phonation time and nucleus duration. Physical and articulatory reasons will form the basis of these observations. As we know, the vocal tract of children undergoes morphological transformations during the early years (Kuhl & Meltzoff, 1996). Moreover, the correlation between the duration of a vocalization and the number of nuclei contained therein is strong. That is, during the second year of life the child will produce vocalizations with more phonation time and with nuclei of more duration. As seen above, these nuclei have a distinctive feature of the vocalizations produced towards linguistic stimuli in the prolonging of the vowel. That is, the results demonstrate the important role played by vowels' elongation over time in infant's singing vocalizations.

The fact that, in the vocalizations produced in the context of singing, there is a strong correlation between the duration of the vocalizations and phonation time shows that the occurrence of silence could be mainly due to respiratory acts. Infants' vocalizations in singing contexts seems to generate a continuous flow of sounds. Together, these observations seem to be in parallel with adults' musical behaviour, since when singing we tend not to separate too much the sounds in time, so that the musical idea can be understood by others (cf. Bregman, 1994).

Interesting is also the significant association of negative sign between speech rate (ratenucleos) and the nucleus' duration (dnucleos) which tells us that when infants produce long vocalizations, they fill them with nuclei of short duration, and vice versa. That is, more lengthy sung vocalizations exhibit shorter sounds and, therefore a greater number of notes, making them appear as complete musical structures. We do not call them musical phrases, since the melodic and rhythmic features are still sketchy. However, these vocalizations already reveal an amazing capacity of temporal control.
This research sought to examine aspects of the acquisition of singing voice in the second year of life, considering both the segmental properties and melodic and rhythmic aspects. As to our knowledge, from the literature review, no study on the developing of the singing voice has compared, objectively, these two aspects of infant vocal productions. Thus, this methodology may be promising for monitoring children's sequential musical development, allowing us to extend our knowledge of vocal production to the ages before and after the ones considered

in this investigation. This methodology may also be used in the analysis of vocalizations produced by different participants (child vs. adult; girl vs. boy; baby vs. mother; etc.) and adopted in future studies involving different musical stimuli (vocal vs. musical instruments). We think that the use of such acoustic analysis may open up a space in which the current model of experimental research in musical development can be extended and challenged.

GLOSSARY

dnucleos – the average duration (in s) of the nucleus present in the vocalizations.

durfonal – estimated phonation time (in s), which occurs whenever the vocal folds oscillate.

durvocal – total speech / singing time (in s), which includes the estimated phonation time and the pauses that occur between nuclei of the same vocalization.

nnucleos - number of nuclei per vocalization

nucleus (or syllable nucleus) – the part of a syllable having the greatest sonority, most often a vowel. For example, [i] is the nucleus in the word [beet] and [aI] is the nucleus in the word [bite].

ratenucleos - the ratio between the nnucleos and the the speech / singing time.

vocalic - a sound which once it's past the glottis, is not obstructed, i.e. it can pass freely through the mouth.

syllable – the unit of organization for a sequence of vocalized sounds. For example, the word gloves is composed of two syllables: glo and ves.

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INTERNATIONAL RESEARCH ON SINGING DEVELOPMENT: THE AIRS TEST BATTERY FOR CHILDREN

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ABSTRACT

The AIRS Test Battery of Singing Skills (Cohen, Armstrong, Lannan, & Coady, 2009) was developed for the purpose of obtaining data on singing skills across ages and cultures, sharing the data among researchers, and disseminating findings in appropriate scholarly and applied fields including those of music education. The original test battery was initially piloted on persons of a wide age range (3 to 80 years) in Canada, and since then in children in a number of countries including the UK, Brazil, Iceland, Estonia, and Japan. While the original test battery was recently modified for on-line presentation and data collection (Pan & Cohen, 2012) with over 100 persons tested (ranging in age from 4 to 87 years), this format was deemed possibly too inflexible and demanding for use with young children. Yet information on singing during childhood is perhaps the most valuable as this is a key time for learning music and language as well as the use the voice to fit the norms for the culture. Based on our experience with testing children and teaching children music, the original AIRS Test Battery was adapted so as to obtain as much data as possible about several key singing skills in a time period that would accommodate the child's attention span of approximately 15 to 20 minutes. This test battery includes the following items from the original test battery: singing a favourite song, carrying out pitch matching games, exploring the vocal ranging, learning and inventing new songs. Researchers in several countries are exploring the suitability for children. The presentation will report on both the methodology and the results of data collection on the various test items.

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KEYWORDS

Singing, children, test battery, cross cultural research, AIRS

EMERGENCE OF MUSICAL FEATURES IN INFANT VOCALISATIONS

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ABSTRACT

From the first days of life infants like to play with their voices, they produce non-cry sounds, utter vocalisations and imitate sounds from their surroundings. Interestingly, their vocal plays are not just experimental, isolated sounds, they are rich in musical features. However, little is known about their vocal patterns, especially how musical and non-musical, linguistic features differ from each other. In this study we explored how young infants' vocal productions are important components of early social interactions and how they play a crucial role in communication. In particular, we examined the vocal participation of a 3m old infant when the mother sings to her. One of our focus concerns the phrasing structure of the song and how the infant participates in it, almost "singing along" with the mother. These early dyadic situations of joint and attuned vocal interactions are significant manifestations of shared affects and intentionality that are basic communicative skills. As such, they are precursors of the infants' singing and speaking. In order to illustrate developmental changes in these respects, we show analyses of very early song singing and how the infant at around 12 to 14m already masters the expression of musical and linguistic ideas by making up songs. All our analyses of vocalisations are supported by acoustic analysis software (XWAVES, mmatools, praat).

These data show us how sophisticated infants' vocalisations can be and how soon they discover about regularities and structure which are going to be crucial for their language acquisition and musical development. This is very important for music educators as early language and music development are intertwined, and music education could start earlier by being aware of the early potentials of infants.

KEYWORDS

musical interactions, infants, vocalisation, shared intentionality, early singing

practice papers

SPOKEN SESSIONS

PART II

PRACTICE PAPERS

MUSICAL COMMUNICATION WITH TWO YEAR OLDS

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ABSTRACT

This paper examines musical practice with two-year-old children on government funded nursery places in a highly disadvantaged area of England.
Taking Communicative Musicality as a theoretical lens, I have observed how very young children are highly competent at making intimate, playful, musical communication.
I suggest a musical approach works in concordance with children's existing communicative competences and helps build their sense of community and their personal wellbeing.
Attuning and responding playfully to children, making communicative musical discourse, involves a practice of playful spontaneity, empathy and working communicatively outside spoken language, tuning in to deeper, social-emotional languages of facial expression, gesture and voice play.
I argue the importance of developing improvisational skills as an essential pedagogical tool for working with two-year-old children.

KEYWORDS
Emotion in early childhood music, improvisation, music and language, music and movement, music and health, communicative musicality, two-year-olds

INTRODUCTION

I am the lead music specialist for a Community Trust which runs a number of children's centres in the east of England. We work holistically with the wider community. It is a unique and visionary organisation. There has been an embedded music practice, forming 'communities of music making' with the families who access our services, since the organisation began 12 years ago. Currently we are a team of two full time music specialists and a music therapist.

The area is deemed by policy makers and funders to be one of the most disadvantaged in the East. There are high levels of unemployment, poor mental health and low levels of attainment in education, including low levels of ***communication and language*** and ***personal social emotional development*** in children at four years. There are high numbers of children with child protection plans (meaning they are at risk) and subject to CAF process (the Common Assessment Framework – a process of multi service intervention for children who have additional needs). In addition to this we have a proportion of children with English as a second language.

There has been, in this area and others like it, an increasing number of free nursery places for two-year-old children due to government funding targeted at the most disadvantaged families. The funding for two-year old places is set to increase and therefore many new two-year-old nursery settings are being created.

In addition to our ongoing music work with families, the funding body Youth Music has, in the last two years, funded two major projects with us. The first has funded the music team to work directly with children in two-year-old settings. The second has been focussing on raising musical understanding and skills of early years practitioners in relation to two-year-olds. This professional development work involves the music team working intensively with practitioners over several weeks.

MUSIC - THE BASIS OF COMMUNICATION AND LANGUAGE

A good deal is known about the intimate connection between babies and carers and this informs children's centres work around attachment theory, parent infant attunement, reciprocity and interaction. It is universally recognised that social-emotional communication is the trigger for all learning and development and that it precedes language. However, there is a lack of understanding of two-year-old communicative competences and little literature on the social-emotional processes which enable confident, resilient, communicators.

Children at two years, typically have emerging spoken language. Between the ages of two to three huge leaps are made in vocabulary and understanding. This is the optimum window and if language is not acquired, and the child reaches school at four unable to speak confidently, this will have a major impact on their

future education. This two to three year window has mostly, till now, happened within the family home, and little qualitative research has been done to examine communication and language progression and its relationships with social-emotional and cultural influences. There is a perception that social-emotional communication matters less as children grow older. But is this actually so? And, what happens if some of the early intimate social-emotional communication in early childhood has been reduced due to the stresses placed on families living in poverty?

COMMUNICATIVE MUSICALITY: THEORETICAL PERSPECTIVES

Through studies of infants and mothers, Malloch and Trevarthen (2009) show powerful and reciprocal musical communication taking place. They suggest that, in a child, musical expression is natural and innate. They examine the evolutionary aspect of shared music making through the rhythms of movement which bonded human groups together and became the social and emotional systems by which our ancestors achieved agreement and synchronicity. They point out that the human brain senses musical-emotional meanings many months before it can understand language. They propose that human musicality is the basis of communication and language both in an evolutionary sense and within individual humans. Ellen Dissanayake, (2001, 2012) explores the universal musical narratives between adult and infant, suggesting that this attunement is the basis for all later interaction between adults. She suggests that the narrative of Communicative Musicality contributes to five psychological necessities: intimacy or mutuality; the sense of belonging to a group; personal and collective meaning; individual and group competence; and the opportunity to demonstrate and communicate how much we care about vitally important matters in our lives.

In a study of language acquisition in a young child, Michael Forrester & David Reason (2006) explore the notion of 'membership': the motivation to master language and thus become a member of the adult world; able to negotiate and affect adults and common-place events through language. In our hyper-linguistic society great emphasis is placed upon speech and language. Language is power. It is something we place great store upon and wish our children to have mastery of. However there are huge inequalities around language, for instance inequa-

lities of class, education, nationality. There is also a great difference between a child gaining membership and participation to the adult realm through language into a loving family home and one in which words are used as weapons to hurt, ridicule or control. We must pay great attention to the power and powerlessness of language, particularly with vulnerable young children.
Taking theories of Communicative Musicality as a starting point, we recognise that two-year-old children communicate in a fascinating place between communicative musicality and spoken language. We aim to enable and develop two-year-old children's own communication, their sense of community and their personal wellbeing. We also aim to raise pedagogical understanding of the core role music and musicality plays in children's development.

TWO VIGNETTES

What happens to a two-year-old when he enters the new nursery environment? What communication happens between two-year-old peers? How do they construct meaning together in a nursery environment? How do they make meanings and connections with those around them? And what does this look like?
These are two vignettes of two-year-old children we have worked with.

BOY YELLOW

Boy Yellow, 24 months, had just begun attending nursery. Practitioners were concerned that he lacked concentration and was often injuring himself and others by constantly racing around the setting. He did not join in group activities or 'listen'. There were multiple issues to do with home and family.
The music team found that during an initial group-music session, Yellow's behaviour was highly subversive. He would sit outside the group under a table and call out repeatedly to his friends, making them laugh and distracting them from the adult-led group activity. His calling out was playful, in a sing-song voice; it was cheeky and provoked laughter. When the nursery staff attempted to make him 'join in properly' it led to a tantrum and tears.
Our reflections of Yellow at this point was that he was resilient, funny, was able to initiate playful rebellious games and draw-in and lead peers along with him. He had high wellbeing and involvement but, when asked to conform verbally, tantrums would often ensue.

On a subsequent music free-play session, we took in two large xylophones and a variety of beaters and placed them outside. Yellow was observed throughout the session. At first, spontaneous group play happened around the xylophones. The children constructed a 'Stop. Go.' game. Yellow joined in with this and showed high levels of involvement in exploring the instruments, changing beaters several times and listening attentively to his playing. Play went on for some time. Yellow reinvented the game by running excitedly to a large metal shed and playing it with his beater. This was like a subliminal signal, as several children immediately followed and joined in laughing, myself included. Yellow began to explore the garden by playing it, performing to his peers. A game of 'beaters as microphones' ensued, with Yellow performing very plausible pop star impersonations for everyone's delight. At some point soon after this Yellow became aware that I was filming him and he started to perform to camera, engaging directly with me, and taking me on a trip around his world. During this footage, our relationship and my attention to him is clearly making him happy. He hands me one of his beaters as an invitation to follow further. He is extremely physical and in his body, moving in a variety of funny, dance-like, interesting ways. He shows me a variety of interesting things around the garden, showing high levels of inventiveness and creativity, playing the space, showing me how a drainage cover is, in fact, very like a xylophone.

This vignette of Yellow highlights several things. Firstly, Yellow shows sophisticated communicative competences. He is a leader, an initiator and an experimenter, and an independent thinker showing high levels of well-being and involvement. He shows high and complex levels of social-emotional understanding in his relationships with peers and with practitioners who are prepared to meet him on his own terms. His presence had the effect of instigating communal play and community; making something exciting happen.

Without approaches which work deeper than language, Yellow would be in danger of being labelled as 'naughty' , 'clumsy' 'not able to concentrate', 'not understanding direction' and the ever-increasing diagnosis of Attention Deficit Syndrome. However, far from lacking in attention, Yellow's activities show clear associative thinking – but in order to see this one needs to be attuned to him.

Sharing observations of Yellow helped reframe some of the nursery practitioner's perceptions of him. They were able to devise strategies which worked with his competences such as moving around the setting with him more, being less instructive and to recognise his behaviour as resilient and creative. The music team were able to develop a relationship and playful discourse with Yellow through communicative musical approaches, this had a beneficial effect on his involvement in general nursery tasks and over time Yellow elected to join in music group sessions taking part as an active member rather than a subversive one.

GIRL SCARLETT

Scarlett, 26 months, had not been heard to speak by anyone in the setting. She avoided attention, appearing very shy and avoiding eye contact. During free-play music sessions she would avoid music workers or large groups of children, but could sometimes be seen playing quietly on an instrument with one or two friends. We set up a regular 'music garden' free-play session in another room. During an early session Natalie, music worker, had a long playful musical conversation with Scarlett. The conversation took place around a gathering drum and involved vocalisations linked to movement and gesture with beaters and fingers. As the conversation develops Scarlett makes stronger eye contact and laughs. It appears very natural and flowing. At one point she hands a rubbery object to Natalie, naming it with a made-up word confidently. Natalie accepts the word, playfully taking the object. This observation was the first time anyone in the setting had heard Scarlett vocalise.

In a subsequent session Scarlett and another girl had an in-depth musical conversation with an ocean drum. The drum is turned over and the two girls mirror each other gesturally by pointing to things on the drum and beating it while vocalising their play. This continues and develops into taking turns to tip the drum up and down making a loud sound. Scarlett's partner does this three times and Scarlett does it three times in return. While this happens they are joined by another very young child. As soon as they notice the third girl, the two girls adjust their positioning to allow the new girl a place and become a circle rather than a pair. Scarlett smiles at the new girl, gives a quick demonstration and passes the drum to her encouragingly. Scarlett and partner wait while the new girl explores the sounds of the ocean drum. After several tips of the drum the new girl looks at Scarlett and pauses in mid tip. They smile at each other. Scarlett gets hold of the drum

and tips it towards her making clear eye contact and with a kind expression. They repeat this several times both holding the drum. There is a sense of Scarlett looking after the younger girl and taking pride in doing so.

These involved, convivial, friendship-building communications are the foundations of language. Scarlett takes on the role of facilitator and empath within a small group. She clearly conveys friendliness, knowledge and assurance in these sophisticated interactions which are way beyond what a child her age would have the language to express.

MUSICAL APPROACHES WITH TWO-YEAR-OLDS

Our approach is to watch, listen, attune and respond playfully to children, finding and playing musical games. We use voice, word play, gesture and facial expression to communicate. At the root of this work is funniness, playfulness, joyfulness, smiling and laughter. These things are fundamentally musical, social and emotional.

These are the core elements to our work and approach and we apply them to working with a child who is an elective mute, with a child who does not sit still or a child who has autism. Communication made up of playful expression allows a child with English as a second language to be able to participate on equal terms and assimilate themselves into the peer culture around them. Silly voice play creates an environment where a child who has a profound lack of confidence in their talking, can use and experiment with their voices freely without feeling pressured to speak or answer.

Sometimes our work is group-based - adult facilitated with a regular repeated structure but, importantly, we allow a high degree of freedom as to how children engage with the activity and we respond accordingly. During group music sessions we avoid being directional or instructive and try to keep words to a minimum, drawing children in through facial expression, anticipation and familiar rituals. This way the children gain ownership of the community music making. They are often observed re-enacting elements of the session during free play. Group music making is a powerful tool for strengthening a community through a fun, shared ritual activity. Kirschener & Tomasello (2010) have demonstrated that shared musical experience increases voluntary supportive and helpful behaviour

following the activity. Children who have made music together using rhythm, song and movement were much more likely to empathise with and help each other.

Musical free-play work requires a high level of improvisational skill. We may provide a stimulus, such as one or several large musical instruments or a bag of silk scarves, and see what occurs, how the children respond and interact. Sometimes the stimulus is activity or objects already in the setting. We support play while allowing the child to lead. This requires sustained shared thinking, empathy, authenticity and playfulness. A large focus of our free-play work is voice play, encouraging free vocalisation during activities.

WORK WITH NURSERY PRACTITIONERS

Our professional development work with practitioners and artists is taught by playing games and exercises which take participants through a process of playful spontaneity, empathy and working communicatively outside spoken language; a practice of improvisation. A typical adult training session involves working non-verbally, having conversations in made up languages where facial expression and gesture become essential to convey meaning. Observing and experiencing these nonsense conversations, the musical nature of the communication, its pitch, intensity and rhythm, becomes very clear. We also emphasise modelling voice – extending vocalisations accompanied by movements; modelling facial expression and eye contact; and modelling play around anticipation and release. The majority of practitioners we work with state that their practice is transformed by working musically although they initially find it challenging. Their perceptions of children's communicative competences are reframed and their confidence levels are significantly raised in working with gesture, voice and expression.

IMPLICATIONS

There is a lack of understanding of the communicative competences of young children. As numbers of two-year-olds in nursery places increase, it is important to be aware of the challenges which lie ahead.

There is a great deal of fear around music making and singing in nursery practi-

tioners. This is a major challenge related to commonplace negative associations and lack of confidence in being musical. This extends to being funny and foolish in front of colleagues. Funniness is not widely or overtly regarded as having pedagogical value and yet we know that funniness appeals and engages. Improvisation is positively discouraged throughout education; the idea of not having a plan, seeing what happens, tuning-in, and responding in the moment is extremely difficult for many adult practitioners. However young children are expert improvisers and to fully partake in authentic communication with a two-year-old will necessitate both improvisation and communicative musicality. It is therefore important that an understanding of communicative musicality and a practice of improvisation, those primal and instinctive modes which are common to all humans and which we have all experienced at some point in our lives, are recognised as pedagogical tools in early childhood.

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WHAT'S THAT NOISE? RECOGNISING AND SUPPORTING YOUNG CHILDREN'S MUSICALITY

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ABSTRACT

This practice paper will aim to describe and support the making and use of a film developed by musicians and early years practitioners highlighting the importance of observation, recognition and extending musical activity through the children's play. It will describe the pathway taken to achieve this film as an example of one approach that we can use to engage in music in the early years.

INTRODUCTION

In 2011 a new National Plan for Music Education in England UK. 'The Importance of Music' (November 2011) sets out benchmarks for pre-school children which includes targets to

> "express and communicate their ideas, thoughts and feelings by using a widening range of movement and a variety of songs and musical instruments and recognise and explore how sounds can be changed, sing simple songs from memory, recognise sounds and sound patterns, and match movements to music".

It is a well-known fact that these statements can often seem daunting to early years practitioners many of whom have little or no background in music and often lack confidence in using music as a tool to aid their teaching. Provision in staff training for music is often minimal or non-existent so quite naturally music takes second place to many other activities relying often on visiting specialists, creating a great uncertainty of how to support child initiated music making. Recognising the need for specialist training and accreditation, Sound Connections of London created the London Early Years Network (LEYMN) to support all

those concerned with care, education and well -being of young children including early years practitioners, teachers, child-minders and freelance musicians. Through discussions and seminars LEMYN identified a need to document children music making more coherently, recognise and share examples of children's developmental stages and increase the understanding of the importance of music making in the early years especially that of child initiated play, an area of uncertainty with some early years practitioners.

A team of three musicians and an early years specialist from the network of LEYMN worked together to develop a 'spotlighting' film; 'What's That Noise? 'This film, with the aid of the funding body Youth Music shows how we can deliver music by observing, recognising and extending children's own interests and that music is everywhere as it weaves its way throughout everything that children do. This film was released in March 2013 at a London based conference with a view to reaching a wider audience by dissemination to regional, national and international networks via YouTube.

FIRST MEETING

The initial meeting of three music specialists and an early years specialist was chaotic with many ideas of what to film, how to film, and then how to collate the ideas to provide a story line. Following an intense period of discussion we agreed on some common threads that would weave their way through the whole film. The story line for 'What's that Noise' drew upon 'The Cycle of Musical Discovery', Extending Children's Innate Musicality written by Marjorie Ouvry (2003) (See Figure 1 below). It describes how we can listen and observe recognise musical potential, participate sensitively helping children make connections and then plan for musical extension whilst children play and explore their world.

This cycle reflects the work of theorists such as Froebel who believed that,

"Play is the highest expression of human development in childhood" (Froebel, 1887);

Vygotsky who believed in,

"scaffolding, which relies on careful observation of what children can do and planning a curriculum which challenges their current capability"(Pound, 2005);

and Isaacs who emphasises the importance of play and said that,

"no experimental scientist has a greater thirst for new facts than the healthy active child" (Isaacs, 1929).

'What's That Noise' would highlight the importance of collaborative work between child and practitioner and focus on:

- Recognising what is already happening
- Observing musical behaviours
- Recognising the Elements of Music
- Recognising how sounds are made
- Discussing how practitioners can respond and extend these activities
- Providing enabling musical environments

FILMING

Filming took place using four nurseries from inner and outer London. The children aged between three and five years old were from multi- ethnic backgrounds, attending these settings on a daily basis. Filming was taken mostly at free-flow

time inside and out and took over four months to complete. These early years settings were chosen by the team for various reasons including: settings displaying good examples of current theories of 'child led 'practice and because of existing contacts aiding the administration and permissions needed when filming very young children. All settings showed interest in learning about this approach and were curious about 'child initiated music play'.

> "Very young children's musical behaviours can be so embedded in all else that is going on that it is understandably difficult to know what one is aiming for and what it look and sounds like when you have it." (Young, 2003)

THE FILM

'What's That Noise' begins by recognising what musical activity is already in place. It highlights the fact that regular sessions of singing and musical instrument playing as a group is commonplace in most settings. Whilst understanding that this is accepted activity it questions whether in addition to the group music we offer we are recognising the musical explorations of our children at play? Children take note of what adults pay attention to and it suggests that if their musical explorations are neglected they might stop being curious about sound and music altogether.

> "It is vital that adults join in spontaneously with what the children are doing and through their enthusiasm and interest, reinforce learning."
>
> Pound & Harrison. (2003)

A possible solution to how we could introduce this way of working is to begin by observing children at play. Every encounter with interesting people and things in their world has the potential to become a musical starting point.
Through play the children already know about the Elements(ingredients) of Music.

By understanding pitch, pulse, rhythm, texture, duration, dynamics, rest and timbre and by identifying these features in children's play we give practitioners the language to use and allow for a better understanding of what to look for when observing. - just as we would look for fine motor and paint brush control, or recognition of light, colour and shape when children are painting freely at an art easel.

WAYS TO PRODUCE SOUND

We recognise that though play children naturally explore the ways to produce sound and that they do not need to be told how to do this.

When playing, children display an understanding of banging, scraping, twanging, shaking, blowing and vocalising whilst making sense of their world. Through observation we can begin to recognise this. Making music also requires all participants to listen and cooperate with each other. By examining ideas shown in fig 4 below we help extend children's innate musicality.

As a child explores an instrument or her voice the adult has a choice of ways to interact and intervene. We could imitate and provoke a call and response situation, describe something musically or capture a singing moment on audio file. Sometimes it is appropriate to introduce a song to an activity that supports other areas of learning. Figure 4 (see above) offers other ideas to the practitioner of how to support and extend children's own music making. We could introduce musical language for instance; harsh or soft; loud or quiet or we could talk about how we feel when we hear them play.

A SKILFUL DRUMMER

As the children play freely throughout the day the practitioner notices a skilful drummer playing with others and uses it as inspiration for his planning. At small group time the practitioner describes how the skilful drummer was using her drum to play with others and extends this activity with more children. The next session the practitioner notices that his extended ideas were then used by other children.

Paying attention to what is needed to extend the experience of the child freely playing is also important as children show interest about how contrasting sounds are made. Offering a variety of beaters may provoke more curiosity and allow the children to experiment and make choices about what they prefer.

When adults show that they have heard and responded to children's music the children delight in the experience and will come back to it again and again.

ENABLING ENVIRONMENTS

The bedrock of children's learning is what they encounter in their environment. To give them high quality instruments and sound makers is of the utmost importance so that they have sounds tools they deserve whilst exploring and composing. We plan lots of time for them to wallow in their exploration and provide space inside and out. At the heart of all this work is the creative and confident practitioner who has songs, rhymes and musical ideas to support children's ability to make sense of the world.

In this film we have shown how there is a cycle of musical discovery when adults tune in to children's innate musical lives. It is easy to appreciate children's singing and music making once we open our eyes and ears. The reasons why we should promote children's own music making seems self-evident when we see how highly enjoyable children find it.
The research is compelling. Music is good for mental and physical growth in addition it gives children pathways of successful experience to other areas of learning, but most important it is a unique means of expression to nourish us all our lives. Let us s feel empowered and confident to enable more children to make more music all of the time and let them play for where there is play'
"…there is joy, freedom, contentment, inner and outer rest, peace with the world. It holds the source that all is good." (Froebel 1896)

THE OUTCOMES

'What's that Noise' was released in March 2013 and is beginning to be shared with early years practitioners, parents, and musicians working in this field. Comments so far include the following:
"I shall watch my children differently now".
"I will be looking for music potential in their free play".
"I understand what this free play is all about now".
"It makes it easier to understand what music is all about at early years level".
"It's much than just about singing".
"I'm going to improve my musical environment".
"I need to talk to my head teacher".
"Any early years practitioner can do this".
"Nice to know I haven't always got to be 'doing music'".
"Music is happening all the time".
"Reassuring and confidence building".
"My initial reluctance for this has turned round to me being much broader minded".
"Music to my ears!"

CONCLUSIONS

It is hoped that 'What's that Noise' will result in specialists and non-specialists becoming more confident with music, more effective at observing children's music making and more capable of planning progression activities. Sound Connections will disseminate the film to wider early years professionals at seminars and via regional and national conferences throughout 2013.

ACKNOWLEDGEMENTS

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INCORPORATING SONG WITHOUT WORDS INTO FREE MUSIC PLAY

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ABSTRACT

Visible Thinking (VT) specialises in producing innovative music education projects using a multi arts approach. Presenting narrative through, music, movement, visual art and dance is an important foundation of their approach. Distinctive to the work is that it is primarily non-verbal and emphasises alternative modes of communication such as sound, symbol, imagery and gesture. The approach focuses on multi-modal expression, communication and interaction.

This project aimed to explore and understand how music can be a powerful tool for engaging hard to reach children and their families. It took place in 2012, based in a nursery for 60 children aged 2–5 and a neighbouring community space, where 30 local children aged 2 - 13 attended. The children came from a wide variety of ethnic backgrounds.

In the approach developed by VT on this project, invented composed songs were repeatedly sung and played to the children during a narrative presentation over a period of time. These songs had simple, clear melodies; clear-cut rhythmic patterning and verbal sounds that were easy for young children to learn and adapt. No recognisable words were used, making it accessible to all. The songs were then incorporated into music play sessions – adults and children used them to assist in structuring play, often blended with instruments. The simplicity of the songs allowed the adult to support or develop an activity and to carefully follow musical directions set by the child. Similarly, children sang songs to structure their own play, adjusting pace and pitch to suit whatever they were attempting to practice and learn. The VT team documented and recorded the music play, observing carefully for moments of 'visible thinking'

This model of practice proposes that when short, simple songs are introduced to children, they are able to independently incorporate them in to much more complex, interesting music play, generated from their own ideas, motivations and stages of music learning. VT will illustrate their approach with examples and video clips detailing how a song can become the structural motivator for different forms of music play initiated by children in interaction with adults.

KEYWORDS
Composed song, self-initiated, non-verbal, teaching/learning performance, singing

INTRODUCTION

In this paper we illustrate an alternative approach to early music education using composed song with young children. The paper will consist of an introduction to our working methods and a description of a 2012 project run by Visible Thinking. It will include case studies of two of the participants. We aim to show how the incorporation of simple songs without words helps to nurture the individual musical explorations of young children.

BACKGROUND

Visible Thinking was formed in 2008 and is a company based in the city of Bristol in the United Kingdom. We are dedicated to exploring new approaches to learning, particularly in the field of music education. The core members of the VT team are Sarah Moody, Sandra Barefoot and Mike Akers.
In 2012 we undertook a long term project in an inner city district of Bristol, characterised by high levels of deprivation and a multi-ethnic community, many of whom were recent arrivals to the UK who did not speak English as their mother tongue. The project was centred in a nursery for 60 children aged two – five years and a neighbouring community space, where 30 local children aged two - 13 years attended. Our aim was to explore the power of music to connect with families in a hard-to-reach community. One discovery we made along the way was how simple songs and rhythms could be used to provide a framework for children to explore their own musicality both inside and outside of the nursery. In this paper we will focus on the use of the simple song within the nursery setting. Our work within the community setting will be presented separately.

OUR APPROACH

MULTI-MODAL

We present music to the children as part of a broader palette of expressive arts, incorporating music alongside story making, movement, mark making and performance. We believe that music with very young children works best when it is one of many ways in which they are free to express themselves.

> "For art is life and life is art. Look at a child playing and try to delimit their activities by categories of the known art forms. Impossible. Yet as soon as those children enter school, art becomes art and life becomes life. They will then discover that 'music' is something that happens in a little bag on Thursday morning, while on Friday afternoon there is another little bag called 'painting'. I suggest this shattering of the total sensorium is the most traumatic experience of a young child's life" (Schafer, 1975).

TIME-BASED

Each session inside the nursery begins with a provocation. This term is borrowed from the Reggio Emilia approach to early education1. The provocation is a prompt to learning, an offering intended to inspire children to follow their own journeys through the rest of the session. Each provocation is designed to contain elements of play that we hope the children will pick up on and be inspired to pursue and always includes music, marking, song, story and performance. It is a time-based expression that encourages children to develop 'Narrative Thinking.' (Bruner, 1990, p. 5). Susan Young describes the importance of this in her report on this project:

> "Narrative Thinking, the ability to hold patterned structures in mind, to imagine possibilities and moreover to hold in mind a number of possibilities, to try them out imaginatively and think them through, are clearly sophisticated, core cognitive skills" (Young, 2012, p. 6).

The provocation lasts between five to fifteen minutes and often engenders a deep focus and engagement amongst the children. It is followed by a 20 to 40 minute free play activity. During this time children can follow their own musical and creative interests and investigations. Adults in the room support these journeys by scaffolding, reflecting back and extending children's individual explorations.

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1 For further reading on this aspect of Reggio Emilia's work, please refer to Project Zero (2001). Making Learning Visible: Children as Individuals and group learners. Reggio Children.

QUALITY INSTRUMENTS

We use violins, cellos, guitars, ukuleles and harmonicas alongside tuned and un-tuned percussion. This provides a rich palette of quality sounds for the young child.

DOCUMENTATION

The documentation of children's learning through observation, photography and Video, and the subsequent analysis of this documentation to inform the planning of future provocations is a vital element of our approach. We believe that it is only through this kind of detailed observation that children's thinking can be made visible and better understood going forward.

THE USE OF SONG WITHOUT WORDS IN OUR WORK

FIRST STEP

The singing of simple songs became a vital component in our sessions at the nursery. The importance of repeating songs on a weekly basis soon became evident when we noticed the motivation the children had for learning and singing these songs and the high level of physical expression they inspired. These songs, often accompanied by a guitar, ukulele or xylophone, would be used to:

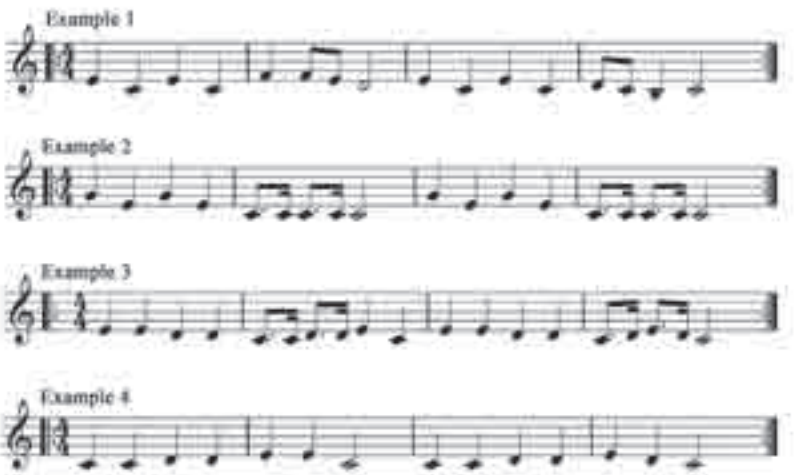
- provide a clear boundary for the beginning and end of a provocation
- model adults teaching and learning from each other. This learning included the singing of melodies and how to play or hold an instrument.
- engender spontaneous singing.

Over time we began to learn exactly what the songs needed to consist of in order to have the best chance of inspiring spontaneous singing and musical exploration. The song would need:

- short repeated phrases of two or four bars long
- simple clear melodies that work within a range of six notes (from C' – A')
- intervals that are easier to sing; i.e., avoiding a drop of a fourth and centering it around the major or minor triad
- simple rhythmic patterning
- sounds rather than words, thus singing to 'La' or 'Da'.

This latter point allows the children to focus on the pitch and rhythm of the music rather than asking them to concentrate on the learning of words. This is even more important when working with children for whom English is their second, or even third language. (Music is of course an effective tool for helping children to acquire language, but the outcome of this is language rather than music based.) Here are some examples of our simple songs:

Examples of simple songs we have used in our work



We made two main discoveries about the full value of incorporating simple songs into our work. The first discovery was noted through observing the ways in which children responded to the repetition of the song. After a few weeks of repeating the same song, the children would on numerous occasions spontaneously join in after the first bar had been sung. Whenever it was repeated, they would immediately sing again. Additionally, if the provocation's performers continued singing and playing the song during the free-play activity, some children joined in spontaneously whilst engaging with the activity of their choice. Others picked up tuned instruments and tried to translate the rhythm they could feel in their bodies and hear around them onto the instrument. Others danced or clapped and some chose not to engage but to explore their own interests. It was obvious that by repeating the song extensively, adjusting the pitch and pace to suit the children, then they were more able to explore, practice or consolidate something they wanted to achieve. Each song was very simple: so many children were able to achieve their goals. This is child initiated learning taking place within a

framework provided by, but not dictated by, the adult.

A FASCINATION WITH PLAYING THE BEAT

W is a Sudanese boy aged four years old. He is in challenging circumstances and English is his second language. We tracked him over a period of six months during the project. We soon noted his engagement with music and his fascination with how the different instruments work and the sounds and timbres they produce. He liked to work either on his own, or with an adult or with one or more children. The instruments were incorporated into his every day play and he often liked to take them outside. Prior to this moment, W has already adapted the simple song by singing a variation of the melody and accompanying himself on the ukulele. His intention was to master the playing of the rhythm on the instrument whilst singing the tune. In this piece of footage, W is exploring how to play the rhythm on a different instrument. The footage begins at the point when the provocation has just finished and the children are moving into the free-play activity. Here is a boy wanting to discover how to beat out the rhythm of the song. We imagine that he is intrigued as to why the song has so many different beats but it feels natural to only play some of them. His question may be 'why do you play on certain beats of a song and not others?' It is important to understand what the child's focus is. W is not concerned about the pitch, it is the rhythm that is his focus.

W goes straight to the glockenspiel and plays along with the melody being played and sung around him. This means he doesn't have to sing himself, allowing him to concentrate wholly on the rhythmic task. W explores different ways to beat out the rhythm. At first he masters the playing of the quavers with alternate hands. He then explores the different options he has; playing just the crotchet beat with both hands together and alternate hands, adding in the quavers or leaving a minim gap in bars two & four. At the end of the exploration, he settles into playing the crotchet beats with both hands and leaving a crotchet rest at the end of bars two & four, before ending with a re-visit to the quavers in bar four. This footage highlights how the repetition of the known song enabled W's rhythmic development. Notable was his correct technique of use of alternate hands for the quavers.

Additionally we have noticed that children can often feel the rhythm in their body and sing it before they develop the motor skills with which to keep a steady beat. The simplicity of the song provides a good environment in which to do this.

Vignette 2

MOVING IN TIME TO THE SONG

N is a two year old Sudanese girl in challenging circumstances, with English as her second language. She has significant needs and hearing difficulties and needs a high level of support. We tracked her for a period of six months noting her absorbed engagement whilst watching the provocations. During these she would often dance to the music and follow the narrative structure closely. Then in free play activity she would explore the instruments, playing tuned percussion, harmonica and drum. Later she demonstrated the ability to lead a sophisticated rhythmical conversation with a practitioner on the djembe.

We had begun to sing the simple song again, allowing Sarah to support another girl's language development through improvising words and sounds to the rhythm of the melody. N is playing with us on a drum when a girl from the older class enters the room. She joins in on a different drum for a short while and then does a short stepping dance phrase with her feet from left to right. N watches her intently throughout.

MUSICAL ANALYSIS

The song provides a framework for N to explore and master different physical responses to the song. The crumpled paper on the floor had been part of the provocation, but it also makes a satisfying percussive sound. This motivates N to stand up and dance on the paper mirroring the steps of the girl who entered a few moments before. She dances like this for about five minutes and would have gone on longer if time had permitted. Again the pace of the song is slowed down to allow her to keep up with the beat. She explores different steps, sometimes on the crotchet beat, sometimes the minim, she tries to jump on the beat (which is more difficult!). She moves her body sideways and claps. The beat is slow and thus a greater skill level is needed in order to pre-empt where the beat will fall before it happens. To do this, she has to move her arms backwards, judging the point to move them forwards again at the correct speed, adjusting where necessary, in order to clap in the correct place on the beat, only to take them off again in time for the next beat. N's arms are shorter than most children of her age and thus her ability to keep time to this slow pulse again shows her talent for music.

FIRST STEP CONCLUSION

Both these examples illustrate how the use of the simple song extended each child's very different individual musical interest. This was achieved by introducing and repeating a simple song over numerous sessions as well as during a single session. Due to its simplicity the song could subsequently be adapted by the adult to tally with any individual's particular needs. For the child, this is an environment in which he/she has space to explore their own understanding of the elements of music through a familiar piece of music that they have most likely already learnt to sing.

SECOND STEP

The second discovery we made during this project became apparent through the documentation of individual children. This documentation showed us that the simplicity of the song allowed the children to easily change and adapt it according to their own interest. These recorded moments often took place long after the provocation and song had finished.
A child sings whilst playing an accompaniment on a ukelele
This is the original melody.

Child W varies the original melody.

The choices that W has (unconsciously) made in order to create this variation are musically sophisticated. Not only does he vary the second and fourth bars, he introduces a harmonic shift in bar three from the route to the fifth. This version might be the result of W forgetting the original melody, but however he came to create this W has produced a variation on this theme just as an adult composer might do.

We can reproduce the rhythm of the tune easily with his voice but keeping the beat with his hands by strumming the ukulele is a more difficult task that he is working on. He has to practice the speed at which he moves his hand, if he

gets behind or in front of the beat then he must either speed up or slow down to fit into the rhythm again. He is doing two things at once, singing and playing together, so he has to make a decision. Does he play the 'silent' crotchet on the fourth beat of bars two and four or not? He also has to negotiate the strings. These only 'work' if his hand moves across them in a particular way, otherwise the hand will 'get stuck' behind the strings. It is obvious from the footage that We understands what he needs to do to achieve this and is very close to doing so! We also changes the key in which he sings. This may be so that he can satisfactorily reproduce the musical idea in his head. The key he starts in is just sharp of A major which is the dominant pitch coming from the Ukulele. (Ukuleles are always tuned at the beginning of the sessions but go out of tune when the children explore them.) The A is a little too low for his range. He then re-pitches his voice up to E major (as in the example above), E is another pitch that one of the ukulele strings is tuned to. Again, this ability to modulate from one key to another is a sophisticated skill that even experienced singers find hard to do! This example highlights how the simplicity of the song allows for it to be easily changed and adapted by W, resulting in him hearing a variation on the theme. It also allows him to practice the motor skills needed to play the ukulele as well as how to sing and play an instrument at the same time. It is also examples how a quality instrument can engender spontaneous singing.

SECOND STEP CONCLUSION

These examples illustrate how the various aspects of our work contribute to the creation of an environment that allows for a wide variety of individual musical explorations. Compositional simplicity, quality instruments, repetition, time-based and multi-modal provocations, the creation of a child-centred space and most importantly, documentation, without which, this paper could not exist.

CONCLUSION

The watchword in all this is simplicity. The musical skills needed to create this environment can be grasped by anyone. This work is not just for the music professionals, but contains simple practical ideas that the early years practitioner can readily use. Our hope is that this can provide a valuable addition to the more traditional adult-led singing activities that presently dominate our early years settings.

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MAKING WAVES: A STUDY OF AFFECT ATTUNEMENT IN YOUNG CHILDREN'S MUSICAL PLAY

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ABSTRACT

This study explored an area of music play with nursery-aged children, related to the concept of 'affect attunement', and in particular 'vitality affect'. The research was part of a project to engage practitioners into tuning into their children musically. The study primarily utilized observations through video and field notes, joint reflections between the musician embedded in the nursery and the researcher, and informal interviews with children, practitioners and parents. The data was analysed jointly by the musician and the researcher and shared with practitioners in order to elicit their views and to support their engagement with the research project. A wide range of musical activities were undertaken, many arising from the children's interest in exploring the musical opportunities presented to them in an open ended way. A number of issues arose about power relationships and understanding of roles.

INTRODUCTION

"Children's Centres are at the heart of the Government's Every Child Matters: Change for Children programme…the key vehicle for providing services for families, to lift children out of poverty, by enabling parents to work and to include both educational and health outcomes for children." (Children's Centre Toolkit section 2). The aim of this Youth Music funded project was to raise awareness of music making and its benefits for children under five and to improve overall standards of music leadership in the early years sector. This study took place in an area of social and economic deprivation where unemployment was endemic and aspirations were low. It was essential that the study was designed carefully to be inclusive and non- judgemental. There was a perception amongst the practitioners that they could not 'do' music and preferred to sing

well-known nursery rhymes and use simple percussion instruments and music tapes. The Operations Manager of this Centre was visionary in embedding an early years musician to support and extend the range of musical experiences for the children. However, there was a perception amongst the practitioners that the musician was an entertainer and an expert and therefore they would participate in her sessions as observers rather than initiate or develop aspects of practice they observed. The challenge was to find ways of tapping into their natural empathy with the children and to extend it musically to develop new and meaningful modes of communication. In reviewing some initial video footage, there was a musical interlude between the musician and a child where there appeared to be an exchange of energy. Speaking about this with a music therapist, she identified Stern's (1998) concept of affect attunement and in particular vitality affect, which seemed to be an excellent starting point for the research.

UNDERPINNING LITERATURE

Framing the research within the nursery was the Effective Provision of Effective Practice (EPPE) study (2004) which raised many issues related to quality in early years provision, key amongst them the concept of sustained shared thinking in order to build firm relationships which support and develop children's thinking skills. Sustained shared thinking is defined as 'an episode in which two or more individuals 'work together' in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc.' It requires both parties to contribute to the thinking and it must develop and extend. Elfer, Goldschmied and Selleck (2003) emphasise the importance of building these relationships in quality provision. Much of this thinking builds on the pioneering work of John Bowlby (1953) from the 1950s. Goldschmied and Jackson's work on treasure baskets (2003) provided the impetus for creating the music treasure baskets with babies to nurture their developing capacity to use all their senses in a concentrated activity.

Daniel Stern's work on the 'Interpersonal World of the Infant' (1998) looked in detail at the sense of the subjective self.

> 'Affect attunement is the performance of behaviours that express the quality of feeling of a shared affect state without imitating the exact behavioural expression of the inner state.' (1998, p.142).

It is important to note here that this state is a recasting or restatement of a subjective state and is not imitation or simply mirroring. He further elaborates this state when defining 'vitality affect' stating that 'these elusive qualities are better captured by dynamic kinetic terms, such as surging'…'fleeting'… 'explosive'…'bursting'.

More recently Gerhardt (2004) discusses the free flow of information around all the systems, both internally and externally, making adaptations to current systems possible. This rapid exchange of emotional information is defined by Field (in Gerhardt) as 'psychobiological attunement'. Alongside the psychological aspect of exploring this phenomenon is the musical focus, exemplified by the work of Malloch and Trevarthan (2009) into 'communicative musicality', which they see as a dynamic and sympathetic state allowing co-ordinated companionship to arise.

> 'Vitality affects are made up of particular patterns of tension, often involving periods of heightened excitement and ending in a dénouement.' (2009, p. 309).

They are compared to musical phrases in terms of duration (2-5 seconds) and in experiential qualities, where two people meet in a meaningful and motivating shared experience. Elliott (1995) develops the concept of the interdependency of thinking and feeling, cognition and affect, leading to deep satisfaction or 'flow'. This term was coined by Csikszentmihalyi (1990) referring to it as play with total involvement. Young (2004) refers to the concept of 'tuning in', enabling a two-way process which triggers an interaction between the artist and all dimensions of the setting.

These concepts represent aspects of research into the development of a person's capacity to pick up on another person's state thus enabling one to adjust to their needs in terms of communication and well-being.

METHODOLOGY

This study was ethnographic, qualitative, interpretive and reflexive. Ethnography perceives social research as needing to examine situations through the eyes of the participants, and it was essential in this study that all the stakeholders felt

included and valued. Interpretivist theory is emergent and arises from particular situations grounded on data generated by the act of research. It looks at the ways in which children interact with the cultural artefacts that comprise their world. Reflexivity refers to the way in which all accounts of social settings (descriptions, analyses, criticisms etc.) are mutually interdependent and allow for a flexible approach to the design of the study to embrace ambiguity and uncertainty.
It was feminist in nature in that it involved the researcher and those being researched and implies change. The workforce in the early years is predominantly female and in this setting there are no males. Feminist post-structuralism seeks to understand power relationships of people working together, and this was one of the emerging themes in this study.

The methods used to gain data consisted of a baseline questionnaire as this is a useful instrument for collecting survey information, providing structured data which is comparatively straightforward to analyse. Semi- structured interviews represent knowledge as generated between people, acknowledging the social situatedness of research data. Observations offered the opportunity to gather 'live' data from 'live' situations, to be open-ended and inductive and to enable me to elicit an understanding of the context. Practitioners were encouraged to keep reflective journals and the musician and researcher made desk and documentary analyses of all the data.

MODEL OF WORKING

Key points of this model were of collaborative working between the researcher and the embedded musician. Practitioners were able to engage in detailed observations and time for reflection which boosted self-confidence and self-esteem, the 'I can do this' thinking of one of the practitioners. Constant dialogue enabled an adaptable and flexible approach to research, utilising Bruner's (1960) model of a 'spiral curriculum' where concepts are revisited in increasing levels of complexity. In 'The Process of Education', Bruner demonstrated his particular view of constructivism, namely that children actively construct their own knowledge based on what they know now and what they have known in the past. Involvement in this process was dynamic and affected all professionals involved in the model of social learning which relates to Wenger's Communities of Practice

(1998) as a broad conceptual framework for thinking about learning as a process of social participation and mutual engagement.

DELIVERY

A wide range of activities to promote thinking about musical contexts, were designed for both practitioners and parents to participate in. The launch of the project, Music in the Atrium, included a variety of props, puppets, recorded music, fabrics, bubbles, pitched percussion and large drums that the parents could participate in with their children in the shared communal space in the setting called the Atrium. The musician also lead whole group circle times of structured musical activities with guitar and flute, props and puppets and instruments for children following children's interests and development aims of the Early Years Foundation Stage guidance. At the same time, there were opportunities for free exploration and instrument improvisation in small groups, with freedom of choice to explore sound makers and to interact with the musician. The development of a 'sounds' treasure basket, a special activity for babies, included a range of natural materials with interesting sound making potential. There were opportunities for older children to engage in Heuristic play, outdoor play with natural materials such as cardboard tubes, pasta, rice and drums to explore their sound making potential alongside parental involvement. Parents were also involved in outdoor musical games, 'musical sports day' including egg shaker and spoon race, musical obstacle course, musical statues with staff, parent and child teams.

These activities were designed to enable practitioners and parents to feel ownership of the project where their views of their children's particular musical play and interests were discussed. This enabled the researcher and musician to introduce the concept of 'affect attunement' to a largely sceptical audience, where musical bonding moments, special musical moments spontaneously occurring between children and child with adult, were facilitated and explored for wider pedagogical principles.

CHALLENGES AND POSITIVE OUTCOMES

The low level of qualifications of the practitioners appeared to produce low aspirations professionally for themselves and the children in their care, resulting in a culture of disengagement. Practitioners saw their role largely as leading the child's development rather than following the child's lead, clay modelling rather than Schaffer's (1996) mutuality model of socialisation which envisages child and adult having reciprocal effects on each other's behaviour.
Being able to review video footage with practitioners was a distinct benefit and enabled them to feel proud of their own and their children's achievements in a way not available to them before. Modelling good practice with specialist resources had a tangible effect on staff morale and they were able to see how following the child lead to pleasure and excitement for both parties.

FINDINGS

There were rich moments of opportunity for the musician and practitioners to engage in sustained shared thinking, but the moments of 'affect attunement' for the most part occurred between musician and child. These moments clearly showed the need for further investigation into finding the acts and processes that let others know what you are feeling, what you wish to convey and how you want to communicate with another person through music. It is important for the adult to read the child's feeling state from his or her overt behaviour and to tune into that sensitively and effectively. The dyad of researcher/musician had an impact on the study which created a ripple effect with the practitioners who started to respond more musically to the children. It was essential to build trust and rapport with the practitioners to engage them in the study and for them to see the benefits of supporting an innovative way of being empathic with their children and nurturing other ways of communication.

The issue of power relations and the ability to 'let go' arose, as practitioners found it difficult to envisage a model of working which was beyond their direct experience and training. Their perception of the musician as expert meant they were less able to envisage their own role within the study in a positive way. The moments when they were successful were fleeting but memorable, as evidenced

by the way they approached the activity on a separate occasion with confidence. The parents who were involved in the study were enthusiastic about their child's obvious delight in the musical experiences being offered, and it was gratifying to see grandparents also attending some events and engaging with the children.

However, there is more work to be done in exploring the concepts of mirroring, echoing and empathy, possibly through abstract dance and music to explore the expressiveness of vitality affects and how this can be successfully translated into effective practice.

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'MUSIC MOVES'

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ABSTRACT

In this presentation the wider implications of music through movement will be explored within an Early Years context. Young children move intuitively and spontaneously to music. They seem to grasp that we don't have a body, but that we are our body. Their body is also their first instrument and tool to make music. What better way than to give them a chance to explore music through this 'instrument' they are longing to play!
This presentation will look at the principles of one of the famous music educators at the beginning of the last century, Emile Jacques-Dalcroze, and their application to working with young children under five. Do his discoveries and principles apply to our work with very young children?
Dalcroze worked by improvising at the piano, students having to respond and interpret the musical elements through whole body movements in the space. Practitioner-led tasks (related to musical elements such as pulse and beat, tempo, melodic phrasing and pitch, texture and timbre) form the core of all activities, leaving much room for imagination, internalisation and interpretation. However, when working with Early Years, the practitioner needs to allow the children to lead and work at the children's level. Stories and images engage the children, leaving much room for playful, free exploration.
Can we adapt Dalcroze principles to work appropriately with young children? Recent research challenges all of us to re-consider this. We are learning more about the importance of movement in the development of neuro-physiological pathways in young children (Sally Goddard Blythe, 2005) and how it can promote well-balanced development. We read also about the massive increase in obesity and hyperactivity in children. We are discovering how music affects our brain development (Minna Huotilainen, 2009). Not only does music motivate children to engage and learn, but it also stimulates their desire to move, appealing to their imagination and emotional regulation.
This presentation will make use of the data of a research project with very young children, where music making was explored with two groups, one with, and one without whole body movement. Film clips help to visualise the outcomes.

KEYWORDS
Music, Movement, Early Years, Dalcroze

INTRODUCTION

This paper comes from my 30 years experience of working as a music specialist (Dalcroze Licence) and as a music therapist with the Early Years. For the last twelve years I have worked in this capacity at a big Children's Centre in the middle of London, where I use music and movement whenever I work with children. I also train music specialists in this approach.

In these reflections I will consider the intuitive and natural ability of children to make music through movement. Many musical skills will have to be learned, but many are in place already. Children sense that music is at the core of their being. They are aware that it is a part of us and seem to know what many of us have forgotten. They 'play' music with their best and most obvious instrument: their own body, their own being. They use the instrument as it is. Intuitively, they respond to what they hear and sense in their body; they experiment and explore. They 'play'.
Before long they will be asked by adults to 'be good and sit still.' Without noticing what is happening, they will forget their original, holistic way of making music. Their music making will have become limited to the use of only arms, hands, fingers, possibly lungs, and in some cases lips and tongues. Many will have lost their spontaneous and immediate sense of connection between movement, body, mind and the music they so love.

> '... to respect constantly the child's spontaneity by adapting exercises to it, be they physical or musical. In adult lessons, however, the teacher has the difficult task of arousing motor instincts, which have been lying dormant... frozen in a prison of conventionality... too long held in thrall to the lifestyle of the ultra civilized' (Jaques-Dalcroze, 1921).

Significantly, Emile Jaques-Dalcroze (professor of composition and music at the Conservatoire in Geneva at the end of C19th) became aware of this travesty. He found that his students, although skilful performers, didn't really have any body awareness. Their music making was not internalised and therefore lacked expression and meaning. He noticed also that they found it difficult to re-connect with fundamental musical skills such as pulse, tempi and dynamics. They had forgotten 'we don't have a body, we are a body'.

Taking them back to basics Dalcroze had them walking around the room in different tempi, exploring the character of different rhythms and musical measures, and expressing themselves away form their instruments. This improved their instrumental music making. Furthermore, they became more evolved and confident as performers and musicians.

The influence of 'Dalcroze Eurhythmics' within music and dance education gradually spread beyond Europe to the whole world. Musicians, dancers and educators have been profoundly affected by his method to this day (Diaghilev, Laban, Rambert, Joos, Frank Martin etc).
This summer marks the centenary of the London School of Eurhythmics (1913-2013). Dalcroze already wrote in 1921:

> 'It is beyond doubt that there is now an almost universal deeply felt desire to reform music education. And yet the greatest confusion still reigns as to how this reform should properly be carried out, since the modifications we are seeking are only superficial' (Jaques-Dalcroze, 1921).

THE MUSIC MAKING OF THE YOUNG CHILD

"The early childhood years are crucial for using the body to respond as a musical instrument in many ways to many different kinds of music. Real musical instruments, like tools, can then become simply extensions or amplifications of the body's ability to be musically expressive" (Levinowitz, 1998).
Given the opportunity, most young children will respond to music in a physical way. Already babies will bob up and down, sway, tap, jump, become alert and animated, ready to express themselves and connect with their identity and personality. Others will sit still and listen and observe intently.
As soon as they learn to move around, they will start to use their body as an 'instrument,' experimenting and exploring their little world around them and engaging with the many sounds within it. At this stage they are playing with sound and improvising, rather than 'making music' as such. With repetition comes growing control and greater purposefulness. Checking the reaction of others, they use their movement and their sounds to connect with others. Their intention is not to become musicians or dancers, but communicators. Instinctively they

grasp that music is a powerful tool, and when coupled with movement, brings sensory satisfaction and wellbeing. In young children we observe that the two are inextricably linked.

> "Both contemporary research and the traditions of many cultures have demonstrated a profound connection between rhythm and movement. The study of rhythm can be thought of as the study of all aspects of flow of music through time. We experience rhythm as the flow of our movement through space. From the developmental perspective, children must experience rhythm in their bodies before they can successfully audiate rhythm in their minds" (Levinowitz, 1998).

The principles of the work of Dalcroze are based on these same connections. Before exploring how this method might inform music making in Early Years, it is important to lay down clearly the core principles of traditional Dalcroze methodology.

As a rule the practitioner leads from his instrument. Dalcroze led from the grand piano. Whilst other instruments are used, the piano with its rich melodic, harmonic and percussive possibilities remains a powerful tool. What matters most is the musical richness, sensitivity and adaptability of the improvisation and how the student then responds bodily to tempo, style, key and meter. These principles lie at the heart of Dalcroze. In reality however, I have very rarely had a piano at my disposal while teaching in various settings. (More often than not there was none or at best a keyboard with no pedal.)
I will try to present the teaching and learning process of a Dalcroze session as follows:

PHASE ONE

The students are called upon to move in the space given. The music is heard with the ear, expressed though the body, and the two inform each other. Through physical engagement with the rhythmic and melodic components, the students' musical awareness increases. Signals embodied within the music call for quick physical responses, which demand a high level of attention and alertness.

PHASE TWO

The individual student seeking to externalise the music physically, perceives this as her own exploration and interpretation. The role of the facilitator-teacher is to catalyse physical responses to the music. Through this sensory, kinaesthetic experience of repetition and memory, the student comes to own the total musical construct, comprised of cognition, internal visualisation and muscular memory. Through repetition this experience is further deepened and leads towards a conscious awareness of the musical elements.

PHASE THREE

A cognitive as well as a sensory analysis starts to happen naturally. The student is now ready to understand and analyse, order and gain control over the task, repeating it and adding her own expression and interpretation. Often working with a partner or teamwork is used to enhance the outcome and add another challenge. As part of the last phase, musical notation and visualisation is now achievable.

WIDER OUTCOMES

The fact that our bodies are moving in the space together with others, brings a whole set of other teaching aims and outcomes. We 'play' with the space, with different directions and levels in our own personal space, also relating and adapting it to the shared space with all the other participants. Being sensitive to others and team work within the group is a main task, often enriching our experience and opening more creative possibilities for the whole artistic expression.

Dalcroze topics, which might be worked on, are manifold. For example, Time – Space – Energy typically it is at the core of every activity:

> A ball rolled between partners, synchronising the phrasing of the musical melody can visualise this: Varying the length of the distance between players and adjusting the energy used to cover this distance across a certain distance in order for the ball to arrive at its destination precisely at the end of each musical phrase is a most musical activity. It is not only a very satisfying game for both players in their relational flexibility, but it demands control and dexterity, musical sensitivity, and an awareness of anacruse, cruse and metacruse.

The core aim of the activity is always to raise musical awareness and skill, such as a rhythmic concept, awareness of a harmonic sequence or mode, or a musical form like a canon or a rondo.

As we use our bodies in space, we gain agility and flexibility in our reactions. We become more aware of how to use our body efficiently and economically. We develop spatial awareness and hone our social skills as well as strengthening our bodies, posture, sense of balance, dexterity and co-ordination. In short, we gain control of our movement, our bodies, ourselves. Much attention and care is paid to self-expression and the need to communicate with others, to be attentive, tolerant and empathic, to partner and teamwork.

As an example, we might work on 'simple and compound time', sensing the difference in character and intention, realising its intricate rhythmic possibilities and subtleties, by stepping, turning, swaying and turning, including singing, beating and tapping. Carefully chosen examples from the standard repertoire highlight the topic and bring the intention of the music to the fore. The creative process expressed by the students individually and in group work leads to a balanced and satisfying experience. Within the scaffolding of the musical topic and the process of getting to know it, the student is invited to create and express their own interpretations, often creating a choreography - either as an individual - or as part of the group. The level can range from young children to professional level.

Having looked at the Dalcroze method, we can now return to the question lying at the heart of this paper:

CAN WE ADAPT DALCROZE PRINCIPLES TO WORK APPROPRIATELY WITH YOUNG CHILDREN?

Children are experts at experiencing what they learn in a holistic, kinaesthetic way. Music through movement feels obvious and apt. The adult has to offer a safe environment where the child feels 'held', excited and challenged. This is a precious time, where the first seeds for a lifetime love for music are planted.

What is the core of our intentions working with that age group, other than to give them the opportunity to express themselves and awaken their love of music and movement?

Do we really believe that their natural creativity and way of learning is best left to them? Should they be free to explore and find out for themselves, as they are naturally inclined to do? Many current theories affirm this process as the best way. The adult role is there to encourage their explorations by watching, often waiting and holding back, interacting and responding if invited by the child.
Current early years educational guidelines emphasise free, child-led play, and exploratory improvisation through making sounds on instruments. This provides one aspect of a child's need and way to learn and develop. In my opinion, however, creativity has a wider spectrum than just free exploration. Children like to explore within a framework, where a challenge with a focus can lead to giving them a sense of achievement. They respond if given an appropriate task, appealing to their exploration of the cognitive and imaginary world, helping them to sharpen the tools they need in an atmosphere of playful, meaningful interactions.
I suggest, that should Dalcroze, the charismatic educator, adored by children, have had the opportunity to work with very young, he would have risen to the challenge of meeting their needs in an original and appropriate way. To my knowledge the youngest children he worked with were four and older.

Time and time again, I witness very young children's musical intuition, while moving to music. They have to be encouraged to listen, but they respond often with accuracy to the music and in particular to the beat and different tempi, recognising and memorising musical signals and associating them accordingly. This is possible with children who are themselves pre-verbal, and who would only understand the simplest of verbal instructions. This applies equally to special needs children for whom language is often a barrier.

Only basic and rudimentary musical concepts are appropriate and possible, as there is still only a minimal cognitive understanding (we are talking about young children under 6). But innumerable variations of these basic concepts are coming alive and many additional aims are met through the movement. We have the privilege to witness, observe and encourage the first and most impressionable phase of a child's artistic awakening. The child will go away exploring, inventing and creating with bag of tools just a bit more confidently and intentionally.

The teacher's task is to engage the children emotionally, involving them totally

and motivating them to listen. They delight in a catchy rhythm or a great melody, which opens out a whole new world to them. The pool of music is vast and rich if appropriately chosen for that age group. This often means working with the voice or an instrument, which can be carried (I use my voice, drums or accordion and the piano only after I have caught the trust and attention of the children), modelling and supporting them by being amongst them. Communication with that age group asks for eye contact and proximity. Verbal instructions are often ignored and not understood, unless directed at the individual. Being part of a group is exciting and helps to feel integrated and safe. Learning to act as a member of the group, following verbal instructions has to be practised. Music therefore is often more direct and certainly more powerful. The traditional Dalcrozian way of leading movement through music, while sitting behind the piano simply does not work in the early stages, at least with very young children. They need the physical and musical proximity.

Once face-to-face trust and communication has been established, the music itself can take over the lead and the individual child can begin to gain independence and confidence. The use of the piano is possible, offering, as it does, a wonderful rich variety in melodic, harmonic, rhythmic and percussive improvisation, responsively and sensitively accompanying and adapting to the movement. The rapport is now between the child and the music itself, rather that the between child and the practitioner. Ears and eyes have been opened.

How can children be engaged at that emotional level? Young children are not polite; if they are not engaged, they simply walk off or look out of the window. We need to relate to their world and understand their emotional and physical developmental stages, learning to see through their eyes. For many it is a challenge to be in an empty, unfamiliar room. We therefore play musical games, which explore the room at the same time. Readers will be all too familiar with the many ways of engaging children through props and stories, 'holding' them with routines of familiar songs and rhymes. When in adult led sessions, all too often the children sit for a very long time in one place, possibly using hand/arms. Whole body movement offers them active music making throughout. Children's ideas emerge; sounds and vocalisations become a natural part of their expression and imagination.

The movement always includes floor time ('tummy time'), at least once in every session, commando crawling, crawling on all fours, rolling and balancing, motivated through music and images, i.e. the beloved animals from the jungle. These movements are important towards the future development of the child's dexterity, starting from gross motor movement before being asked to attempt fine motor tasks. Some children find this very easy, others struggle and hesitate, needing encouragement and modelling. There is great appeal and fascination in pretending to be 'Leo the Lion is the king of the Jungle'; it feeds manifold emotional, sensory and auditory needs, taps into the children's imagination and playful, improvisatory world. Lets get down there, crawl and roar along with them and believe that it is worth it every time.

> "The overall object of a session in EY can mean that music is more of a means rather than an end at this stage: a case of learning 'through music' rather than 'for music" (Bachmann, 1991).

Another most important basic musical concept is simply learning to stop and start. It is a skill applicable to anything we do in our daily life, in a practical but also metaphorical way. But children find incitation and inhibition really difficult. The place where the brain organises this holds essential synapses, 'switches' where most movements are controlled.

> "Movement play in the early years can introduce the body as a fundamental tool towards learning and cognitive development. To stimulate a child through movement and sensory exploration can aid development in a range of areas and further the brains capacity to learn. A child's experience of movement will play a pivotal part in shaping his personality, his feelings and his achievements … These are higher abilities built upon the integrity of the relationship between brain and body" (Goddard Blythe, 2005).

Locomotor movement (movement which travels in the space) represents the basic rhythmic elements, confirming the link of movement to music through walking, running and galloping/skipping. Even very young children who have only just started to walk and run, can manage this skill, unaware that they are doing it. Others have difficulties in discerning if their body is walking or running, blissfully unaware and out of control. Music is there to provide the regular beat

and rhythmic patterns, supporting the child with a sense of control and connectedness and sensory satisfaction. Young children are re-assured by this, intuitively aware of health and wellbeing.

> "The ability to establish and maintain one's balance has long been recognised as an important element of skillful movement behaviour... Indeed balance has been identified as one of the many abilities underlying the motor performance of both young populations and adult groups..." (Goddard Blythe, 2005).

Many other musical concepts are experienced through children's ideas, as their imagination inspires them to move. The teacher is there to provide a framework within which the children can offer ideas. She observes and responds quickly and flexibly, affirming, supporting and commenting.

Many models of music making with children are available, often claiming wonderful outcomes and 'results'. Music through movement seems a very appropriate approach, more topical then ever, encouraging children to focus as well as relax. Like water to a plant, the power of music and the love of movement together can enhance the child's everyday life, helping them to grow at the core of their beings.

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COLLABORATIVE MUSIC MAKING IN THE EARLY YEARS WITH UNCONVENTIONAL PENTATONIC INSTRUMENTS

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ABSTRACT

Three unusual musical instruments with pentatonic tuning, "The Wing", a "Hapi Drum" and a large, sit-on log drum, were introduced into several early years settings in a mid-shire county in England as part of the Youth Music funded ChIMP Champs (Child Initiated Musical Play Champions) project. Careful management of the immediate relationships between children, music leaders, carers and early years staff allowed playful musicking to be a shared, joyful, transformative experience of communicating, exploring, thinking, inventing, relating, building knowledge, and creating meaning. This paper explores the notion of empowerment of the child through use of carefully considered, high-quality musical instruments and authentic, respectful play in the early years.

KEYORDS
Child-initiated musical play, ChIMP, collaborative play, pentatonic musical instruments, The Wing, Hapi Drum, Large Log Drum, musicking, Foucault

INTRODUCTION

This paper stems from observations of child initiated musical play with three unusual pentatonic musical instruments in the context of "ChIMP Champs – Child-Initiated Musical Play Champions". The instruments were "The Wing" (a metallophone), a Hapi Drum (a circular, steel tongue drum) and a large log drum. These are musical instruments which are rarely, if ever, found in early years settings. The instruments' success in promoting meaningful child-initiated musical play and collaborative play during this project suggests that it is time to revisit the nature, purpose and role of musical instruments in the early years.

BACKGROUND

ChIMP Champs was funded by the UK charity Youth Music through a city-based Children's Centre in England. The primary aim of the funder was to promote a culture of high-quality music making activities in the early years settings within the Children's Centre's reach. As it turned out, the music leaders facilitated a balance of child-initiated musical play and adult-led, playful musical interventions within participating settings. Five early years music leaders guided 95 free-play sessions and group music sessions for children aged between eight weeks and four years old in eleven groups in Children's Centres, Nurseries and Playgroups between January 2012 and March 2013. Sessions were diverse in their nature to accommodate the unique requirements determined by each setting's or group's starting point. Each session featured children and adults being drawn in to verbal and non-verbal, multi-modal dialogue through high quality collaborative musical exploration during free play and also some core repertoire led by the music leaders and shared through a webpage (ChIMP Champs, 2012).

The project was informed by diverse yet mutually supporting theories.

- The young child was perceived as a competent communicator (Trevarthen, 2002, Trehub, 2006) and "ready to learn" (Donaldson, 1978, Bruner, 1986).
- The young child was recognised as an empowered human with a view to the future (Freire, 1996) in this case of their own music making and was given agency to direct their own musical learning by people mindful of the relationships between knowledge, truth and power (Foucault, 1977).
- Concepts of musical play in an early years setting were guided by Young's (2009) and Gluschankof's (2004) work on adult:child and child:child relationships during musical play.
- The music leaders' response to musical playfulness was rooted in Playwork theories developed by Sturrock and Else (1998).
- The importance given by music leaders to ensuring a nurturing and supportive environment was informed by Bronfenbrenner's Ecological Theory (1979) and an acceptance of the social nature of learning (Vygotsky, 1978).
- Promotion of music as praxis; as mindful, situated practice (Elliot, 2009) given the right conditions for flow (Csikszentmihalyi, 1991) as in environmental conditions, challenge of task and rewarding sounds was an

important factor for deciding on the instruments and their positioning in the setting.

- Towards the end of the project groups consisting of young children accompanied by their carers were introduced. The work of Boyce-Tillman (2012) around recasting the musical experience (using quality instruments in a sensitively managed space) as social cooperation became embedded as the project's adhered-to tenet;
- "Children need to be given, in the process of education, the tools to re-imagine the world in order to claim their own power."
  Boyce-Tillman (2012, p. 27)

THE PROJECT'S INSTRUMENTS

A "music audit" at the start of the ChIMP Champs project revealed that all settings possessed some musical instruments such as egg shakers or setting-made shakers which were often supplemented with musical toys. One setting kept their instruments in a box in a cupboard because they were "noisy". Three settings regularly laid out small djembes, jingle sticks and rainmakers in dedicated areas; under the stairs, in a garden shed and under a covered table. All settings had small instruments available in a drawer or box as a free-play option.

In addition to using the settings' existing musical instruments, ChIMP Champs introduced three unusual pentatonic instruments. These were kept in the host Children's Centre toy library and were taken to participating settings by the project's music leaders for ChIMP Champs sessions.

Along with taking detailed field notes, music leaders shot video footage of child:child and adult:child interactions during musical free play and group music sessions. Video showing particular aspects of children's musical play or, in the style of appreciative inquiry (Stowell, 2013), showing excellent adult:child musical interactions were selected by the author for sharing in the project's training events.

The Wing, by Freenotes, was developed by Richard Cooke and is made in Colorado, USA. Eleven tuned aluminium bars are stuck to a frame of black plastic resonator tubes and it measures 46 x 41cms. The tuning is A Minor pentatonic and it is played with nylon-topped beaters. The sound is resonant, mellifluous and "dreamy". Four beaters were always made available for its play. Children's play on this instrument tended to be solitary, sustained and focussed.

The Hapi (Hand Activated Percussion Instrument) Drum is a cylindrical tongue drum 30cms high and 20 cms wide, made of steel and if played with nylon-topped beaters makes a percussive yet sonorous sound. It is tuned to D minor pentatonic and the model used in this project was powder coated in blue paint. Groups of children often gravitated to this instrument, collecting beaters and playing a "tongue" each.

This is a wooden tongue drum tuned to F major pentatonic and measuring 120cms long, 40cms wide and 40cms high. It is played with large sheepskin-covered mallets by players who can sit on each end of the drum. The log drum is particularly unusual because of its size, the fact that adults and children can sit on it, and the sound it makes. The bass notes it offers are resonant and this creates an immediate, enveloping, aural environment of sound and vibration. It is significant that players usually sit opposite each other. The instrument's bi-lateral symmetry facilitates eye contact between the players. The size of the beaters and the amount of energy that the drum can absorb with each hit is challenging to all players and seems to promote energetic, multi modal play.

EXAMPLE OF MUSICAL PLAY 1

E (female, four years old) watched as the usual gaggle of children played, "It's my turn now", quickly having a go on The Wing and having to move on so the next child could try. After the initial gaggle, J (ey practitioner) played the Wing and invited E to sit with her. A musical conversation ensued, but what was special was how they sat. Not opposite each other but E sat in the crook of J's arm, half-cuddled. J played then E played, taking turns and glancing at each other at the end of their turn. Much smiling and a rather lovely, sensitive five minutes utterly without words.
Extract from A's field notes 2th March 2012

EXAMPLE OF MUSICAL PLAY 2

M sat back and waited whilst the others played on the Hapi drum in the den. Four children surrounded the drum playing with an excited urgency and speed. M didn't have one of the four beaters available. She tried the drum with her hand then sat back and sang on so me do "I love marshmallows". Another girl sang

"I love marshmellows" (sic) "Eat them all up". Someone said "that's a fire coming up there". Another child (unseen) sang the marshmellow song. Then vigorous beating of the Hapi drum for about twenty seconds followed by animated chatter. Z loudly demanded that everyone stop, "No one talk to me sh sh stop stop everyone! Stop talking as well I have something to tell you. Marshmellow on a stick and you cook them on the fire."
The Hapi drum was the fire. The children "stoked" the fire occasionally (played it) and then cooked marshmallows on it.
Extract from A's field notes 19th April 2012

EXAMPLE OF MUSICAL PLAY 3

A group of three boys had between them turned the log drum on to its side and were taking turns lying on the plain side as a boy played the tongues vigorously. They seemed to like the vibrations on their body.

Extract from R's field notes 18th June 2012

CHALLENGES

The project's unusual pentatonic musical instruments were successful in that they tended to engender musical play which was engaged, focussed, collaborative and joyful. However, this play was situated in a wider context of relationships between adults, children, practitioners, managers, music leaders and funders. The time and effort taken to ensure that all participants were involved and informed was significant. Also, much thought was required regarding the funder's need to evidence children's progression in music making.

Contextual relationships took time to develop. For example, some members of the Young and Pregnant Group had many issues to work through including "I'm not sitting on the floor with her" and "I don't know any songs". After about four visits by the music leader and much conversation, mutual respect and trust was earned and musical activities were gradually introduced. At the end of the project, dyadic and group musical play on the projects' and other musical instruments was fully integrated into free play sessions and at this point, three members of this group volunteered to continue to co-lead the newly integrated group music session in this and other groups.

June Boyce-Tillman (2004) remarked that western culture has developed a concept of knowledge as divided into "discrete categories" and that music should not be thus, rather it should be "bound up with the wider curriculum, particularly in the areas of personal, social, cultural, moral and spiritual education". She calls for a "connectedness" within the musical experience, and beyond it to other areas of knowledge and understanding.

Boyce-Tillman's concept of connectedness arises from deep listening and free, open conversations, maybe in the spirit of conversations advocated by the theoretical physicist and philosopher Bohm (1996). He advocated for conversations in which participants acknowledged their preconceptions and prejudices and tried to build on participants' ideas to produce collective thinking beyond anything the individual participants could offer. This was achieved in the ChIMP Champs project by taking time to have those respectful conversations with all involved.

Evaluation of the project was a necessary part of the project's funding. And evidencing children's progression in music in a way that seemed congruent, appropriate and plausible was a challenge.

Efforts were made to maintain children's musical play as play and musical play was supported by careful, playful, knowledgeable music leaders. To enforce an intentional "learning" or a "framework" or even a direction to this play would have meant that the play was no longer authentic play. Sturrock and Else (1998) coined the term "adulteration" for adults' interference with child's play. It arises from the adult's need to dominate play and arises from the adult's embarrassment or fear or their need to work to imposed standards.

Towards project evaluation, we assessed the participants' progress by what they did rather than what they said. Musical processes and products as intertwined facets of music making became evident in the groups through musical play as an expressive and meaningful free-play option and active participation in group music sessions. As illustrated by the examples of musical play above, children easily added the project's quality musical instruments into their play. Children were enabled to "exercise power, agency and control" (Wood, 2010) in their musical play and could make meanings and communicate them through symbolic activity and representation in that play.

Towards the end of the project, early years professionals and carers started to support musical play on the child's terms. So there was evidence of progression. However, it was not an incremental progression from "A to B" but from one state of awareness to another.

DISCUSSION

Carl Orff (1950) recommended certain instruments for young children and his list still represents, with the exception of the lute, harpsichord and viola de gamba, the contents of a typical music box in an early years setting: triangle, cymbals, sleigh-bells, tambourine, wood blocks, hand drums and castanets. Indeed, prior to Orff in the UK, these percussion instruments constituted the instrumental core of the school Percussion Band (Adair, 1934).

In "Orff-Schulwerk Music for Children" Book One, Orff outlined the qualities of a good musical instrument for young people.

> "The tonality is limited to the pentatonic scale. In this, where the musical limitations correspond to their own mentality, small children will be able to express themselves easily without being in danger of leaning on the strong examples of other music".

Like Orff, the ChiMP Champs project advocated the use of special instruments to facilitate young children's musical experiences. The reduced (pentatonic) tonality of the instruments prevented both adults and children from playing, for example, the seemingly omnipresent "Twinkle Twinkle Little Star" and other popular tunes. This was not done from an assumption about the child's mentality but from a Foucauldian perspective. The balance of power between adult and child or even "expert child" and "learner child" was ameliorated by the unfamiliarity of the instruments' musical (pentatonic or minor pentatonic) scale and performing or recreating most conventional tunes was impossible. However, if reproduction of tunes was restricted, the creation of pleasing, expressive sounds was easy and the players' opportunities for collaborative or solo musicking (Small, 1998) within the ludic (play) space were enhanced.

An important lesson learned from the ChIMP Champs project is that adults and children enjoy playing musical instruments that sound good to them. This sounds almost trivial but it is a vital element of giving the power of expressive music making to those young children previously oppressed with typical early years' sound makers and musical toys. Pleasure and joy from expressive music creation is surprisingly easily dismissed or is conflated with the adult's delight that the child's performance matches the adult's expectation.

The quality of sound, tonality, construction, shape, method of play and pitch (including, as in the log drum, potential to produce low, resonant frequencies that literally vibrate the body) of musical instruments in the early years is something that requires far more thought and monetary investment than currently is the case. However, musicking is "a complex series of encounters" (Boyce-Tillman, 2009, p. 197). A liminal space - a transformative space – that makes children and adults joyful and empowered requires having the right instruments in the right environment.

In ChIMP Champs' carefully managed environment of mutual respect and playfulness, cooperative musical play emerged as praxis – interwoven process with product. Because the instruments looked and sounded significantly different from a conventional western classical instrument or a child's typical plaything, the child did not have to behave like an adult and the adult did not have to behave like a child. The pentatonic instruments used in this project facilitated expressive, active musical play and dialogue for all ages of participants - children and adults alike - and that was a significant breakthrough.

CONCLUSION

I offer a simple conclusion with a simple message: Provision of an environment conducive to authentic play and use of musical instruments, that are effective instruments of individual expression, is transformative.

IMPLICATIONS FOR FUTURE WORK

The author has begun further study into the nature of musical play around the log drum and the significance of eye contact between children during log drum play. The instruments named in this paper, with the addition of a wooden-keyed "Imbarimba" and a Yamaha Q-Chord, are currently being used to develop child initiated musical play and shared musical repertoire in groups for referred children with special needs. The author will also use a harpist and a pentatonic, lyre-style harp for playing by mothers who have babies in a special care baby unit.

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CHANGES IN THE MUSIC EDUCATION OF FUTURE TEACHERS AND PRESCHOOL TEACHERS IN CROATIA

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ABSTRACT

There are on-going reforms of the curriculum and modification of the education system of teachers and preschool teachers in many countries of the European Union. A new approach to the education system is defined as a dynamic, open and on-going process based on the demand that continuous professional development and continuing education is an obligation that arises out of professional ethics and responsibility of the teachers and preschool teachers. The reform of higher university education called Bologna Process has also occurred in the state of Croatia and has particularly affected the education of teachers and preschool teachers.
The alignment of studies with the Bologna Declaration at the majority of Croatian universities means the quantitative extension of the studies, which means that Teacher study has extended from four to five years and the Preschool teacher study has extended from two to three years. However, the concept of the studies does not significantly alter the qualitative dimension. Education of preschool teachers is the only educational programme, within the educational profession, still being realized by the professional study in the three year period.
Necessary changes in education require constant reassessment of existing and re-evaluation of new goals, strategies, programs, content, methods and forms of work whose implementation should lead to the raising of the quality of educational systems. Education, especially in early childhood, requires a high level of intellectual ability followed by its practical actions. The Preschool profession demands reflective thinking, continuing professional development, autonomy, responsibility and creativity of research.
This paper specifically analyses the musical education of teachers and preschool teachers during their study in Croatia, whereby it compares the curriculum of Teacher and Preschool Teacher Study prior to the Bologna process with the current curriculum of Musical education of future teachers and preschool teachers. The result of the documentation analysis will present evaluation of study progress in connection with aspects of musical competence of students at the Teacher and Pre-school teacher study.

KEYWORDS
Education of teachers and preschool teachers, professional development, musical education in higher education, musical competency of teachers and preschool teachers

INTRODUCTION

Constant changes in science, technology, culture, economy and politics inevitably require changes in education. In developed societies the main developmental resource is human capital, and its quality is substantially determined by education. All developed countries keep education as a national priority and implement those strategies of education development which contribute most to society.

Necessary changes in education require constant reassessment of existing and re-evaluating of new goals, strategies, programmes, facilities, methods and forms of work whose implementation should lead to the rise in the quality of educational systems. How will education in a specific practice respond to new demands and challenges, and will it be efficient and effective? This depends primarily on the quality of education of teachers and educators. Therefore, one of the fundamental questions with which experts and educational authorities in the field of education are dealing is

> "how to educate and prepare teachers and preschool teachers for successful performance of professional duties to ensure their continuous professional growth and development" (Rosić, 2009).

In the education system development plan of the Republic of Croatia, as of 2005 to 2010, the system of teacher education[1] has been recognized as an important priority area whose development should contribute to the improvement of the overall education system efficiency in Croatia. Until now, a complete strategy for education development has not been developed, but there has been innovation and redesign (modernization of the curriculum) in the initial training of teachers

1 The term "teacher" refers to teachers at all levels of education in Croatia: teachers in the preschool period, classroom teachers, teachers in subject teaching and professors at universities. It is a term commonly used in European terminology and implies all professional experts in education, who are defined with the prefix "educators": preschool teacher, "teacher": a primary teacher, "subject teacher": a subject teacher, "professor": secondary teacher, "professors": university teacher.

and preschool teachers (harmonization with European standards, and the introduction of the Bologna process[2]), and professional development of teachers. Alignment of studies with the Bologna Declaration, in the majority of Croatian universities means the extension of studies in terms of time needed for acquiring teaching skills, so the teacher study has extended from four to five years, and the preschool teacher study is extended from two to three years. However, the concept of the study did not significantly alter the qualitative dimension. Education of preschool teachers is the only educational programme, within the educational profession that is still taking professional studies in the three-year period. Preschool program in Zagreb and Rijeka began with the first generation of pre-university studies for five years in 2010. Education of teachers and preschool teachers includes musical education. How does music education stand in the training of teachers and preschool teachers in Croatia? In the following paragraphs, we shall consider music education and teacher training courses for teachers and preschool teachers by analyzing the available plans and programs of teachers and preschool teachers' studies in Croatia.

MUSICAL EDUCATION THROUGH THE EDUCATIONAL SYSTEM IN CROATIA

In order to better demonstrate the changes in the musical education of future teachers and preschool teachers in the teachers' and preschool teachers' studies we will show the entire musical education throughout the educational system in Croatia (Table 1, 2, 3 and 4).

2 The term "Bologna process" entails the reform of higher education. The goal of this process is to increase the competitiveness and quality of European higher education compared to other developed countries. The Bologna process started with the adoption of the Bologna Declaration in September 1999 in Bologna at the meeting of 29 European countries. Croatia has signed an agreement in the year 2001, and the process began in 2005 – 2010 year (http://domus.srce.hr/iuoun/index.php?option=com_content&task=view&id=78&Itemid=106)

Universities	College
Academic degrees (undergraduate, graduate and postgraduate education)	Vocational degree (3 years)
Integrated Teacher Studies (music courses)	**Professional Preschool Teacher Studies (music courses)**
Art Academies	
Professors of music culture	

Table 1. Higher education in Croatia

Gymnasiums	Art schools	Vocational schools	Vocational schools
4 years	4 years	4 years	3 years
Music art (1 hour weekly)	Music art (2 years per 1 hour weekly)	No music education	No music education

Table 2. High school education

Music education in the overall education system in Croatia begins in kindergarten, from nursery to preschool period of the child, in which preschool teachers have an important role in the music education of children. During the Elementary School (1st – 4th grade) teachers have an important role in the music education since it is them who teach music from the 1st to the 3rd grade, and in the 4th grade of the primary school, music culture is taught by a teacher who graduated at the music academy – subject teacher.

Class	Age	Forms of Teaching	
8	14		
7	13	Subject teaching	Music culture (1 hour weekly)
6	12		
5	11		
4	10		In 4th grade subject teacher teaches the music culture
3	9	Classroom teaching	
2	8		
1	7		

Table 3. Primary school education

Preschool :	age 6	- music
Kindergarten:	age 3-6	- music
Nursery:	age 1-3	- music

Table 4. Preschool education

In secondary education only Gymnasium schools have music education and in that case the subject is called music art which is held for one hour a week for all four years (the program is exclusively aimed at listening to music and learning music literature), and vocational secondary schools have a shortened music programme of two years (one hour weekly).

Therefore, a high school student who has completed any other vocational school (such as economic, hospitality or medical secondary school) and decides to enrol in Teacher Study (either as a teacher for class teaching or a teacher of preschool children), where music education is compulsory during the studies, he lacks continued music education during his secondary school experience, which can be seen in the tables on the education system in Croatia. Continuous music education stops in high schools with four-year vocational programs. This fact should be especially emphasized because most secondary school students with vocational four-year high schools enrol for teacher and preschool teacher study and only a smaller percentage comes with a completed gymnasium programme. It should be noted that any high school student who had music education in the gymnasium programme, in the teacher study is faced with problems in the area of music performance (singing and playing) which are not carried out continually in the elementary school music classes (because the teaching programme is open kind, so that the teacher alone decides about which music areas he will conduct and he often relies on his musical skills. Accordingly, if a teacher has not developed a musical ear, he does not teach singing but may use recorded musical examples). These musical areas (singing and playing) are not taught in high school music programmes because the music classes are directed towards the listening of music and the introduction of music literature.

During the enrolment in teacher training/study as well as in preschool teacher training/study, before the Bologna Process, high school students had an exam in music skills (musical, rhythmic, and melodic hearing was rated) which was of

an elementary character. Certain faculties in Croatia have kept this, as a rating type (rated music abilities, mostly singing, or a music theory exam which consists of questions of general music culture of exclusively musical content from the gymnasium programme, and these results are included in faculty entrance exams). By introducing the State Matura in Croatia, every High school student after passing the State Matura selects a faculty according to the State graduation results. Therefore, we can conclude that when talking about teacher and pre-school teacher study, the student has the legal right to enrol in teaching studies, without entrance exams and testing of their musical skills. That would mean that a certain number of points which the High school student acquired at the state graduation, gives him the right to directly enter a certain faculty. This decision has abolished the entrance exam for teacher training universities, as well as the verification of musical ability. These changes in the enrolment for study represent problems in further music education studies.

When it comes to the music education during teacher training/study, the debate arising from the music education practice at the Teacher education study in Croatia is that students are faced with many problems. In particular, most evident are the problems related to singing, playing instruments and carrying out musical activities during pedagogical practice (Šenk, Ercegovac-Jagnjić, 2004). We might search for the source of these problems in the musical education curriculum that is in the music courses that are present today in Croatia.
Before examining the music courses of teacher and preschool teacher training/study in Croatia, we have to note that at the teacher universities and academies for pedagogy of the eighties and nineties there were only two music courses called Playing and Methodology of Music Culture.

City / Year	1st year 1st sem	2nd sem	2nd year 3rd sem	4th sem
Zagreb			Music culture I 1 0 1.5 0 Music practicum I 0 1.5 0	Music culture II 1.5 1.5 0 Music practicum II 0 1.5 0
Rijeka	Music notations 1.5 0 1.5	Music practicum I 0 0 1.5	Music practicum II 0 0 1.5	Music culture 45 1.5 0 Music culture II 0 0 1.5
Split	Music notations 1.5 1.5 0	Vocal practicum 0 0 1.5	Instrumental practicum 0 1.5 1.5	Vocal-instrumental practicum 0 0 1.5
Zadar	Optional Music practicum 1.5 0 1.5	Music practicum 0 0 1.5 Optional Music workshop 1.5 0 1.5	Optional Music practicum 1.5 0 1.5 Choral singing I 1.5 1.5	Music culture 30 1.5 0 Optional Choral singing II 1.5 0 1.5
Osijek	History of music 1.5 1.5 0	Music culture 1.5 1.5 0	Playing I 0 0 1.5 Optional Music Child Creativity 1.5 1.5 0	Playing I 0 0 1.5

Table 5.
Music courses at the Teacher Study in Croatia

City / Year	3rd year 5th sem	6th sem
Zagreb	Music practicum 3 0 1.5 0	Music practicum 4 0 1.5 0 Methodology of musical culture 1 1.5 0 0
Rijeka	Music practicum IV 0 0 1.5 Optional Croatian music history 30 1.5 0	Methodology of musical culture I 45 1.5 0 Musical practicum V 0 0 30
Split	Music culture 30 0 0	Methodology of music culture 1 30 1.5 0
Zadar	Methodology of music culture teaching I 1.5 0 1.5 Music practicum II 0 0 1.5 Optional Music workshop II 1.5 0 1.5	Methodology of music culture teaching II 1.5 0 1.5
Osijek	Playing II 0 0 1.5	

	4th year		5th year	
	7th sem	8th sem	9th sem	10th sem
Zagreb	Methodology of music culture II 1.5 30 0	Methodology of music culture II 1.5 30 0		
Rijeka	Methodology of music culture I 30 1.5 0 Optional Folk music 30 1.5 Music Workshops 30 1.5 0	Optional Music Child Creativity 2 0 1.5 Extra curricular musical activities 1.5 0 0		
Split	Methodology of music culture II 0 30 1.5	Methodology of music culture-2 0 1.5 30		
Zadar	Methodology of music culture teaching III 1.5 0 1.5	Methodology of music culture teaching IV 1.5 0 1.5		
Osijek	Methodology of music culture I 30 0 1.5 Optional Music workshop 1.5 1.5 0	Music culture II 30 0 1.5	Optional Music workshop 0 1.5 0	

Zagreb	Split
MUSICAL ANIMATION	Aesthetics of music 30+0+0
CHORAL SINGING 1-5	Croatian music history 30+0+0
	Choral singing 15+0+15
	Development of children's musicality 15+15+0
	Basics of choral conducting 15+0+15
	Music, child and the media 15+15+0

Table 6. Optional musical courses at the Teacher Study in Croatia

Primarily we can see a variety of music courses, compared with two music courses that were present at teacher universities and preschool academies, before the Bologna Process.

From the table of the music courses at the teacher and preschool teacher study, we can see that each institution for the education of teachers and preschool teachers has considerable autonomy and freedom in the creation of music education. Mainly all studies have kept music theory (letter notations, music notation, music theory), play (music lab, instrument lab, playing) and the methodology of music (music culture with the methodology, methodology of musical culture, music culture teaching methodology).

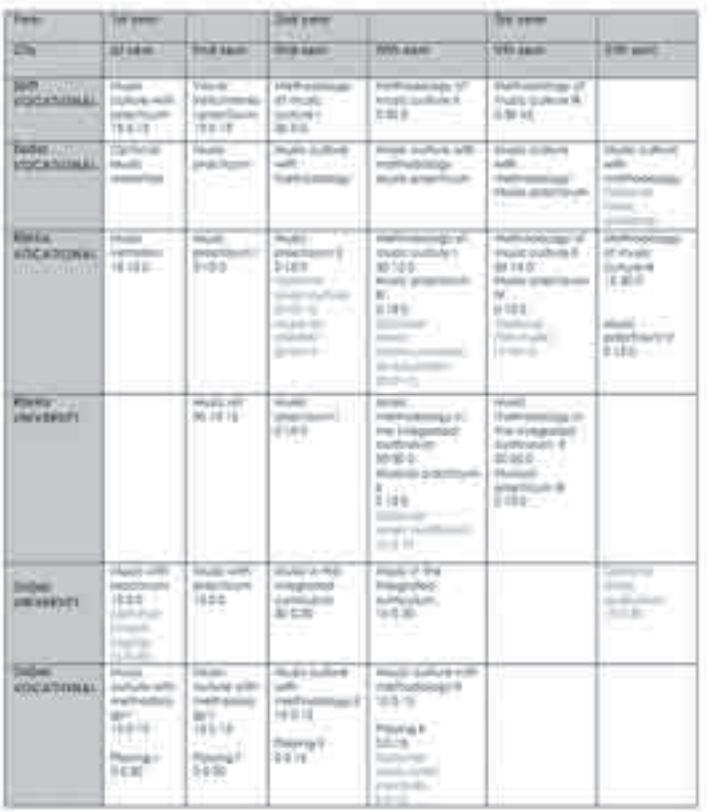

Table 7. Music courses at the Preschool Teacher Study in Croatia

In addition to the various names of music courses, we can see a different number of hours (some studies have more hours of playing, while some studies have more hours of didactic lectures on culture). We must point out that the music courses are fragmented into sections, so we talk about discontinuous music education teaching at the studies (Miočić, 2009). One of the important positive features of the Bologna programme in teacher and preschool teacher training /study in the field of music education is a relatively large number of music electives, which should enable each student to shape his own professional profile to a certain extent.

In addition to the significant differences in vocational preschool studies and university programmes for early and preschool education in Zagreb, Rijeka and Osijek, we observe a variety of music courses and a different number of hours. Such an approach for future teachers and preschool teachers, who are considering their musical predispositions and musical abilities during their study, gives a good foundation for the further need for lifelong learning and education.

COMPETENCIES UPON THE COMPLETION OF TEACHER AND PRESCHOOL TEACHER STUDY

One of the fundamental goals of identifying common trends in teacher education is the identification of key professional competencies which are the basis of initial teacher education programmes and their continuous professional development (Ferrer, 2006). Common European principles that should help in formulating a national policy of teacher education are: University degree, a profession placed within the context of lifelong learning and mobile occupations and professions that are based on partnership. Key competencies that teachers should acquire in their education are defined by three general categories: work with information, technology and knowledge, working with people and work in and for the community.[3]

The concept of competence is based on an integrative approach that sees the individual features as a dynamic combination of features that enable competent

3 Common European Principles for Teacher Competences and Qualifications, 2005 (http://ec.europa.eu/education/policies/2010/doc/principles_en.pdf)

performance, or are a part of the final product of the educational process (Vizek Vidović, 2009). Competencies include the following elements: knowledge and understanding (theoretical knowledge in the academic field, the capacity for knowledge and understanding), knowledge of how to act (practical application of knowledge in certain situations), knowledge of how to be (values as the integral elements of perception and ways of life with others in a social context). Competences represent a mixture of these features (taking into account the knowledge and its application, attitudes, skills and responsibilities) and describe a level or a degree to which they are able to be used by an individual.[4] Therefore, the new curriculum for teacher training/study should be based on the outcomes of learning and intune with the Common European Principles for Teacher Competences and Qualifications (Zgaga, 2006).

Changes in Education in Croatia[5] require different competencies of teachers who are no longer the main source of knowledge, but rather an organizer of the teaching process. 6 The teacher becomes the starting point of intentional and unintentional reflections which form the profile of students' cognitions, adopted knowledge and overall life conceptions (Mijatovic, 2002).

Understanding and developing the professional identity of teachers / preschool teachers, an act in accordance with ethical standards and professional codes, and a training for professional work in intercultural and inclusive environment (appreciation of diversity) could be set aside as a general competence of teachers / preschool teachers. In accordance with the general competence of teachers in particular, we will allocate musical competencies which are acquired by the expected learning outcomes at the Teacher and Preschool Teacher Study in Croatia.

A) INSTRUMENTAL MUSIC COMPETENCIES AT THE TEACHER AND PRESCHOOL TEACHER STUDY

* To demonstrate a basic knowledge of musical art and music education in context and according to one's levels of educational achievements

4 http://tuning.unideusto.org/tuningeu i www.rug.nl/let/tuningeu

5 The introduction of HNOS-a in Croatian in 2005, and the Bologna process in Teacher and Preschool teacher Study

6 www.ucitelji.com

* To have the capability to organise and plan individual learning in and through music during the study, by using critical and self-critical questioning of artistic and scientific / educational truths
* To possess the capacity to acquire musical knowledge to generate new ideas in a variety of musical situations
* To develop musical and research skills at the level of professional work

INTERPERSONAL MUSICAL COMPETENCE

* To demonstrate the possession of personal qualities and personality dispositions and their reflection in the development of professional music education work
* To have a capacity to make decisions and demonstrate decision-making skills appropriate for music education and other educational situations
* To develop a preference for musical interaction teamwork and cooperation based on partnership
* To demonstrate the ability for continuous evaluation and self-evaluation of one's own music work
* To demonstrate a respect for cultural diversity, multiculturalism and the intertwining of music and cultural diversity and differences
* To develop music and professional ethics

SYSTEM MUSIC COMPETENCE

* To progress in studies by one's own independent work and continuous self-dedication, by using a variety of sources, personal disposition, music ability and music skills
* To be trained for the musically-creative and authoring dimension of one's own professional role
* To be able to take responsibility for the professional recognition of one's professional profile as the music mediator
* To show, understand and promote the concepts of lifelong learning of music efforts for one's own professional development
* To encourage and develop a constant concern for the quality of music mediation

B) SPECIFIC MUSIC COMPETENCE AT THE TEACHER AND PRESCHOOL TEACHER STUDY

* To know, to understand and to be open towards the latest educational musical knowledge and insights about the nature of music development and learning
* To demonstrate the knowledge of music theory, theory of music education, music arts and sciences at the theoretical and practical level
* To develop relationships with music and to support communication with children in order to develop individuality and sociability
* To use music in order to develop abilities, skills, capabilities, needs, interests and characteristics of a child, with which an integrated educational practice is thus achieved
* To understand and use music in the development and adoption of speech, language, a child's creative potential and the totality of physical, cognitive and social development
* To independently construct, implement and evaluate an integrated curriculum in the totality of all development areas (kinesiology, art, language and communication and cognitive research) using activities and materials in accordance with current developmental theories that explain child development
* To develop partnerships with parents on the principles of music communication: to develop an awareness of the need for parental involvement in a child's music development

TOWARD A CONCLUSION

Teachers of music for music programmes in elementary subject teaching classes and secondary teaching classes gain their music education at the music academies. Teachers, who teach in the elementary classroom, gain their music education at the teacher study and preschool teachers, who are raising children in kindergarten and conduct music activities, acquire their music education at the preschool studies.

From the above mentioned, we can observe that there are several types of profiles in the music teaching profession engaged in Croatian music education. These are: teachers of music culture of classroom teaching in elementary school, teachers of subject music culture in elementary school and Gymnasium high

school; church musicians, teachers of music in elementary school; teachers of music history in secondary schools and secondary music schools; teachers of theoretical subjects in music schools; teachers of instruments / singing in music schools; university teachers of the music courses at the teachers' colleges;.
All above listed teachers of music, except for classroom teachers in elementary school and preschool teachers, acquire a musical education in music academies. Namely, this pedagogical, psychological and methodical music education of music teachers of these groups is relatively good. At the music academies, the emphasis is on musical courses that are "more pedagogical" and that is against the spirit of music, claims Rojko. Poor music pedagogy in music courses at the music academies in Croatia is closed in itself and such pedagogy does not exceed its own limits. The main cause of this condition is an undeveloped music pedagogy theory. Music and pedagogical decisions in Croatia are often conducted by people who are of very modest pedagogical education. The Croatian music pedagogy is still governed by the thought that every musician is automatically a good music pedagogue, and musicians, who often do not have elementary pedagogical or psychological knowledge are considered competent in teaching music (Rojko, 2009).

The teacher is one of the key factors to the effectiveness of teaching and learning in primary schools, namely the effectiveness of the educational system as a whole. The quality of the teacher education is a key determinant of the quality of teachers in any educational system (Domovic, 2009). The development of teacher education system has led to the improvement of the quality of teacher education as well as their music education during the study. Therefore, the teaching profession and its systematic professional development is a priority in the process of education. From each teacher is required a separation time for awareness, learning and self-reflection. In the area of initial teacher education a fundamental and qualitative organizational change has happened, but there are still issues that have not been resolved. The problems in the process of education and professional development are the systematic training and motivation of teachers, unclear objectives of the educational system, the problems of methodological monism and the like. All this is also evident in the music education of future teachers and preschool teachers.

If we want the students, as future teachers, to acquire knowledge and develop competencies in context, if we want students to be able to present, implement and integrate knowledge from different disciplines, to develop critical thinking and the ability to acquire the habit of lifelong learning, we need clear learning objectives, an education integrative approach, the development team and the interaction between members and teams. Therefore, university education should prepare future teachers for the ability to apply knowledge in practice, developing research, analytical and synthetic skills, working knowledge of foreign languages and computer literacy, ability to work in multi cultural environment, initiative, productivity and entrepreneurial spirit, quality focus and motivation, capacity for learning and lifelong learning (Babic, 2007). Accordingly, when developing new programs, curriculum development model that is based on competencies was not systematically applied (Pavin, Vizek Vidović, Miljević-Riđički, 2006). We observe that among the universities in the Republic of Croatia, and the teacher and preschool teacher study respectively, there is no coordination in the program relating to the mastering of specific competences of teachers.

From the available documents, it is seen that there is a discrepancy between the programmes of teacher and preschool teacher training and therefore we can expect that students, as future teachers or preschool teachers coming from different teacher and preschool teacher studies in Croatia, will gain an unequal professional competence which also applies to the specific musical skills. To resolve these discrepancies of music education at the teacher and preschool teacher training/study level in Croatia, and especially for the unevenness of professional musical competence, an extensive discussion should be preceded with an agreement among all stakeholders in this area. The definition of professional music standards / competencies at the national level should be set for teachers who teach music in elementary school (from 1st to 3rd grade) and for the preschool teachers who musically educate children in the kindergartens.

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MUSIC AND OTHER ARTS IN THE EVERYDAY LIFE OF VERY YOUNG CHILDREN

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ABSTRACT

Music and the other arts, such as dance, visual expression, word art and puppet theatre are a natural way for a young child to experience their environment and express themselves. Every child has a right to their own children's culture. Therefore, it would be natural that the high-quality art pedagogy is also present in the everyday life of a very young child (from 1 to 3 years old) in the daycare and at home.
The main goal is to improve the child's everyday life (children under 3 years) through music and other fine arts. The aim is also to strengthen the educational cultural content of the early childhood daycare and to develop and strengthen the knowledge of the daycare personnel to guide music and other arts activities in their groups. Music and other art materials could also be used by the families at home. They can support the interaction between a child and the parents in the families.
This practice paper presents a music project in the kindergarten. The daycare staff can develop their own musical, as well as other art pedagogical skills. They get ideas about how to use music and other art forms with children whose are under 3 years old. They can plan and make the trial period in their group. Co-operation with the families is also important.

KEYWORDS
Music, arts, pedagogy, children under 3 years, day care, families

INTRODUCTION

Music- and Art education can be considered as the basis of all the education from the beginning of life (Väkevä 2004).
The main idea of my pre-doctoral work; "Ensimmäiset elämykset – musiikkiin integroitua taidekasvatusta vauvaperheille" was the principle; Art is in the middle

of life - wellbeing and creative power from music and arts. This is based on Dewey's (1934/2005) holistic and active experience approach (Pantsu, 2010).
The most important educators for a small child are its own parents. Family-oriented music- and arts education can support the wellbeing of families in many ways.
In Finland many one-year-old children start daycare. This means that professionals have a responsibility of not only holistic, but also cultural education. They are responsible for the artistic, aesthetic and cultural upbringing, which can, naturally, be integrated in the everyday life of kindergartens. However, many early childhood educators think that it is not so easy to do this with the youngest children in practice. The primary care takes much energy and time from them; they feel there is no time for the daily music and art education. One of the main reasons is also that they do not have enough pedagogical skills and knowledge to do it. During the last years, kindergarten education has reduced the music and the other arts subjects' share of the curriculum, which may also be reflected in the practical field work.
That was the main point for me, when I started to plan a project of music and art pedagogy called Musakatti for the kindergartens. Especially, I was interested in groups of children under three years of age. I thought that the art pedagogy could be wide-ranging for small children. I was interested in finding out what the possibilities are for integrating music with other artistic forms, such as movement, dance, arts, lyrics and puppets.

THEORETICAL BACKGROUND

"Arts are in the centre of life", says Dewey (1908). An important approach is that the child becomes familiar with different kinds of arts and is connected with his daily life (Väkevä 2004).

I have the same opinion: the art pedagogy of small children is at its best when linked with normal family- and daycare life. The young parents need guidance and ideas for music and art education. Professionals who work with small children integrate music and arts without extra efforts in everyday care and learning. Getting a child dressed becomes easier, if an adult sings or plays with words. Also drawing or crafts can bring a song into a child's mind and that song

will support creative activity. By integrating different forms of arts into everyday activities, children learn arts through several channels. (Pantsu, 2010).

Experiential learning is important for a child. Dewey (1934/2005) has said that the best way of learning is doing (learning by doing) and the aesthetic experiences come together with the other experiences. These ideas are like the background for Kolb (1984), who has built the model of experiential learning theory. He thinks that the individual concrete experience provides a basis for observations and reflections. These observations and reflections are assimilated and distilled into abstract concepts producing new implications for action, which can be actively tested, creating in turn new experiences (Lahdes, 1997).

David J. Elliott (1995) also emphasizes how music pedagogy is at its best when it is based on practical activities such as playing music. In my opinion parents and kindergarten teachers play a key role in their children´s music and arts pedagogy. It is essential to motivate them to act and participate with their children by singing, rhyming and moving.
According to Bennet J. Reimer (1989), the most important goal of music pedagogy is to develop a child's natural sensitivity towards music. The cooperation with other art forms is also significant. Aesthetic teaching concentrates on the natural aesthetic sensing. Reimer states that one cannot teach this kind of sensing; everybody experiences it in his own way (Reimer, 1989).

The music pedagogy of Carl Orff is a way to make music active. This involves a lot of improvisation and the use of different kinds of methods such as singing, dancing, playing instruments, listening to music and the use of different forms of art education (Perkiö, 2010).
Puurula (2000, p. 89) believes that the environment of a child plays an important role in supporting the child's musical development. The best results are found when music- and arts education are at home in everyday situations. She describes the ways of integrating music- and art education in early childhood education like a model of staircase, which is a three-phase process. The first part of the staircase is the primary integration, which means that the professionals are using music – and other arts spontaneously, for example; lullabies. The second staircase is like a second level: a child-centered education; a child gives an

impulse to sing or dance or play. The third degree is a pedagogically-oriented art education. The educators are using theoretical knowledge and practical skills to plan and make goal-oriented music- and art integration.

PARTICIPANTS AND MUSAKATTI-PROJECT

The project "MusaKatti" is a pilot study, which is organised in cooperation with the early childhood music education students of Jyväskylä University of Applied Sciences and the daycare staff and children of the city of Jyväskylä. I, myself worked as a designer and organiser of the pilot, as well as a guiding teacher. The first study pilot was organised in one kindergarten in two groups, where children are under three years old.

There were a total of six educators working together: two kindergarten teachers and four nursery nurses. Five early childhood music education students were working with me. We presented seminars for educators, music lessons for the children groups and also some lessons for the children with parents. There were also two concerts in the evenings for families.

Figure1. Musakatti-project in the kindergarten; contents and goals.

EVERY CHILD IS SINGING

The model of Musakatti -pilot study allows better musical skills for daycare stuff. They are able to use music and the other arts with their children and together with the parents or grandparents.
It is important for the kindergarten professionals to have good cooperation with families. It is most important, when we are talking about very young children. Their language is not good enough to describe to the parents their day time activities. Music and other arts could be like a unifying "bridge" between home and daycare. They have to be offered so that the parents can take part in the action. The common mode of operation could strengthen educational partnerships with families and daycare, as well as internal interaction of families. Many young families need special support for their parenthood.
The approach would also be the slogan for the media-orientated parents: "Find your own wonderful children!" - Songs, rhymes, games are a good way to bring time together with children and parents. The model strengthens their own cultural heritage and brings it forward.
The aim is also to create a network between music and arts education experts and daycare professionals. It can empower the personnel of daycare to feel better themselves.
The main idea of Musakatti-project is to get the majority of children together with music and arts education. It is important that it happens during the daycare time of children. The music -and art education should be inside everyday situations. The best music education situation is on the floor, when children are playing with their tools. The toys and books inspire singing and dancing. Short music lessons for the group are also nice; however, not every day. This model strengthens the interaction between child and child, child and educator, child and parent, as well as educator and parent.

CONCLUSION

Result 1: A basic music and art education is equally available to every child's growth and evolution. The child's cultural identity is strengthened.
Result 2: Welfare of families will be better. The interaction between day-care staff and the families is strengthened - music and other arts are one of the unifying factors.

Result 3: Child Care staff can use music and arts better in their groups of very young children. They get more motivation and, therefore, they are feeling themselves as well.
Music and other arts could be a "bridge" between home and daycare when they are offered in a way that parents can take part in the action. The common mode of operation strengthens the educational partnerships with families and daycare, as well as internal interaction of families. Many young families live in need of special support for their parenthood.
Dewey (1934/2005) did not want to separate aesthetic or artistic experiences from other areas of life. I think this emphasizes the importance of arts and their inclusion in the everyday lives of people as some kind of spiritual food. Multi-artistic activity, started together with the baby, could also awaken in the parent a renewed inner inspiration, which may have been dampened during their youth. This "spark", rekindled in the parent, is the best possible inspiration for the small child, who gets a stunning amount of knowledge from all of his or her senses. These sensory experiences are closely related emotionally, aesthetically and ethically (Pantsu, 2010).

I believe that music integrated to the art pedagogy supports the wellbeing of families in several ways. Joining an activity group once a week binds the family unit together as it enriches the everyday life by learning about the arts and by creating a social situation. The first experiences of arts form the basis for later experiences in arts. Through arts, one can enter the cultural heritage and, therefore, find one's own musical or artistic inner self. I suppose that music and other arts also give power and happiness to everybody (Pantsu, 2010).

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MAKING IT TANGIBLE A PROCESS OF TRANSLATING EARLY CHILDHOOD MUSIC EDUCATION ACTIVITIES INTO CONTEMPORARY DESIGNS

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ABSTRACT

In an increasingly digitized society resources that can serve new approaches in musical learning have become an important supplement to early childhood music education. The construction of these tools asks for a translation of regular musical practices combined with new ideas into new designs. The designs described in this article as well as the musical learning contexts are based on and reside in a western cultural context and consequently are subjected to the musical learning processes and symbolic understanding of the children within this context. We will describe our reflections and a number of outcomes of the genesis of a little box with activity cards and a CD, and a digital application containing musical game exercises for touch-screen mobile devices.

KEYWORDS
Music education, young children 0-6, contemporary designs

INTRODUCTION

"Children in Western societies are encountering an ever-wider variety of media and symbolic artefacts and their exposure to these media begins at increasingly younger ages. Full participation in society requires that children begin to understand several kinds of symbolic media quite early in life" (DeLoache, 2002, p. 226)

The designs discussed in this article – the little box and the digital application – can both be understood as contemporary translations and explorations of educational musical equipment in early childhood. As such they are culturally bound artefacts aiming to provide a bridge between musical (symbolic) information and musical learning activities.

> "Despite its presumed universality, as with other arts music is a cultural product imprinted with material and symbolic aspects of its point of production as well as the musical conventions prevalent in that time and place" (Leavy, 2009, p. 102)

The aim was to transform musical activities into an accessible format that would serve colleagues in the field but also parents at home, carers in day care centres and playgroups. In this process, years of practical experience and research outcomes were combined.

THE PROJECTS

THE DIGITAL APPLICATION

Using information technology is very challenging if not impossible for very young children with interfaces like keyboards, mouses, and joysticks. In the last decade, the evolution of embedded technologies allowed the development of tangible interactive artefacts. However, the diffusion of specifically touchable screens in recent years makes it possible to embody in an application the key elements that engage children, thereby providing more learning opportunities at reasonable costs.

The application project is based on the translation of a number of musical activities normally used in music lessons. It is intended to be used by children aged 2-6. The exercises include the exploration of sound and other musical features like pitch and tone duration, rhythmic and melodic sequences and musical structure.

OK! SING AND PLAY

The little box is specially developed to stimulate the musical development of children aged 0-6 through songs and musical learning activities and, like the digital application, is based on regular activities used in early childhood music education.

Designed as a manageable compact set of cards in a sturdy box accompanied by a CD, its size is similar to the regular size of computer tablets, thereby connecting to contemporary layout formats. The choice for cards was inspired by the aim for ease of handling, safety – rounded corners –, and washability – laminate. A small informal test among a group of young children was performed to determine the functionality and the musical learning possibilities prior to printing.

Each card has a picture on the front side as a source of information to support the understanding of the song. On the back of the card the score of the song is printed, the musical game pertaining to the song is described and the activity aims for each developmental area are explained. The CD contains two versions of each song: a sung version with accompaniment and the instrumental version.

WORK IN PROGRESS

Though differing in appearance and use, both designs aim to contribute to musical learning and as such their properties and meaning had to be conceptualised in terms of symbolic dimensions that can represent music. The transformation of musical activities from a face-to-face situation into a mediated fashion was in fact a re-shaping into another mode.

> "Virtually anything can be used to represent virtually anything else" (DeLoache, 2004, p. 67).

The choice of symbols to promote musical interaction therefore demanded a solid underpinning informed by practice and research. As a result the projects became a bridging construct between a child and her music learning.

The most prominent challenge that emerged was the question of how a child would interact with the tools. In our teaching practice we observed that manual exploration of objects is an important step in the process of symbolic interpretation. According to Vaesen (2012), the cognitive capacities crucial to tool use are

the same as those that explain our ability for accumulate culture. These capacities include hand-eye coordination, body schema plasticity, function representation, executive control and causal reasoning but also social learning and teaching and, in particular, language. In reference to written notes, Walker (1992, as cited in Leavy, 2009, p. 102) explains that

> "The visual, symbolic forms act as mnemonics for the physical actions necessary in the production of musical of spoken sounds".

In view of the target audience, notes are not the primary source for musical reference although they are present in both designs. Therefore, apart from the presence of the accompanying CD and accompanying sounds in the application, the high level of abstraction inherent to music required visual and gestural analogies for sound in the shape of small narratives. These narratives are short pretend situations that allow children to experience the concrete dimensions of a particular musical feature, a musical activity or a musical exercise. They have to function as a representation, a link to the musical content therefore the use of language in both designs had to be reduced to a minimum.

Choices had to be made based on the symbolic level of development of young children and their ability to recognise shapes, not only pictorial but also movement shapes that would represent musical information. Using touchable interfaces reduces the distance between the digital (virtual) and physical world because of the possibility of interacting directly through hands and gesture, providing a way to develop from enactive through iconic to symbolic stages of knowledge (Bruner, 1981).

The pictures on the cards depict the songs thereby referring to concrete objects in the real world children will know. The digital application uses known daily situations that are transformed into musical experiences. For example, a fire truck drawing refers to the fire truck's sound presented in the song. The underlying musical aim is voice formation, meaning to experience the use of the voice in a certain way.

Gestural analogies appear in the shape of different movements that support the musical expression, meaning and understanding of the songs and exercises (Retra, 2010). We consider movement to be an organised action to accomplish a musical objective and an important form of kinaesthetic representation through

which young children can come to understand and learn different aspects of music. This way the musical learning process contains stimulation for motor learning.

Gestures have an order and an orientation, and their use not only requires the logical culturally bound application of common rules like "reading" from left to right, but also the clear presentation of their graphical information. In particular, designing a digital application requires focusing not only on the content one wants to convey, it also addresses issues of development of fine motor skills to handle the device and to interact with the screen and the way an adult handles the device to communicate with a child. Children almost 2 years of age have reached the touch-related behaviours needed to interact correctly with a multi-touch screen (Buckleiter 2010).

Focussing on the actual use of the cards addressed practical ways of handling. The design of the cards can provide a way to support representation of a song. Children can see the accompanying picture on the back of the card at the same time the adult is reading the text or singing the song. Children can also hold the card themselves because of their manageable and safe construction.

TOWARDS MUSICAL LEARNING

In order to start musical learning, children will first have to "figure out through experience" (DeLoache, 2004, p. 68) the meaning of the symbols used in the designs. The development of symbolic understanding incorporates the amount of experience young children acquire with concrete objects and language, with the guidance of adults in their specific cultural context.

> "Cultural differences in caring for the young includes who cares for the children, their availability, the kind of interactions, communication and activities in which care is provided. Cultural traditions as well as economic and political factors shape structural differences in children's living arrangements" (Booker & Woodhead, 2010, p. 12).

Social signals show what can be learned, when something can be learned and in what way. Imitation, shared attention and empathic understanding are the social skills foundational to human development (Meltzoff, Kuhl, Movellan & Sejnowski, 2009), making humans unique regarding the ability to apply skills as a highly effective learning strategy. As explained by Tomasello and Carpenter (2007), other

species also have the ability to imitate (meaning to "copy"), but only humans are able to teach others by demonstrating intentionally what they should do through modelling and to share a joint intentional framework within a cooperative target.

> "From the very start of their lives children are immersed in influences and become participants in their progress, the most important element of which is the nature of their relationships with the people surrounding them" (Fabian & Mould, 2009, p. 10)

In the actual designs, these relationships take shape in the form of partnerships in which a child is a co-constructor of its own knowledge and the adult serves as a mediator (Torres Vigoya, 2005). For both designs an incentive is needed provided by the adult to explore and engage in the musical activities and benefit from them. Independent use is possible but only when children are older and have had ample guided experience.

OUTCOMES AND IMPLICATIONS

More questions and information than expected germinated from the creation of the designs. Also the designing process reflected highly on our daily practice in early childhood music education. Things we took for granted appeared to be in need of in-depth reflection and would benefit from further research, for example our observed excessive use of verbal commands in practice. Reflecting on the use of language in the designs made us more aware of the function of verbal instructions in a regular face-to-face setting: to be clear and precise and to convey the necessary information in a concise and understandable form.

The musical exercises and activities used in the designs had to be studied both in terms of their usability and how they would create the desired musical learning effect. This resulted in improved observation skills of the musical responses of the children during regular face-to-face classes.

Describing the use of the accompanying CD made us aware of how recorded music could function in an early childhood music class. In particular, the way a song on the CD is presented during a lesson. The recorded music is more than just a support to synchronise movement in order to experience a pulse. Intentional or planned use can extend musical learning experiences giving deeper meaning to the songs.

We experienced that every choice we made is a result of our music cultural upbringing and education, putting restraints on our wish to reach many children. Designing educational materials therefore comprises thoughts about how and where to distribute it. It is important to understand local expectations of children's musical behaviour and participation, and to be mindful of the space there is in the daily routine for stimulation of musical development.

We propose the ideation of designing activities for contemporary media inside a teacher-training course similar to those included in our designs, because they might serve as good tasks that can incite students to think deeply about musical learning processes in early childhood.

Both designs can be particularly useful in meeting individual musical learning needs because the accompanying adult can make appropriate choices that will suit a child.

Contemporary musical learning designs, especially touchable (mobile) devices, are in the very first stages of development. Nevertheless, the first results are emerging. Also, teachers, carers and parents who want to use these tools will most likely benefit from extra support. To provide advice about the content and use of the designs, and to provide information about the underlying research supporting the methodological choices, websites for both products are under construction.

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GIVING BIRTH TO INTERGENERATIONAL COMMUNITY PRACTICES: THE MUSIC'S "DOMINO EFFECT" IN THE OPUS TUTTI PROJECT

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ABSTRACT

Opus Tutti is a four year project that aims to create ways of improving full human development through the involvement with music in early infancy. In this paper we present three types of initiatives that demonstrate how a project aimed at infants has spread to a whole community. In the first year we ran several types of workshops aimed at educators, parents and artists. At a later stage, very much inspired by the ideas of Murray Schaffer, participants were involved in exploring music and movement activities in communication with the sound ecology of the magnificent gardens of the Gulbenkian Foundation. This process led to an open musical performance - "Um Plácido Domingo" (A Peaceful Sunday)- shared with invited passers-by, especially caregivers accompanied by their babies and young children. They would pause, listen, observe, explore, discover and enjoy the series of musical, choreographic and scenic events developed as a dialogue with the elements of the

gardens. This experience became the subject of Budding, a documentary which focuses on the importance of taking care of the youngest children and on the potential of music as a tool to connect people. During the second year of Opus Tutti, attention was focused on a day-care facility. As well as a regular musical intervention on the premises, we designed Babelim, a participatory performance that involved caregivers, infants and their older brothers and sisters. Babelim was built on the exploration of non-verbal communication and the fusion of music and language that took place in preparatory workshops. Currently, we are working on Play to Play – a set of portable musical and theatrical pieces that are designed to be presented in day care facilities and kindergartens. These three experiences support the idea that making music with parents and infants causes a 'domino effect': music produces spontaneous responses in infants, which affect their own caregivers. When a caregiver and infant are musically involved, their involvement easily spreads to other pairs. This effect is magnified when musical practice occurs in groups that share feelings of parenthood in common - the conjunction of both elements is powerful in supporting the emergence of a special type of community.

KEYWORDS
Infancy, community, intergenerational, music, Opus Tutti

INTRODUCTION

Over the years, the authors of this paper have progressively broadened their vision and practice from a purely artistic and academic focus towards a conception of music and art in general, that is rooted in the need to communicate and acknowledge its immense potential in nurturing many aspects of what can be generally defined as human development. Several experiences in our artistic life have shown us very strikingly that our artistic activity should be regarded holistically. Projects such as Bebé Babá (Rodrigues, Leite, Monteiro, Faria & Rodrigues, P., 2010) and Grande Bichofonia (Rodrigues, H. & Rodrigues, P., 2008), developed within the scope of Companhia de Música Teatral (please see www.musicateatral.com) or the work developed while coordinating the Education Service of Casa da Música (Rodrigues, P, 2009) made us realize that an important part of our role as artists was related to the development of ideas that produced interesting artistic results at the same time as transformations in the people that participated in them. These projects have been described specifically as referenced above, and a more general, philosophical, discussion based on our practice has also been attempted in Rodrigues, P. and Rodrigues, H. (2011) and Rodrigues, P. (2011). These background and philosophical ideas allowed Companhia de Música Teatral

and Laboratory for Music and Communication in Infancy to conceive the project Opus Tutti (www.opustutti.com) and its proposal to the Education Service of the Gulbenkian Foundation.

Opus Tutti is a project that aims to create methods to improve full human development through arts in early infancy. It is a four year project, now in its third year, and the different stages have been given metaphorical names (Budding, Rooting, Growing, Fruiting) inspired in biology and in the idea that the project would be, itself, a developmental process with sequential phases and a sense of direction, but would also have an organic nature and the capacity to react and adapt to circumstances, results and people. The project is not purely academic nor educational, artistic, or social. It involves aspects and approaches of all these areas and it is neither a pure early childhood project. Indeed, with time, the project has become truly intergenerational. Adopting a Systemic approach has been a very influential perspective for us and this is probably one of the reasons that explains why a project concerning early infancy has included initiatives addressed to adults and older children. In fact, having that theoretical model in mind, we look at infants as elements belonging to different systems – the nuclear family, the extended family, and the nursery care institution – that also belong to collateral systems in the community. Accordingly, we plan initiatives that are directly addressed to infants and we also extend our action to other components of the system that can indirectly benefit them.

AN OVERVIEW OF BUDDING, ROOTING AND GROWING

The first year of Opus Tutti, the Budding stage, was dominated by a series of experiments with very young children. We wanted to explore the possibilities of involving them with older children and adults in exploratory artistic activities, and find out possible models and strategies of action. We wanted to start studying in a systematic manner their reactions to artistic performances specifically devised for very young children. We wanted to identify a target nursery school where later phases could take place and gradually start to involve that community (educators, families) in the project. We wanted to create a "community" of artists/educators that could develop and implement artistic work aimed at very young children. A series of workshops took place at the Gulbenkian Foundation, directed at parents and infants, infants and older children (7-12 years old), and

young artists and educators. We performed AliBaBach [please see: http://www.musicateatral.com/publicfiles/Details/AliBaBach_pt.html
and held workshops of BebéPlimPlim] please see: http://www.musicateatral.com/publicfiles/Details/BebePlimPlim_pt.html] in which the reactions of 8 individual children were video recorded for further analysis.
This series of activities created the momentum, interest and awareness necessary for the development of a performing project involving many of the people that had already participated in the workshops mentioned above. We decided that we wanted to create a performance that was unique and would reflect the identity of the people involved and the space in which it would take place. We decided that this project would be prepared in two one-week artistic residences, one in July and another in September 2011. We decided that this should be a performance conceived not as a "show" (with clear borders between audience and actors/musicians, both in terms of roles and spaces, and definite times) but as a series of interactions (mediated by music and movement) with all the elements that would inhabit the gardens on a normal day (people, birds and flowers) of which caregivers and their young children are an important part.

Very much inspired by the ideas of Murray Schaffer (1977), we mapped the gardens according to the soundscape and took decisions about particular areas and sound/movement textures/actions that could occur as fixed structures/moments involving the whole group (about 70 people), as opposed to variable, wandering moments involving smaller groups. Names such as "Patio of the Gamelans", "Bed of Sonivouros Plants" "Field of the Singing Drums", "Forest of the Birds Houses", "Trail of Canes Rumors", identified areas that where subjected to a visual/sound intervention with sound sculptures such as the Porcelain and Glass Gamelan [http://vimeo.com/46079934] or with simpler strategies, like in the last case, where bamboo canes were made available to be played by the participants. A series of signals, both acoustic and visual, and a "code" were developed to direct actions or directions in improvisation collective moments, as well as within the smaller groups. The performance Um Plácido Domingo emerged on the 11th September 2011 from a set of prepared "tuning moments". The literal translation of Um Plácido Domingo in English is A Peaceful Sunday and through this name we wanted to convey the idea of a certain informality.

Basing our thinking on the extension of the events that normally take place on a Sunday (wandering families of humans being one of the distinctive bio-entities), we knew also that we were dealing with a certain type of "gesamkunstwerke" (Rodrigues, P. & Rodrigues, H., 2011), and although this was not an opera, it could be interesting to play with the double meaning emerging from using a name that could be identified with that world. Um Plácido Domingo, was, therefore, a "performative dialogue" (a "site specific performance", a "garden-opera", a "happyning") that invited casual visitors of the gardens - specially caregivers accompanied by their babies and young children – to pause, listen, observe, explore, discover and enjoy the series of musical, choreographic and scenic events that were developed as a dialogue with the elements of the gardens. Budding, a documentary by Pedro Sena Nunes [9] reports that experience, aiming to spread the ideas that taking good care of the little ones is an important issue and that music is a powerful tool to connect people.

In the second year of Opus Tutti, the Rooting stage, the intervention at a particular day-care facility was of paramount significance. Not only was it important to test ideas and strategies in real situations, but also because we feel that our work, whenever possible, should contribute to the actual improvement of the people we work with. Very much inspired by the concepts of "intuitive parenting" by Papousek (Papousek, H., 1996, & Papousek, M., 1996) and "communicative musicality" by Malloch and Treavarthen (2009), we consider that companionship is rooted in inner musicality resources that can be awakened by musical practice in daily life and believe that music can be a powerful tool to connect people and contribute to better ways to take good care of infants. The institution we started to work with is the Centro Infantil do Roseiral, in Lisbon, a nursery/kindergarten school in Lisbon that takes care of almost 80 children, aged 4 months to 5 years old. The social environment is very diverse, with a relevant number of children coming from deprived backgrounds. We planned several approaches that would make music reach not only the young children but also their caregivers. One of these is Creche e Apareche: weekly, two members of our team started visiting the centre, providing music sessions for the several groups of infants and toddlers located in the different rooms of the building. These music sessions were scheduled for the closing of the day, when caregivers come to take their children home. In this way, we started to promote the joint participation of parents and day care professionals in the music activities. These were mostly singing, chanting and

movement-orientated since one of the main goals was to stimulate a feeling of togetherness in making music and also to provide some tips to caregivers to play musically in their daily life.
In addition to this intervention located at the daycare, we designed a project for which we invited the caregivers (parents and professionals working at the day care), infants, and older children (typically the older brothers and sisters of the participating infants and the children of the daycare's professionals) for a series of music and photography workshops named Playing with Music, Tuning of Listening and Tuning of Seeing that were held at the Gulbenkian Foundation during six weekends along the period between February and May. These workshops would be followed, on the same morning, by another type of workshops, Tuning of Playing, in which all participants would share their experiences in a playful atmosphere mediated by music. Other parallel sessions were run with artists and professionals interested in artistic creation for infancy, aiming to build a bank of educational and artistic resources and to contribute to their personal and professional development. The workshops, devised for specific target groups, led to the conception of a performance that would incorporate the different groups and many ideas and materials created throughout the process.

The title of this final performance, Babelim, is inspired by the idea of "Babel", and aims to convey the concept that the performance is a mixture of musical idioms and sounds searching to respond to the human need to communicate. Based on transhumance between music and language, we borrowed the idea that babies are born as universal communicators and guided towards narrow languages through adults' companionship. The performance, open to the general public, involved several layers of information and participation: the public could contemplate the beauty and detail of the interaction between a couple of dancers with their infant placed on stage in conjunction with a movement and voice chorus formed by the older children and the professionals that participated in the workshops. Parents and infants were seated in the audience and participated by singing and playing specially adapted music boxes. The piece Babelim is an open form consisting of a series of tableaux that include moments of complex textural sounds alternating with very simple melody-based elements. Voice, piano, cello, toy pianos, pre-recorded sounds electronically manipulated and diffused by the piano soundboard, thumb-pianos attached to the piano soundboard and small sound sculptures were some of the resources used. A screen with easily under-

standable graphic scores was displayed to allow the participation of all the public in specific moments of the performance. Babelim was the culmination of a shared creative process that involved the community we were working with but also the audience. It expressed in very poignant terms our idea of music as a tool to bring people together.

The third year of Opus Tutti, the Growing phase, is where we are currently. The weekly sessions of Creche e Apareche at the Roseiral are still going on, because we consider them the very centre of a successful music intervention: it takes time and it needs to be done on a regular basis. At the same time we are working on an idea that started to be developed earlier on. In two one-week creative residences held in July and September 2012 we started to work on the idea of creating highly portable performing pieces that could be presented not only in theatres but also daycares and kindergartens. This intends to answer the need for democratizing the access to high-standard performances. Although there are many cultural institutions that programme music concerts for very young children, the fact is that many do not have access to these experiences, due to practical and socio-cultural reasons (they tend to be attended by families of a higher cultural level). Additionally, we feel that the possibilities arising from integrating music, dance and theatre are immense and there is a great deal of innovation needed within this area. We decided that the pieces would be the result of a collective creative process in which artists, educators and children would participate. These creative residencies were also training opportunities and a way to contribute to the development of skilled, imaginative performers/educators specialized in early childhood. The first drafts of the pieces were shown in the II International Symposium Art for Infancy and Human Development held at the Gulbenkian Foundation in September 2012 (please see http://www.youtube.com/watch?v=hxbfmkPSVc8). This set of pieces was denominated Peça a Peça (Play to Play) and each piece, a solo or a duo, has a distinctive identity but there are also common features that easily identify the different pieces as the result of a common background and a shared creative process. Among these, a genuine human interaction rooted in the idea that art and ludicity share common territories and an emphasis in fostering the interaction between parents and children. After the first draft presentation, the pieces entered a phase of "working progress" that aims to tune the pieces by the experience of presenting them in the real context of Roseiral, as well as by a further process of experimentation and consolidation,

this time shared with teachers and education agents working in daycares and kindergartens. These sessions not only serve the purpose of consolidating the pieces but also fulfill the need to train and raise awareness within the education community and prepare them for the presentation of the piece at their institution, at a later stage. There are seven pieces, named Opus 1 to 7, some of them in very advanced stages of preparation or already on tour, whereas others in the initial stages of development. Different pieces involve different combinations of elements of theatre, dance and music (the voice being a recurrent musical resource, alternating with instruments such as clarinet, cello, harp or percussion) and they last for approximately 30 minutes, followed by a variable time of informal ludic interaction.

THE MUSIC'S "DOMINO EFFECT" IN THE OPUS TUTTI PROJECT

Throughout our experience, it looks as though when we do music for parents and infants there is a result that can be metaphorically described as a "domino effect": music produces spontaneous responses in infants which affect their own caregivers. A dyad musically involved easily contaminates other dyads.
There is no doubt that music promotes social cohesion through specific devices such as rhythmic synchronization or melody/pitch alignment. This effect is magnified when musical practice occurs in groups that share parenthood feelings. In other words: music helps to synchronize groups and this effect increases when the group is tuned in parenthood feelings. According to our experience, the conjunction of both elements is powerful in making up the emergence of a special type of community.

For a long time we have been leading musical guidance sessions based on musical learning theory of Edwin Gordon (1997) and we have observed the power of music in the construction of a community through that "domino effect". Bebé-Babá, an emblematic project that was conceived in 2001 – reported in publications such as Rodrigues et al. (2010) and Rodrigues, Rodrigues, & Correia (2009) – helped us to find out strategies to develop its potential in the construction of a parenthood community. We look at Um Plácido Domingo and Babelim as projects in which the "domino effect" is amplified to the entire community.
Besides very positive feedback from the participants, we realized that for a lot of them it was the first time they entered a cultural institution such as Gulbenkian

Foundation and one of the few performances they had attended. Whether or not this will last and lower the barriers many people face in engaging in cultural activities is something that the future will tell. This is not, however, the reason why this type of work needs to be done. In other words, educational work should not be justified by the need to create audiences or increase the number of concert-goers. It has an identity of its own and its own worth, artistic and ethical.
We also believe that these projects have a very positive impact within the educational and the artistic communities. Working in this integrated manner allows a genuine interchange of experiences. Artistic creation is frequently a process of isolation and although the encounter with oneself is certainly one of the strongest aspects, the sharing with others does not diminish this dimension; on the contrary, it probably adds extra challenges, solutions and a sense of worth. The educational community finds in projects such as Opus Tutti the renewal of ideas needed for direct application in their professional environment but, above all, the context for deep artistic experiences.

CONCLUSIONS

When guided under human and social concerns, music has a powerful effect in developing interaction and communication between people. Music has, therefore, a vast potential to diminish social isolation and in shaping relationships between individuals towards cooperation. Music's "domino effect" has been present in the way we've been designing Opus Tutti.
"Artists and educators are discovering new aspects to their activities and we are entering an era where music is no longer a solitary pursuit for the ultimate work of art but collective processes of constructing worlds that Music can improve" (Rodrigues, P. & Rodrigues, H., 2011, p. 43).
Opus Tutti is now on its Growing stage. Fruiting will be the last stage. We hope that many can taste it.

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symposia

PART III

SYMPOSIUM 1

MUSIC MOVES: THE DEVELOPMENT OF INTERCULTURAL APPROACHES TO ENGAGE MUSICALLY WITH 'HARD TO REACH' FAMILIES

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ABSTRACT

This paper explores some theoretical perspectives and implications for practice through the experiences learned from project work with families traditionally considered to be 'hard to reach' in three urban settings in the UK. The discussion focuses on the ethical responsibilities, implications for work in partnership with parents and practical challenges for Early Years music educators. Four Music Leaders experienced in working with families and their pre-school age children aimed to work alongside Children's Centre practitioners whose remit is to visit and engage with families who are considered isolated for a range of health, social, cultural and linguistic reasons. Policy recommendations in the UK emphasise the importance of working in partnership with parents, though there is little guidance in how or what this means; even less is it articulated or researched in relation to music and its place in early learning.

Ethical dimensions emerge through developing work with families. These ask questions of practice that all too frequently prioritises the professional's knowledge over that of the parent. Examples of practical strategies for meeting and working with culturally diverse groups of families are offered for consideration. These have evolved through fostering intercultural awareness, by attuning to young children's musicality, and by listening to and performing with parents. Through music culturally diverse families and settings staff develop common understandings of ways to support young children's learning.

KEYWORDS
intercultural awareness, cultural diversity, music, ethics, parents

BACKGROUND

This paper discusses the findings and implications for practice of 'Music Moves', an action research project using music with parents/carers and pre-school age children who are traditionally viewed by local services in urban areas in the UK as being 'hard to reach'. It follows in the footsteps of similar projects over the last ten years, such as Music One2One (Young, Street & Davies, 2006) Musical Babies (Street, 2009) and Time to Play (Young & Street, 2010) that were situated in Children's Centres or 'stay and play' settings; community based spaces where families could gather socially and where adults obtain information and support. These projects each had a research element in that they first consulted parents for their views of everyday music at home, their repertoire of songs and the place of music in their children's lives. It might be over-idealistic to claim that in each case we sought to make a difference through providing positive musical experiences and inviting parents' participation, as though all three projects were driven by concerns of social justice. There was a certain pragmatism in bidding for funding that would be available if project aims met the ideals of Government departments to reach minority groups; for example, to address the needs of working class families (Music One2One), or to work with Muslim women (Time to Play). However, the resulting recommendations for practice in each case aimed to contribute to a greater understanding of how music education can involve parents as partners. Policy recommendations in the UK emphasise the importance of working with parents, though there is little guidance in how or what this means; even less is it articulated or researched in relation to music and its place in early learning.

In 'Music Moves', four experienced music leaders each worked with different communities traditionally seen by settings as 'hard to reach'. Nuzhat Abbas invited stories and songs remembered from childhood by South Asian mothers. Her language skills in Urdu and Punjabi and as a singer in the Sufi tradition allowed parents to explore their fears and hopes for their children in their home languages. The songs collected and sung together built an understanding of the helpfulness of music in bonding with their babies and in expressing their

home cultures. The four music leaders liaised with local Early Years practitioners and other professionals known to families, kept a reflective log of their twenty weeks of practice and brought their ideas to four reflective seminar days held at regular intervals during the project. Visiting musicians were also invited to work alongside the music leaders with families for some sessions, and to attend the seminars as part of joint professional development.

AIMS

This paper considers theoretical perspectives and implications for practice relating to the first of three key themes which emerged during the course of the project. It explores the skills associated with intercultural competence we found helpful in working in music with culturally diverse groups, and the challenges and opportunities this work afforded. The other themes are implicitly related, namely our interpretations of 'hard to reach' and what this term can mean for building relationships. The third is the value of integrated working with other professionals whose remit is to support parents with children under four. These were the outreach workers from the Children's Centres' staff on whom we depended for contact and engagement with families. Their perceptions of the value of using music as a means of engaging were important because of the short-term nature of the project. Sustainability in this kind of work depends not only on funding available to provide activities, but also on the prevailing attitudes in settings towards the relevance of music for and with families.

INTERCULTURAL AWARENESS IN PRACTICE

As global economic conditions fluctuate and people move in search of employment or safety from conflict, many cities in Western Europe are hosts to newly arrived immigrants. Migratory patterns over the last fifty years have lead to successive generations of immigrants for whom the UK is now home, notably for and in established communities of South Asian and east European origin. The resultant cultural and linguistic diversity is viewed by media and existing services as alternately challenging or to be welcomed. Services that support their maternity, health and social and education needs increasingly have to

respond with some intercultural awareness to difference and develop practice accordingly.

Lessons learned from previous research on music with Muslim families (Young, 2009) highlighted the importance of developing intercultural approaches to music provision. Intercultural - or cross-cultural – competence in relation to education is a term subject to scrutiny in whether it refers more aptly to a fixed ideology (or –ism) or rather to a set of circumstances which imply 'dynamic interactions' between cultures and individuals (see Baldock, 2011: chap 3 for an overview). Byram (2008) considers that in addition to knowing about other cultures, individuals have to be prepared to suspend disbelief eg with ideas one does not share, to attempt to interpret and understand, to discover new things through interacting and to be critically self-aware.
This implies practice to be sensitive to parents' attitudes to childcare and education as well as to everyday things like dress, respect for those in authority and customs that permeate daily routines with young children, such as how they are lulled to sleep, are changed and washed. Brooker (2008) explores the significance of such factors for young children's identities and sense of self as they enter school and early years settings, while Pascal and Bertram (2009) have persisted in their focus on ways of listening to the voices of the children themselves, to understand their experiences as refugees crossing borders.

Understanding issues of cultural diversity as they affect parents can develop through action that requires a growing awareness of how relations of power operate within accepted hierarchies, such as exist in day care settings. Vandebroeck et al, (2009) have argued that the daily interactions and negotiations between immigrant mothers and day care staff are opportunities for creative dialogue in very concrete, here-and-now practices, and that these can be expressed within a conceptual view of inclusive and relational citizenship that are:

> 'not to be understood as another set of competences that the individual should perform, but as a quality of relations, an ethic of encounters without predefined outcomes' (2009, p. 212).

Here is expressed the unpredictability of this kind of work and the importance of open-ended activities. For the music practitioner it implies being prepared to

take risks, and simultaneously considering a number of options according to who attends and how parent/child interactions appear. These may be at odds with their own views of which interactions can be 'helpful' for supportive learning.

Understanding of 'difference' between self and other has ethical dimensions. Where music provision works within relationships in partnership with parents with their children, questions emerge about whose knowledge and expertise is in the foreground; what counts also within the debate about diversity itself? Vandenbroeck (2009b) points out how taking stock of parents' views on early childhood education is not the same as relating with them on their perspectives on issues of diversity. Noddings (2010: 7) analysis of the ethics of care suggests that being 'in relation' to someone comes before 'caring for' them and that it takes both parties to play their part. She asserts how care ethics are not so much about rights as about responding to needs, where emphasis is on attention, listening and understanding.

These roles are not fixed. They may change places as the balance of power alters from one moment to the next. When genuinely open, this balancing can make working with parents and extended families feel both rewarding and terrifying, as practice learns through a quality of empathy what others may be going through or feeling about the process. In an educational context care is not conceived as warm and fuzzy, but includes the competence and critical thinking needed to carry out the caring responsibilities, as educators respond to a host of diverse needs and evaluate their capacity to respond.

Hence the challenge for the Music Moves project was in allowing enough time to establish what is important to parents, while simultaneously trying out a range of musical activities and expanding our musical repertoire to be meaningful and appealing. Across the three urban centres our interviews with thirty five carers started with asking them to describe their background. This resulted in thirteen different groups being identified including Iraqi, Yemeni, Afghan, Polish, Palestinian, Philipino and Ukrainian. Nuzhat Abbas worked with mainly South Asian mothers and their children whose rich variety of home languages included Urdu, Punjabi Shahmukhi, Pashto, Bengali, Punjabi Gurmurkhi and Hindi. Nuzhat can speak some of these languages and asked the mothers for songs and stories remembered from their childhood.

Sixty miles away in a different city Trish provided music in a 'stay and play' where families drop in to pass time, chat and can meet outreach workers and play workers from the local Children's Centre. Here two Somali mothers would often attend, together with a Polish woman with her two year old and two Chinese families. These illustrate the linguistic challenge; when no English can be heard in the room, where does one start? In a hyper-diverse context Trish reflects that in any one session there could be

> 'Somalian women, Chinese women and no one speaks any English – but we all communicate through the music … there are some people who come and sit, arms folded – and they sit on the outside, whereas the Chinese women all pile in and play and we communicate through drumming'

Practice in this context has to be very porous and respond to visible cues such as gestures and smiles. Trish provided a range of quality musical instruments and responded through her own improvisations to the patterns children played, meeting their musicality. She also drew attention to the children's competence through recording and photography. This documentation was appreciated by the parents and helped to build understanding and weekly points of reference.

There are questions to ask about those who sit on the fringe, who might constitute the 'hard to reach' parents. Yet those who appear uncomfortable about joining in are not always those who speak a different language. They can hold very different priorities and perceptions of their role in relation to their child compared with the views of the professionals who offer support. Through persistent thwarted attempts to do home visits with families we found that these carers are hard to reach because of chaotic lifestyles and daily problems of poverty, ignorance or fear. The answers to these questions may depend on the relationships and understandings over time of the identities, needs and experiences of both music leader and parents, and of seeing the learning potential for both emerging through this awareness.

BUILDING ON WHAT FAMILIES ALREADY KNOW AND DO

Previous projects (eg Time to Play) have indicated the importance of allowing time to build relationships of trust and understanding what families already do

and know. Sheehan-Campbell (2011) emphasises the key influences on children's musical development and behaviours from the daily sonic surroundings in family life. She draws on ideas from the anthropologist Appadurai (1996) whose notion of '–scapes' comprise ethnoscapes, technoscapes, finanscapes, mediascapes and ideascapes. These categories help us to consider the social and cultural processes that all play their part in encircling the day to day lives of parents with children and which contribute to their musical childhoods (Young, 2009).

Although the South Asian children attending the groups were under school age (four years), from the interviews it was clear that the mothers appreciated their children already heard a rich variety of music at home including Punjabi and Indian songs, music on TV, radio and Playstation, music played by digitised toys, CDs, the computer, books with built in sounds, DVDs, and Youtube via ipads. The repertoire of songs was also extended by other family members, both nearby and through daily on-line trans-continental communication. Grandparents sing songs and Urdu Gazals as well as loria (lullabies) and these both excite and soothe their babies. There were also a few English nursery rhymes labelled as favourites, such as 'Twinkle Twinkle little star' and 'Baa Baa black sheep' which had been learned through the Children's Centre. These are all embedded within the social and cultural, local and international networks in which family life proceeds and through which children build up knowledge of what is meaningful to them. This illustrates Bronfenbrenner's ecological model (1979) for children's development, which describes the environments around the child being 'nested' like a set of Russian dolls, where the closest contains the family and the outer layer the dominant beliefs and culture. What is interesting here is that through on-line communication, such as Skype, the intimate interactions of a lullaby can be communicated and jointly experienced across time zones, carrying strong emotions in very immediate cultural contexts.

WORKING WITH SOUTH ASIAN FAMILIES: A CASE STUDY

We aimed to produce an audio resource (CD) for South Asian families that can both celebrate the rich linguistic diversity and support ways parents can relate, care and play with their children through sharing songs. The following case study is an example of how Nuzhat Abbas, a PEEP worker, engaged with women in song through exploring meaningful questions about their own identities. The manager

in the Children's Centre had observed how South Asian mothers would sit and watch rather than participate in activities. For a range of reasons the setting found them hard to reach.

Nuzhat writes:

When I started working with a family, the mother was feeling very low due to her isolation and language barrier. She couldn't cope with her day to day life and needed support with her two young children. Mostly she missed her mother and family back home in India. Her longing became sadness as she never had a chance to visit her family since she was married here in UK. During my sessions I was mostly listening to her and her stories of longing. One day she was very upset and I suddenly started singing a folk song which was describing her situation. That song became an emotional healing process for her. From that significant starting point it seemed a natural progression to start a group for such women to try to nurture them through their folk music and songs. The women sang their traditional folk songs they loved in the following sessions while their children were in the crèche. In that way the women had an opportunity to explore who they are, as mothers and as women.

We created a tree with leaves; each leaf symbolised their thinking about who they are. They wrote on the leaves what came into their minds …They were mothers, daughters, daughters-in-law, wives – and women, but none of them managed to think about their own selves and names. My task was to draw their attention to a central leaf that asks 'Who am I?' and to support them to recognise themselves as individuals with all their own abilities. It was a slow journey towards empowerment; but we had lots of interesting debates, talk, music, through learning new songs, discussions on gender roles, tears, laughter – everything. After some sessions we had an opportunity to talk about the impact of music on children's early life through lorian (lullabies). I asked them what they think about how music and lullabies can help children learning and developing their senses and feelings. They described it easily saying "It would surely impact on children as the way folk songs impacted on us." We explored together how listening, talking, learning new words through singing lullabies can develop better communication and bonding between mother and child. These sessions helped us to gather a few traditional songs and lullabies from the mothers' childhood memories which

were mostly forgotten. As a small step forward I have recorded the CD for them to remember their own voices and share this journey with their young children. It's so rewording to see the mothers singing with their young children in their own languages at home.

CONCLUSION

This case study draws attention to the need for a setting to employ the services of practitioners who can speak the native languages of immigrant families, and who are sophisticated in understanding the cultural challenges that women face in their daily lives as women, mothers and potential supporters of their children's learning. This paper has shown how through inviting parents' own stories, their memories of songs and their purpose in daily lives with their children we aimed to develop our own understandings of intercultural competence. These were strengthened through our sharing and reflecting together on ways of working; finding that activities required an open-ended approach, respected what parents already know and do and which drew attention to their children's musicality and to parents' potential to support. Reflections on how music can both facilitate approaches and bridge differences serve to ask ongoing questions about the underlying ethical dimensions that permeate relationships where settings seek to work in meaningful caring partnerships with diverse families.

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MUSIC MOVES: NO NEED TO TAKE YOUR SHOES OFF!

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ABSTRACT

In this presentation we will look at a project where music making aimed to bring parents through the door of the primary school to engage positively with the staff and school environment, starting at the pre-school stage. Could music sessions offer a place where the children's learning and progress was visible and obvious to parents and could engage parents and children together?
In this project over ten months, parents had an open invitation to either partake in or observe a weekly music and movement session with the children in their first year.
In the very multi cultural setting, where only few people have English as their first language, music through movement offered a good tool for participation and non-verbal interaction and communication. Many adults seemed to encounter cultural barriers, while the children were expressing themselves enthusiastically using movement and experience music in different ways.
In this presentation, we will look at the different responses from the parents and the way attitudes changed over the time of our project. Children played a key part, as they were keen to involve not only their parents, but also the staff. Responding to music and musical tasks, perceived as a game in the space, whole body movement became a useful and obvious learning tool and a way to relate and engage. Parents could observe that learning at school could be fun. They could see how their children were developing many skills through exploring and experimenting through movement and music. Festivals offered a great opportunity to attract the parents to come and celebrate with the children. One big part of those celebrations was music and movement.
Could the visible enthusiasm of the children, focussed attention to the music and their imaginative contributions influence the parent's attitudes? Were they more willing to engage with their children and their school environment? This presentation will look at the task of challenging and engaging parents through music making with their children.

KEYWORDS
Music, movement, parents, engagement, staff involvement

INTRODUCTION AND AIMS

In this presentation I will discuss one part of the project where music making was to bring parents through the door of a primary school to engage positively with the staff and school environment, right from the beginning at the pre-school stage. The big Primary School included an adjacent Children's Centre, including a Pre-school (three to four and a half year olds) in a suburb of a big southern English city with a very diverse community. The children would either attend in the morning or the afternoon. The project leader has a background in music therapy and Dalcroze. Those theoretical principles underpinned and informed her observations and the practice with the young children. Two aims emerged through discussion with the school:

- To see if music making could offer a place where the children's learning and progress was visible and obvious to parents and could engage parents and children together.
- To overcome cultural and language barriers through music and movement towards better communication and collaboration between parents and the school and staff.

Through close involvement and collaboration with the staff, the music project was aiming to be sustainable and become part of the Nursery's tradition.

SETTING UP THE PROJECT

The music specialist approached the school with the question, if they felt they had many 'hard to reach' families in their school? 'Overwhelmingly many. Our children come from a wide cultural background of families, who do not speak English at home and have little support other than from their immediate family', was the answer. The school pointed out that they preferred to use the term 'hard to engage', the hardest families to engage being the local British ones. Anything,

which would help to improve the relationship between the school and the school community, was most welcome. To my surprise I found that the school had already done a great job to achieve this aim and that much had been tried and accomplished.

The music project was to help specifically with the youngest children and their parents, just entering the school into pre-school, all aged between four and five with the hope to overcome some of the very first barriers and install trust and good relationships right from the start.

THE MUSIC SESSIONS

Sessions were held weekly and involved two groups of pre-school children. We had the use of a good space, which allowed movement, with reasonable floor and lovely light, as well as access to some instruments and a keyboard.
The sessions had to fit into the rather formal and traditional school day, the children to be good and well behaved, with no disturbance of the school day. Needless to say some of the children were quite intimidated and so was I. However the sessions proved quickly to be the highlight of the children's week. Staff were very supportive and took part in all the sessions. One teaching assistant was given the task to be the link person and would become a key person in the sustainability of the project.

PARENTS AND CARERS

Parents had an open invitation to either partake or observe the weekly music and movement session with their children throughout the year. They were given a written invitation and then were kindly reminded and welcomed at the door by the teaching assistant on arrival to the school every week.
In this very multi cultural setting, where only a few people have English as their first language, the challenge was manifold. Not only language, but also many cultural barriers had to be overcome and trust to be won through sensitive and careful handling of the issues involved.

The school had a lot of experience in handling those and did their best to keep an open door for communication and collaboration with parents. But they had found it difficult with some parents, who were very reluctant to come over the school's threshold. Only ten percent of the children were English speaking, sixty five percent Asian (many different languages) and twenty five percent Polish. The school told me that the contact and trust was hardest to be gained with the local English-speaking parents from the town, many of whom would not have had a positive experience at school themselves.

HOME VISITS AND INTERVIEWS

Initially we had planned to visit families in their homes, hoping to introduce them to the school through inviting them to the music sessions. But it was very difficult to be welcomed. Many were fearful about letting the professionals into their homes. However many parents were very happy to fill out a questionnaire, which took place in the form of an informal interview during the first term of the project. Most parents - mostly mothers - were very open and prepared to communicate, once in the safety of the room and reassured of confidentiality. I perceived it as a privilege and an amazing experience to have a chance to introduce myself and to get to know more about the families manifold backgrounds and circumstances and their relationship with music. The most striking information was that music was heard only from the TV and computer, some from the radio, but rarely live. I also was amazed at the differences in their appreciation of music: some were keen listeners and knew a lot about their own preferred music styles, others had no music at any time in their home, nor elsewhere.

SUCCESS OR DISAPPOINTMENT IN THE OUTCOME OF THE PROJECT

Parents came to the session sporadically, maybe five or six to the same session, later maybe two or three. Some were there every week. They would sit at the side and observe, unless encouraged to take part in an activity. The children were very, very keen for their parents to attend and really enjoyed sharing their

experience. Some fathers came as well, but more rarely. Overall, parents were reluctant to engage. Reasons for that were never really identified with a survey, but they had said that they were at work, too busy with other things to do. We wondered if they might feel reluctant to engage with the sessions and the child, wanting the free time while their child is looked after (understandably!), embarrassed, or else not keen on music making themselves and not seeing any point.

There was an emerging dilemma for the nursery staff, which we had not really thought through beforehand. They tried to settle the children in the school and send the parents away, especially for those who found the separation difficult. We on the other hand wanted the parents to stay and partake in the music sessions. Often when parents came to the music, their child regressed in their behaviour. They cried a lot and would not leave the parent's side. We therefore became reluctant to ask some parents to join. At the same time, staff could see the progress during music session and often commented on the visibly positive change in confidence and independence of shy and anxious children in particular. It was poignant to see those children take the lead, suggest ideas or 'perform' to all at their own suggestion.

> "On the occasion of our Queen's Diamond Jubilee in June we worked on this theme over a few weeks. One previously shy girl walked up and down the room by herself with a pretend crown on her head to the slow movement of Handel's Royal Fireworks music. We all were enchanted with her poise, focus, attention span and courage".

CELEBRATIONS

Trying to encourage parents to attend, we made special celebrations like Mother's and Father's day, Christmas and Eid into music celebrations. For those special occasions the attendance was excellent. Most children had someone of their family joining us: mums and dads, grandparents, older sibling and carers. The parents were invited to take part, sit, play and dance next to their child. After the music session all went together to the classroom to do crafts and have snacks. This was probably the most successful part of the whole project in terms of our

specific aim. Parents seemed to really like this, relax in each other's company, talk to the staff and the Assistant Head, who joined us for the occasions. Some barriers were definitely overcome on those occasions. Many commented that they could see their child's progress in confidence and musical skills.

INDIRANI'S VISIT

As about sixty five percent of the children were from an either Indian, Pakistani or Bangladeshi background and had never heard any live music or seen any dance of their own culture (according to their parents), it seemed a perfect time to give them an opportunity. We invited an Indian classical dancer, who gave the groups and their parents an interactive workshop and then a performance to all children in the lower school. At the same occasion some older children sang and also performed on instruments. On reflection, remarkably few parents took the opportunity to come along to this free event, especially arranged for them. The response was polite but not very enthusiastic. Was it because it was organised by us? Would the audience have preferred Bollywood instead of the classical style of dancing? I could only understand this by comparing it to a classical chamber music as opposed to a pop concert? Were there any cultural, political or religious reasons? I was aware of my initial naivety and lack of knowledge about the issues involved and I learned a lot from Nuzhat's approach. She ran another part of this project and is presenting her reflections in this symposium (under Nuzhat Abbas).

EXAMPLES OF RESPONSES OF PARENTS

One mother told me her son insisted that she should change her day of work, so she could come and take part in the sessions. She eventually did and was astonished at her son's commitment and engagement. She said she had never seen him so animated and involved in anything he did.

Another parent, who had told me her whole story and had no music at all in her life, in fact she was avoiding to listen to any, came to several of the celebrations. She was delighted to see her son taking part, despite his extreme shyness and a slight disability. She had assumed that he would be bullied. But here she saw him well integrated in the group, relating to other children, and even leading the others in one musical game.

Another mother came with her twins on a very regular basis. Her little girl was clinging to her at all times, clearly shy and insecure. Mum told me later in an interview towards the end of the year how she had been determined to help them to get more independent. The twins had a difficult start as babies and were needing a lot of attention. This made her very protective of them both as she was now realising. Through the music sessions the family had started to make music at home with singing all the songs and playing saucepans and spoons as instruments, performing to each other before bedtime, dancing and laughing. It had been a very good time for them all, including the father.
As the parent was so often present in the music sessions, she started to support other children, too. They would seek her company and play with her and her children. The mother discovered how much she enjoyed working with children and ended up taking a voluntary job in the school in the following Autumn term, with a view of training and working in a paid position.

STAFF INVOLVEMENT

An essential role towards the outcome of the project was taken by a member of staff, who had been given the remit to support, observe and contribute. She was able to join the project team in two training days and share her experience and observations. She was able to keep the music and songs going during the week, help with the setting up of instruments and equipment and take the lead in some of the activities. She texted me to say that she has been able to keep the music going after the project, taking sessions with up to six different classes all throughout this year.

MOVEMENT AS A MUSICAL TOOL

I reflected beforehand on the possible ways of planning the sessions.
How would I manage to communicate with children who could not understand me, or each other? I expected music to be able to offer common language and a sense of fun. I was predicting that interaction through movement with the children would be natural and could replace verbal communication and help us to find meaning.

Could music also provide a framework and set some boundaries?

> "You are a body' (note not 'you have a body!" (Greenland, 2001).

The children responded instantly and enthusiastically to most of the music and movement activities. Although verbal language was always present, it was the movement, which was a 'language' all children seemed to 'speak'. In fact it was clear that it was their spontaneous, intuitive and preferred language, like a default mode.

> "The body is the child's first home, and movement their first language" (Greenland, 2001).

The music led and framed the activities through its natural sense of form and phrasing. The emotional containment of the music, i.e. the security provided by a regular beat, the satisfaction of simple rhythmic patterns so familiar and easy to repeat again and again, the appeal of the melodies and the accompanying harmony (the latter often provided on my accordion) were working their magic with the children. I can remember thinking of sponges soaking up information as I stood introducing them to my 'Kantele' (a simple Finnish string instrument). It felt as if the sound of it transported them to the place they wanted to or needed to be. The focus and attention was 100% and their energy seemed almost tangible. But what really engaged them without exception was the chance to move in an open space with their whole body. There was a sense of excitement and anticipation once we entered the space. The response from the children was instant and immediate. The tasks were simple and short, giving a lot of opportunity for the children to give their ideas and experiment and 'play'.

The principles of Dalcroze (Bachmann, 1991) were applied, experimenting with time, space and energy, internalising music and listening skills honed while moving and interacting in the space.

Musical sound signals would demand a movement response from the children, which included basic locomotor movements (walking, jogging, skipping, jumping, stopping, starting) often as part of a story or a theme. Along with some 'tummy' movements (crawling) and other basic moves (balancing, turning,

swaying, etc.) this provided important and essential development in physical skills (co-ordination and dexterity, balance). It seemed so obvious that musical structures mirror so many in real life. Children seem to pick this up intuitively. I will elaborate more background research and principles about the importance and benefits of using movement in my other paper, called 'Music moves'.

The music provided a framework and natural boundaries through beat and rhythm patterns, as well as phrasing and form (Dalcroze, 1921). Children were motivated to produce this music in their bodies, recognising intuitively the direct link and connection, adding their own expression and interpretation of the stories of animals, transport and fantasy world. Once a framework was set, we worked with their ideas, exploring and copying, changing and memorising them. We were able to use the current topics of last summer in England: The Royal Diamond Jubilee provided a colourful theme with Handel's Fireworks Music and parades, horses and flags, followed by an 'Olympic Games' theme, both themes giving plenty of music and movement opportunities.

VISIT OF A COMMUNITY MUSICIAN

For four sessions in the winter months, we had a visiting musician, a violinist, bringing another live music experience and providing an array of improvised sounds to encourage expressive movements. She introduced the children to the violin and the String instruments, which provided a great addition to the skills of the project leader, who use mainly voice, accordion and keyboard, various whistles and percussion. She realised how intense the experience is for the children when using live music, which can fill the space and the body and be flexible and improvised. The musician also remarked after the sessions on how much she noticed the best engagement of the young children when emotionally involved through stories and images. She developed skills in improvisation in order to play for the movement, which was new to her.

NO NEED TO TAKE YOUR SHOES OFF!

This was to be an encouragement for parents to participate in the movement, even with their shoes on! They were as a rule reluctant. It seemed that they wanted to observe while sitting at the side. They commented repeatedly on the intense engagement of the children during the sessions, but most of them were not willing to take part themselves or in front of each other. The formal school atmosphere of the corridors must have brought up big cultural barriers, which were hard to break down.

The one activity all parents and grandparents were willing to take part in was circle dancing. This was safe and predictable, orderly and familiar, at least for some. The children were thrilled when parents actually took part in this and the activity seemed at least for short moments have to achieved one of our goals: to involve the parents and integrate them into a time with their child, modelling an attitude of openness and willingness to take a risk, to experiment and learn. The circle dance seemed to powerfully visualise an image of harmony and togetherness of school and a very diverse community.

As a result of the music sessions with the pre-school classes, I was asked to continue the project to the end of the year, as well as working with two boys in need of music therapy. Unfortunately, due to lack of funding, the sessions had to be terminated then.

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PART III

SYMPOSIUM 2

EXPRESSION AND COMMUNICATION AS A CUE FOR DEVELOPING MUSICAL SKILLS

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ABSTRACT

As a result of its mainstream educational paradigm, music education in Flanders often shows problems in dealing with the expressive nature of music. The fundamental nature of early mother-infant interaction in combination with Cross' (2012) idea of 'something-like-music' could serve as a model for establishing the kind of mental free space that is needed for an integrated artistic development based on expressivity and musical communication.

KEYWORDS
Communication, emotion, expressivity, interaction, musical development

> "What I would like most, is sitting in Kindergarten all day long, looking around and talking. Life can't be more beautiful than a child. A child knows how to live. Most adults have lost this ability."
> (Kees van Kooten about his grandson in 'Always grumbling' an interview by Christophe Vekeman with Dutch author Kees van Kooten in De Morgen, March 13th 2013)

IS THERE ANY PROBLEM?

This article is the result of an increasing awareness of problems related to musical expressivity and communication that are widespread in music schools and primary schools in Flanders. They reveal the symptoms of an education that seems to have deviated from what human social interaction - and in its wake learning - is all about. Nevertheless, as a result of an increasing body of scientific work on human musicality as well as own 'teaching research' with children, youngsters and adults, it becomes clear that music can offer inspiring

insights about 'who we are', 'what we can' and 'how we develop' (Strobbe & Van Regenmortel, 2013).

Although I think that music teachers have to play an important role in the transformation of education, I agree with Bjørkvold (1992) that music is not a positive experience under all conditions. As a former teacher at Flemish music academies, I soon became aware of the kind of pretend play that often emerges when children are expected to 'interpret' musical compositions as objects invented by dead, male, European composers (Upitis, 1992). Most children have so many problems dealing with the technical difficulties of their instrument, deciphering scores and accepting imposed technical and stylistic norms, that they too often just copy the symptoms of musical expressivity that their teachers explained to them. This kind of artistic fraud (see Gardner, 1995) contrasts heavily with the way they expressively interact with each other in informal situations even before and after music lessons. So, in general the problem has little to do with a lack of expressivity at the personal level. It is the result of an educational approach through which the distinction between those who are musically gifted and those who are not becomes a self-fulfilling prophecy.

Similar problems arise in the context of primary school. Twelve times a year Musica, Impulse Centre for Music organises Musicaklassen for 3d to 6th grade children and their teachers. For one week they reside at Domein Dommelhof Neerpelt, which is a beautiful natural surrounding and the habitat of Klankenbos, an open-air collection of international sound art works. Inspired by experienced artistic coaches and starting from a central theme, children and their teachers work with sound, music and movement, and possibly make excursions to other artistic domains. Depending on the theme, each week ends with a presentation: a performance on stage, a recording, a flash mob, a live radio broadcast, a mini sound art exhibition, etc. (Van Regenmortel, 2013a).

With mainstream educational background and specific school culture in mind, during Musicaklassen we are often faced with the problem of bringing participants to real expression during performance. Many children as well as teachers have acquired a kind of 'schoolish reflex', a mimicking behaviour that is the result of what they experience as actions, goals or requirements coming from the outside. According to my view the reason why many children and teachers

have adopted such an unfortunate attitude is precisely because they want to connect to each other within the system as it is, and wherein most of them do not have the feeling that fundamental changes are possible as a result of their own initiative.

At Musica we became more and more aware of our own instructional habits and the results they deserve. Until a couple of years ago we realized to what extent many children during performance acted rather duty-aware in the way they reproduced what had been developed and rehearsed during the week. As if they were the actors for whom a director had carefully stipulated what to do at what moment and in what way, being part of a play they didn't feel emotionally connected with. Indeed, taking a more careful look at their facial and bodily expression, we sometimes asked ourselves: Do they understand what they are doing? Are these children expressing the things they really identify themselves with? (Van Regenmortel, 2013a)

We decided to rethink our approach from an artistic as well as a pedagogical point of view. The main ideas were about bringing expression and communication to the centre of attention, and adopting 'a pedagogy of listening' (Rinaldi, 1998) from an interpersonal as well as a musical perspective.

LOOKING FOR SOME CUES

Since in our society an active on-going musical development from birth to adulthood is rather rare, the question arises how to approach children that often had very poor active musical experiences, and if they had, they were seldom rooted in expressive performance from the very beginning. The implicit paradigm about music coming from the outside and children that are being acted on as blank slates, as it is exemplified in society and in many educational contexts, contrasts much with the general accepted idea among musicians that music is a language, specifically the language of emotions. The latter might be rather a kind of paradox in the literally sense.

In the case of language children acquire their mother tongue based on what is more or less generally accepted as an innate universal grammar (Jackendoff, 1994; Pinker, 1994), all languages being surface phenomena of a rather strict

and unconscious deep structure rule system. Could the same be true for music? There are many problems in solving this question, and many attempts only deal with musical 'literature', with a dominant focus on composed western tonal music written down in scores. I think that the idea of sticking the word 'language' to music could even add some problems to the way teachers approach music. From an artistic point of view, music could be approached too obviously as a binding rule system, exemplified by the way subjects feel attached to tonality or a musical tradition.

Although universal grammar puts many constraints on the structural conformation of linguistic utterances, the rhythmic, dynamic, timbral and melodic, call it the musical aspects of language, already seem to allow much more diversity (Patel, 2008).1 The more language moves towards poetry, the more linguistic grammar gets blurred in favour of musical features. In this respect poetry could be seen as a kind of linguistic nostalgia in remembrance of the time language and music still formed a holistic unity, even without a universal grammar.

If a universal grammar for music would exist, at least it would be very confined and not a binding one, allowing for an asymmetric level of complexity regarding different parameters, as is exemplified by the immense diversity of musical cultures (Strobbe and Van Regenmortel, 2010). Especially when talking about children, and from an artistic and pedagogical point of view, I would even suggest that music has a grammar 'à la carte'. Even if this weren't true from a scientific point of view, it is a nice idea in dealing with diversity. It means that, what we experience as music can be empirically recognized as such by means of artistic action research within a social (and thus educational) context.

This idea fits well to what Cross (2012) calls 'something-like-music'.

> "(…) across cultures, music appears embedded in social action, and I'd suggest that a generic 'something-like-music' constitutes a foundationally non-conflictual medium for communicative interaction. 'Something-like-music' affords participants the

1 Patel (2008) e.g. refers to the fact that stress-based segmentation is by no means universal, and that the use of intonation is more diverse than has generally been appreciated. In this respect he refers to the difference between English and Somali in using pitch to put focus on certain words in sentences.

> collective intuition that they 'understand' each other. It does so partly by virtue of its floating intentionality — each participant can, within limits, abstract the meanings that they feel are expressed in or reflected by the music, but as music does not require that its meaning be recast back into the public domain in order to be efficacious, individually-constructed 'meanings' are not brought into potential conflict."

From an artistic and pedagogical point of view, this seems an inspiring idea. It means that there is no need to start music sessions from a 'should be', but rather from a kind of 'as is (possible)'. Bearing in mind that there is no direct relationship between musical complexity and emotional response to music, 'something-like-music' holds interesting perspectives in dealing with diverse groupings in diverse settings, as it can lead to 'whatever-we-call-music' (Strobbe & Van Regenmortel, 2010). It seems to be applicable on whatever level of complexity, in whatever situation, including the mix of different levels of proficiency as well as different ages, even exploring the borders were music overlaps poetry, dance or theatre, or becomes part of the ever-expanding possibilities of new media in dealing with sound. This is precisely what we try to do at Musicaklassen.

TIME TO PLAY

Although schools have mainly been invented in order to transmit skills and knowledge to children and youngsters, I would like to point to the curious observation that the discrepancy on the level of skills and knowledge is never larger than between a mother and her baby (Strobbe & Van Regenmortel, 2013). Nevertheless, both succeed in establishing a strong mutual bond and in its wake the most powerful learning process one can imagine. Could this be the result of the ambiguity - or call it the 'flou artistique' - of 'something-like-music' (Strobbe & Van Regenmortel, 2013)?

> "We instinctively accept the kind of free space that manifests itself in mother-infant interaction, that is limited by the baby's physical and perceptual abilities and is nourished by empathic interventions from the environment. By means of reciprocal interaction closely attuned to the infants' physical and emotional needs, mother and baby create a shared narrative, in which the baby's explorations, experiments and play lead to concepts that make him skilful with the surrounding culture. The baby gets

> the chance to do so at his own pace and in his own order as related to his congenital character." (ibidem)

Apparently, notwithstanding the gap on the level of mental and physical abilities between mother and baby, there seem to be plenty of mutual starting points to evolve within a common narrative. These postnatal 'jam sessions' clearly exhibit the principles of what we could call the 'Ur-Pedagogie' (Strobbe & Van Regenmortel, 2010/2013).

Could the same be true when working with children or even adults? I think it is. Whenever participants get the chance to evolve from 'something-like-music' on own terms instead of imposed ones, the same mechanisms as in mother-infant interaction seem to emerge and show up powerful bonding and learning effects.

In this respect, allow me to describe the following experiment with a group of adult musicians that was part of an introduction course on music and play in early childhood. As an experiment concerning verbal communication in duos, A was asked talking to B about his or her favourite topic for 90 seconds. B was asked to react by no means whatsoever: no facial expressions, no body language, no sounds. Both had to sit in front of each other and make eye contact. After a sign, both changed roles.

The participants concluded that it was hardly possible not to react as a listener. Despite of rational control, the body wants to react as a result of a deep psychological need. On the other hand, it is hard to keep talking for 90 seconds to a person who doesn't react, even when it's about your favourite topic. Conclusion: we are social beings from top to toe. Unconsciously we want to express ourselves in order to connect to each other. At the same time, we feel an urge to bring communication in balance.

At the second stage, the same duo's where invited to choose between a simple musical instrument, their voice or a sounding object. This time they were just asked to communicate by means of the chosen 'instrument'. No other additional rules were given for this game. The duos were composed as follows (A + B):

- big tambourine + djembé
- pencil with chair + xylophone with stick
- pencil + piece of paper
- melodica + voice + ukulele (this duo happened to be a trio…)

Without being able to get into the details within the scope of this article, what emerged without exception in all ensembles, though in the most diverse conformations, was the following:

- at the beginning B immediately reflected back A's idea by means of true imitation2
- all B's did so by using all musical parameters that were possible with their 'instrument': same timbre, same dynamics, same timing, more or less same pitch and melodic contours (in the trio), same overall feel
- the interventions of A and B stayed more or less in balance within the scope of the improvisation
- all improvisations exhibited the principles of repetition, contrast, expectation and surprise at novelty
- a broad diversity of solutions emerged (partly as a result of the instrumental constraints), indicating the possibility of engaging in or developing towards any musical idiom

I've done this exercise many times, with children, adults, musicians and non-musicians. Notwithstanding of course many variations depending on the participants, available instruments and context, It is striking that the overall results are very consistent although the instructions of the task are very open. Even if you compare trained musicians with non-musicians, experienced improvisers or score musicians, the former often (but not always) exhibiting more complex developments. In general, such musical talks start rather quiet, often evolving to more adventurous passages with shorter fragments and/or resulting in an overall crescendo as a kind of catharsis.

By starting to imitate each other, all participants made immediately clear that they accepted and understood each other's intentions. As the play developed,

2 In contrast to mimicking, true imitation copies the task structure and hierarchical organization. It focuses on the goal rather than on the means through which the goal is attained. (Leman, 2008)

they became part of and contributed to a shared and unique narrative, which is real fun in its own right. Although performances lasted only between 30 to 90 seconds, all contained basic principles of mother-infant interaction, compositional features like repetition, contrast, expectancy and surprise at novelty, a feeling of togetherness, the urge for autonomy as reflected in the individual roles each adopted, and the emergence on the spot of (unconsciously and) mutually accepted rules. All participants were so focused on each other's state of mind during these unexpected little improvisations, that their feeling of mutual connection and flow immediately radiated to the audience, as was proof of the attentive silence at the end of each performance.

As this little experiments show, the power of our social nature unconsciously leads to the emergence of music-like structures taking whatever gestural form. It happens between mothers and baby's, between children, between adults, and – why not? – between teachers and pupils. In such a context, there might be a gradual transformation from sound as mere communication to what we can recognize as music in a momentary accepted or agreed on form or structure. From that point of view, the compositions of solitary composers can gradually be understood as a representation or sublimation of our very social nature, including the 'true' expressivity they need. This also means that the mere reproduction of musical literature might not be a good basis for establishing a music curriculum. Musical understanding should be rooted in emotionally meaningful interaction, and the acquaintance of a repertoire could be seen as a satellite of musical improvisation and creation in diverse settings.

Papoušek (1996) affirms that the global and relational principles of perceptual organization are universal across age and sex, and function early during ontogeny, because they seem to be based on biological predispositions. That is why babies, children, youngsters and even adult professional musicians experience the same psychological rewards during experiments like these. Still according to Papoušek (1996)

> "the more intelligent and social the species, the more elaborate the play (citing Wilson, 1975). (…) Infant play may be an early manifestation of capacities playing important roles in human life and should not be underestimated."

Play reveals a kind of expressiveness that seems situated first of all in the interactive features and the reciprocal entrainment of being in the same situation, where emotions are primarily construed from and at the same time nourish the interaction. That is quite the opposite as in the situation I described above about children struggling to 'interpret' music coming from the outside. A context of emotive interaction along the principles of mother-infant interaction, is a powerful tool for recognizing one's own musicality, fostering the invention of musical ideas, discovering an individual music vocabulary and dealing with the basics of musical structure.

When we started to apply this idea during Musicaklassen two years ago, it has become clear that the most powerful learning process emerges when action becomes part of emotionally rewarding interaction in which basic psychological needs are being fulfilled: togetherness, autonomy and pleasure. In such a context, subjects are willing to accept on own terms a broad range of approaches about what could be regarded as music.

At the same time, we can imagine what is the result of in fact being prohibited to socialise, as is the case in the examples at the beginning of this presentation. When children are expected to imitate prescribed behaviours in a symptomatic way according to imposed norms, the focus easily shifts on isolated symptoms instead of overall experience or mutual and thus musical understanding.

CONCLUSION

The development of musical skills thrives well on a basis of expressive communication that leads to playful interactions, feeding our psychological needs in an integrated manner, be it by means of 'something-like-music' or even 'real music'. Depending on the specificity of interpersonal contexts our musicality can develop into the most diverse conformations, to which everyone can add his own. For that reason the focus in music education on whatever level of proficiency should be directed towards the mental and bodily system that forms our musicality within a social context, instead of towards music.

Such an approach allows for bringing together different ages, different levels of instrumental skill as well as different levels of musical understanding and is able to adapt and fit to the most diverse contexts. From this perspective teaching music is about the clever and strategic limiting or/and recognizing of the mental free space where learning can emerge. In such an environment "music takes its power in its profoundly social nature, like language, as a vehicle of interiorized representations. All its temporal substance is nourished by our way of being in the world: that is, in our time, our culture, our perceptions, our bodies, our emotions, and our sentiments." (Imberty, 2000).

> "Sitting in Kindergarten all day long, looking around and talking" could indeed happen to be a revealing pastime to start fostering musical ideas.

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MUSICAL EXPRESSION AND COMMUNICATION AS THE BASIS FOR MUSICAL DEVELOPMENT OF YOUNG CHILDREN

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INTRODUCTION

Jong geleerd.[1].. is a three-year music education project devised and run by toeval gezocht. It aims to offer young children opportunities to develop their own musicality in creative ways.
toeval gezocht's objective is to explore, develop and strengthen the relationship between art and learning through projects, research and the exchange of knowledge. Our starting points are certain principles of social constructivism and we take inspiration from the Reggio Emilia Approach which has taken these principles and put them into practice in a special and inspiring way.
In this paper toeval gezocht explores the essence of expression and communication as fundamental dynamics within which the development and learning of young children takes place, focusing on music as a language. We are convinced that musical expression and communication in all their diversity and complexity form the most fruitful basis for the musical development of each and every child.
This musical development contributes in turn to a child's emotional intelligence and the development of connections in the brain (Mieras, 2010).

1 "Jong geleerd" ... literally means "learned young", it is a phrase in Dutch which has no English equivalent. In Dutch the sentence does not need to be finished, the implication hangs in the air for all to hear. It captures something of the idea of how crucial the early years of a child's life are for forming the future adult.

EXPRESSION AND COMMUNICATION: NECESSARY CONDITIONS FOR THE SURVIVAL OF THE SPECIES

From the moment of birth, everyone possesses the potential to express themselves and to communicate. Human beings have developed these capabilities, through the long process of their evolution, in order to survive as a species.
After World War II Loris Malaguzzi, the founder of the Reggio Emilia Approach, worked with severely traumatised young people and discovered that the best way in which he could help them was to offer them opportunities to express themselves freely and openly and to communicate their experiences and feelings to each other. He discovered however that the emphasis on the verbal language was a hindrance to this process. Together with these young people, he explored many other forms of expression (e.g. theatrical, musical, imagery) and became convinced that human beings have hundreds of languages which they can use to express themselves and to communicate. This concept is an important theme underlying the method of education which he subsequently developed for young children.

HUNDRED LANGUAGES

It is important to offer some explanation about what we mean when we speak about a hundred languages, because we could be referring to some of the more than two thousand verbal languages that are used around the world to allow each culture to express its own values, beliefs and experiences. But once we grasp the richness of the concept of "the hundred languages" we can go much further: we can use it to explain our ability to express ourselves and communicate to others using imagery or sound, or the "language" of logical reasoning, of metaphor, of mathematical formulae, of gestures or other movements of the body. All these ways of expressing ourselves and communicating are part of being human and can be developed as rich languages.
Emotions, thoughts, ideas, feelings, experiences and many other aspects of what it is to be human, which need to be expressed and communicated, are encaptured in this concept. And it is essential to understand that some people are far better at expressing themselves in words than others, but that another person may be able to express him or herself far better using imagery, and yet

another through music. And that all of these different languages can influence and strengthen each other.

MUSIC

Music has a special role to play in this context. It is believed that at an early stage in human development people communicated with each other using sounds, well before words were developed. Our potential for music is located in a primal part of the brain, close to the emotions, a part which evolved very early on. Oliver Sacks (2009) has described wonderful examples of people who had suffered serious brain damage, but whose musical ability and memories remained intact. We can readily observe how music triggers the first attempts at communication in the individual development of every human being. Henk Jan Honing (2009) describes how babies and their parents begin to communicate through 'babbling musically': communication characterised by melody, sound and rhythm. The expression "C'est le ton qui fait la musique ..." captures the essence of how the musicality of language is vital in conveying the emotional meaning of spoken words.

Mark Mieras (2010) explains how the thalamus, the central part of the brain, serves as a distribution centre: music and the intonation of the spoken language is sent to the right and words are sent to the left. These areas are mirrored in the brain and work together to enable the understanding of language.

The meaning of speech is therefore to a large degree understood through the "music" of the spoken language, the intonation. And what is crucial about the language of music is that it is so close to the ever present emotional component of human communication.

THE RELATIONSHIP BETWEEN THE DIFFERENT LANGUAGES

If we observe young children carefully, we can see how little pressure they feel to restrict themselves to a single language when they are playing or exploring. From moment to moment they switch from imagery to theory, from movement to storytelling, from singing to materials, from experimenting in order to

understand something to experiments which flow from wonder, from the languages of "truth" to the languages of "beauty". Children are acknowledged as budding artists and scientists and they use all languages to develop themselves. Examples from science teach us that often the greatest discoveries in, for example, mathematics or physics originally manifested themselves as images. (Think for instance of Richard Feynman and his world famous visualisations and drawings). American psychologist Jerome Bruner (1986) suggests that many scientific and mathematical hypotheses begin as small stories or metaphors. The switching from one perspective to another, the easily established connections between the different "languages", can be seen as the manifestation of children's creative potential to develop themselves in a rich and versatile way. If we look specifically at music, it is striking how intertwined movement and music are. Sarah Verhulst, a Belgian musical education specialist who works with very young children says: The movement a child makes is often a precursor of his or her musical expression.
And W. Gruhn (2009) argues that every experience a young child has is accompanied by movement of the body and that every movement produces a stimulus in the brain that is stored as a mental representation. The human brain does not therefore function autonomously but is always connected with the body from which it gets sensorial input and the environment which is necessary to stimulate the growth of the internal networks.

HUNDRED LANGUAGES AND CREATIVITY

The definition of creativity that we use was formulated by Carlina Rinaldi (President of Reggio Children) as the freedom at any moment to look at something from a different point of view. She says:

> "From a very young age, children seek to produce interpretive theories to give answers ... There is the intention to produce questions and search for answers, which is one of the most extraordinary aspects of creativity"
> (Rinaldi, 2005).

Languages are opportunities for individuals to express themselves and to communicate. But such languages are much more than that: they are also the many different perspectives from which to view something. When we look at the view from our window with a geometric eye we see something very different

from when we want to know whether or not it is cold outside. In each case we let our eyes wander over what we see outside, but in each case we see something different. And in both cases our feelings influence what we see, as will the previous images and memories we have from looking out of the window before: context, feelings, moment of the day, the light, sounds. To judge whether or not we need to put a coat on or for forming an opinion about the geometrical proportions of the street therefore many more aspects come into play than we are always conscious of. And it is those very connections between all those different aspects (even unconscious ones), the complexity of the connections that are made in our brains, that make it possible for us to continue developing and enable us to intensify our understanding of a given subject.
The concept of "creativity" and the idea of "the hundred languages" are therefore inextricably linked. We are always able to look at things in a new way and then to give expression to what we have seen because we have so many languages at our disposal. Moreover: the cross-fertilisation between different perspectives, and different languages makes the learning process rich and fruitful, even in very young children.

PEDAGOGY

What we have said above presents an image of the child which encompasses all the capacities that children are born with. We have called them "budding artists and scientists". We have also set-out the essential concepts of creativity and the hundred languages in the context of (musical) expression and communication. The next issue is: how can we best design musical education for children so that they can use all their creative potential to express themselves and communicate musically? We cannot however take this step to the practical application of the above concepts without first considering the pedagogical principles upon which we base our theories. These are essential and indispensable. They form the link between theory and practice.

We have therefore chosen to explain briefly two important pedagogical concepts which underpin the way we proceed:

1 Children take the lead
2 "The Three Pedagogues"

1. CHILDREN TAKE THE LEAD

We recognise in children the potential for the same strategies as those used by mature artists and scientists by which we mean: research, experimentation, careful investigation leading to something totally unexpected, which turns out to be just what was needed. Robbert Dijkgraaf (2012) chose as the title for his book the phrase coined by education expert Abraham Flexner (1921), "The usefulness of useless research", in an attempt to defend the value of the free, wandering, creative spirit. He argues not to divorce wonderment from understanding (2009). If we wish to honour such capabilities in our children then we must let them take the lead. In other words: we should see learning as a creative process where it is not the information or instruction which adults give to children that is paramount, but the initiative, the curiosity and the motivation of the children themselves. In this way we can see a child as the protagonist in his or her own learning.

Children are perfectly well able to compose, improvise, conduct and play music together and to listen to complex music in different tonalities; all the roles that are part of the lifetime experience of a musical adult. (Bremmer and Huisingh, 2009).

The role of adults as supporters and followers of the processes of children involves observing, documenting and reflecting. By recording in words and pictures which musical strategies and concepts the children use, which initiatives they take and what arouses their curiosity, adults can then decide what interventions they should make in order to help the children progress further.

> "It is important for each child to know their own musical "voice" and to have the skill and confidence to develop it.
>
> Only by making contact with children's musical thinking and imagination as it comes through their own improvising and composing, and taking this seriously, can the details of planning for composing as part of the class and school curriculum take shape" (Glover, 2002).

2. "THE THREE PEDAGOGUES"

Just as adults do, children are constantly reconstructing their knowledge.

And this reconstruction is always co-constructive, i.e. in interaction with other children, adults and their environment.

These three are what we call "The Three Pedagogues": firstly, children learn from and with each other, secondly from and with adults (by whom we mean

everyone: teachers, parents, neighbours, shopkeepers, etc.) and thirdly, equally importantly, from and through interaction with their environment. And here we mean both their immediate physical environment and in a broader sense the world around them, the total context in which they grow up.
Ideally music is seen as a form of communication which has a uniting effect: music is made with others, music plays a part in all the important moments experienced by a community. When emotions are shared music plays a role and is everywhere, at home, on the street, in public spaces. In this way "the third pedagogue" is of the utmost importance when it comes to music.

> "Today's children have to become adept at managing transitions between the different places where they are cared for and educated. So many shifts mean that it is particularly important that we think of music in the context of their whole lives, childhoods lived at home and within distinctive localities…
> Before we move on, it is valuable to notice that these ideas of learning through communicative music, of the dialogue being a musical one, also line up with recent theoretical perspectives on music itself. From studies of music in diverse cultures, from popular, folk and jazz music studies, music has increasingly been understood as made in social processes of people playing together, or listening and dancing together. Conventional music theory casts music as a solitary, academic pursuit concerned with the inner rhythms, analysis of structure and so on" (Young, 2009).

CREATIVE MUSIC EDUCATION FOR YOUNG CHILDREN IN SCHOOL - A PRACTICAL EXAMPLE

On the basis of the theoretical reasoning and pedagogical concepts described above, toeval gezocht has developed an own method for teaching children music. (See also the paper Jong geleerd ... creative music education for young children elsewhere in this volume.)
For the purposes of illustration and inspiration we have set out an example below taken from one of a series of lessons that we have conducted:

"I HEAR THE WIND!"

The children from De Wagemaker primary school are the musicians of Rat Island, a nature reserve within walking distance of the school which they visit frequently.

15TH MARCH

Evi (4.4 yrs.) hears the wind today. She whispers softly: "I hear the wind, I hear the wind!" The music teacher whispers back, "Remember it!" Evi closes her eyes, listens and absorbs the sound of the wind.

Back in the music studio, whilst sitting with the entire group, we invite the children to let each other hear the sounds of Rat Island. Evi makes the sound of the wind with her mouth. She makes soft blowing sounds. It is not long before the entire class reproduces the sound. The children then vary the sound and some of them progress from blowing to soft whistling.

2ND APRIL

The wind becomes the focus for a number of children. We invite them to produce images as well. Liv (4.5 yrs.) draws wind-flowers. Liv: "This is from Rat Island, because there's a bit of brightness and there's my name and there are clouds and a puppet and the sun as well. And this is a toadstool ... Those are the wind-flowers. I saw those, didn't I? They're in the water, but this (points to the drawing of the wind-flowers) is grassy".

19TH APRIL

To encourage further exploration the music teacher collected various natural materials and instruments (twigs, leaves, sticks, hay, aluminum foil, sheets of coloured transparent plastic, a cardboard box, a violin, tin cans, shakers and a pellet drum). This collection is laid out on a large cloth in the middle of the music studio.

Liv performs the sound of the wind for the other children. She blows on a piece of aluminum foil. The other children lie all around her with their eyes closed.

Later on they say what they had heard. Anna (4.3 yrs.): "blowing" another child "a bell!" Liv makes her sound of the wind one more time. This time she sweeps the aluminum foil through the air.
Later on the music teacher asks Liv whether the wind-flowers in her drawing can also make a noise. Liv: "Yes, the wind can blow through them. That makes them wave". Liv demonstrates. She gets onto her hands and feet and swings her head up and down between her outstretched arms. We invite Liv to choose materials or instruments with which to make the sounds of the wind-flowers. She takes a deep breath and blows in the music teacher's face. Her arms follow with a powerful gesture. Liv: "Your hair is fluttering!" Then Liv grabs a sheet of transparent blue plastic and swings it with powerful strokes back and forth with her outstretched arms. Jalila (5.2 yrs.) stands next to her. She has in her hand a small bag filled with plastic balls and begins jumping in rhythm with Liv. This was the first joint wind composition.

26TH APRIL

Michiel, a cellist from the Amsterdam Sinfonietta, is visiting; he plays a piece from the repertoire of Sinfonietta for the children and also participates in the children's musical exploration. The children show him Rat Island and Michiel says: "Shall I try to make wind?" A child: "I know how you do that!" Lisa: "Yeah, play very slowly". Michiel plays his interpretation of wind on his cello.
The children have taken materials and small instruments with them to Rat Island. Together with Michiel they make music in the open air of Rat Island.

21ST JUNE

The "wind-group" forms a small band that makes music inspired by the wind. They have made special instruments for this purpose. They have hung various

chains, metal plates, a triangle and wooden rattles on a small climbing frame. During play two of the girls climb onto the frame. The other girls have different instruments: various shakers, a pellet drum, a rain-maker and a violin. Liv has chosen the violin. One girl is the conductor and gives strict instructions as to when it is each individual's turn to play. First they play in turn and then as tutti.

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FROM THE OUTSIDE IN

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ABSTRACT

Human musicality could be seen as a universal set of basic behavioural traits, involving body, sound and emotion, rooted in the evolution and ontology of communication and closely related to the emergence and acquisition of culture. All healthy children from birth on seem to share a common musical nature, expressed by innate musical abilities. On these shared grounds, children develop differently as a result of personal characteristics and unique individual experiences within their social and musical context and specific cultural background.
Because of children's differing biographies, teachers are confronted with very different musical skills, practices, likes, expectations and even idioms. It seems like a big challenge to offer a music education that fits this diverse picture and at the same time ties up with the needs of a classroom or day-care situation. But, as music expresses itself by means of different parameters in different constellations, it can take different forms and can mean different things to different people at the same time. The ambiguity of musical expression and communication can provide consistent answers for dealing with current challenges in music education.
A focus on musical communication and expression seems to establish a solid ground for supporting initial musical explorations, creativity and consistent ongoing educational pathways that incorporate children's diverse musical backgrounds. What are the implications of this assumption for the design of a music curriculum for children? How can we foster musical communication and expression? How can we identify, develop and reinforce existing musical potentials by such an approach? What are the opportunities and where are the boundaries for a tangible path of musical development?
In this symposium we will present and discuss three approaches that incorporate the idea of musical expression and communication, spanning the gap from children aged 0 to 12 years.

KEYWORDS
organic structure, migrant families, community, child centred,

INTRODUCTION

The Tyndalls project took place in 2012, centred around Rosemary Early Years Centre (EYC), a nursery located in a large block of flats in an ethnically diverse district of inner city Bristol. The EYC serves a severely disadvantaged ward, within the top 3% nationally for all indices of deprivation. Around 50% of children attending the EYC are identified as having refugee/asylum seeker status. A total of 13 languages are spoken, the most prevalent being Somali.

As well as running sessions at the nursery during curriculum time, the project also aimed to explore how music might be taken out to the wider community. Weekly drop-in sessions were set up in a community room outside of normal school hours. These sessions were open to children attending the nursery, their parents, siblings and friends. This group grew rapidly over time and eventually included families from nine different countries.
During this project we aimed to create an authentic space that allowed for each person to explore and share their individual musical biographies. What soon became evident was that the community setting created an environment where a greater depth of musicality could be expressed than was the case within the educational setting. This disparity raised important questions; what were the reasons for it in our project and how could the knowledge gained in the community setting be of benefit to the educational one?
The challenge faced when exploring how the outside setting can inform the inside was highlighted by M.S. Barrett in her chapter on 'Musical Communication and children's communities of musical practice' (2005):

> "There is an inherent paradox in cultivating informal structures for implementation in formal institutional settings such as schools."

She later adds that:

> "A challenge for music education lies in drawing on the positive features of children's communities of musical practice as they exist beyond the formal schooling in ways that strengthen and provide a legitimate role for such practices, and simultaneously contribute to the development of music learning in formal settings."

In this paper we will illustrate, through a description of the project and a case study, the practical and pedagogical elements that contributed to this depth of musical expression. We will then conclude by highlighting how this project provides an example of working from the outside in.

BACKGROUND

The project was inspired by two pieces of work in the community that Visible Thinking had previously been connected with. 'Time to Play' was an action research project at Rosemary EYC where creative play practitioners worked with mothers and children in settings serving Muslim communities. It was managed by PEEP (Parents in Early Education Partnership) and evaluated by Susan Young from Exeter University (1). The driving forces behind the work was to better understand issues concerned with racial and religious diversity in the early years and challenge assumptions that all too often lead to unequal opportunities for some children and parents while favouring others. Non-verbal storytelling, dance and music provided a safe medium for expression and communication and working non-verbally helped to prevent English from becoming dominant within the group.

At the end of this research an arts trail took place in St Jude's. This was initiated by Rosemary EYC and funded by the English Heritage fund. It was the first of its kind to be run in St Jude's, and led us to look at how music can present itself outside of the nursery. Within the arts trail event, music existed in two very different spaces. Inside the EYC, women and their daughters performed a traditional scarf dance with drums for several hours, out of the sight of men. Outside, on a grassed area, a drum circle was formed and people passing by could come and join as they wished. The drums acted like a calling, inviting residents from the flats to come and play. We documented an explosion of dance and drumming. Adults and children from a diverse variety of backgrounds joined this circle, contributing to the rhythms, song and dance. This experience inspired the plan to develop music work outside in the community.

ELEMENTS THAT WERE CRUCIAL TO THE SUCCESS OF THE PROJECT

1 PREVIOUS RELATIONSHIPS WITH THE COMMUNITY

When the 'Time to Play' research ended, the group was run by a mother who spoke both Somali and Arabic and who was a dynamic role model for her community. Thus when the Tyndalls group began two years later, we were able to link with 'Time to Play' and the relationship already established with this mother enabled the project to get off to a flying start. Many mothers from this group remembered us fondly. This is a good example of how important relationships and meaningful connections to a community linger beyond the life of the projects themselves. These relationships were a vital element in igniting participation across the community.

2 CULTURAL SENSITIVITY

90% of the St Jude's community is Muslim. Music can be a difficult concept within certain strands of the Muslim faith. Before starting this project we embarked on wide discussions with the community to better understand how music was viewed. We held two group discussions with parents at the EYC and invited them to explore the instruments we would be working with. A fascinating debate took place that presented the diversity of views held within the community. Some parents held very liberal views towards music while others expressed a more conservative view, with a few parents implying that the mosque would shut down the group if they knew it was music. One thing that most parents agreed on was that the group should not be called a music group, a label which might alienate some people. We took this advice and thus began the project by advertising the group as a place to explore story, sounds, instruments and song.

3 OUR WAY OF WORKING

Having run many long-term music projects with young children over the past 5 years, we have developed a particular approach where music is presented as part of a broader palette of expressive arts; movement, mark making, story making, etc. Our aim is always to allow the children to lead the learning journey and an important part of achieving this is the use of detailed documentation, particularly video, to support the analysis of children's learning. Documentation is crucial if we are to share the outside with the inside.

We also use a range of quality instruments including violins, cellos, guitars, ukeleles, harmonicas, tuned percussion, djembes, bougarabous, darabukas and kpanlogo drums. This provides a rich blend of sounds with which children were able to explore their musicality.

4 WORKING WITH A PERCUSSIONIST

Working closely with a percussionist proved to be a vital element of this project's success. The drum resonates across all cultures. With this instrument, mothers were inspired to come and play together and share their own rhythms and songs. We discovered that the constant rhythm of the drum created a framework for instruments and songs to weave in and out of. Children were held to play both within and outside of this framework and it allowed all ages to belong to the whole. We noted how children were able to develop their musicianship under this frame and these findings are presented under our paper, 'Incorporating song without words into free music play'.

THE CONTENT OF A TYPICAL SESSION

We adapted our approach to best suit the organic nature of the community group. In a typical session, instruments were set up in the centre of a circle of chairs and drums. Art materials with pens and paper were available on a table at one end of the room. Paper was spread on the floor amongst the instruments. The sessions fluidly moved between group activities such as a welcome and goodbye song (composed by the group) and free play, where the children explored their own musicality. The shifts between the two structures happened as and when necessary, or when someone in the group began a new idea. For example, during the free play, one of the adult musicians might notice a melody created by a child and begin to play it. Other members of the group pick up on this and spontaneously join in. The melody then develops organically into a new group 'piece'. Mothers would sometimes play an instrument alongside their child, or explore a rhythm of their own. The children might join in with the rhythm, or create their own music, individually or in small groups. Sometimes the children spontaneously danced. A dance floor would be created and the children would enter and present their freestyle movement. Most weeks a performance space was also created where the children played their own compositions or sang songs they

knew, both individually and in groups. Listening was required of the children during this activity, encouraging peer to peer learning and developing listening skills. The pieces were documented through video and musical transcriptions. These might then be shown or played back to the children, inspiring further musical explorations. Sometimes we took the instruments outside onto the green in the middle of the flats, allowing the community to share the group's music and even come down and join in.

We could not have anticipated the explosion of participation and joyous expression for both children and adults that took place within these sessions. It is this explosion of expression that we knew could be of great benefit to the EYC in the understanding of their children.

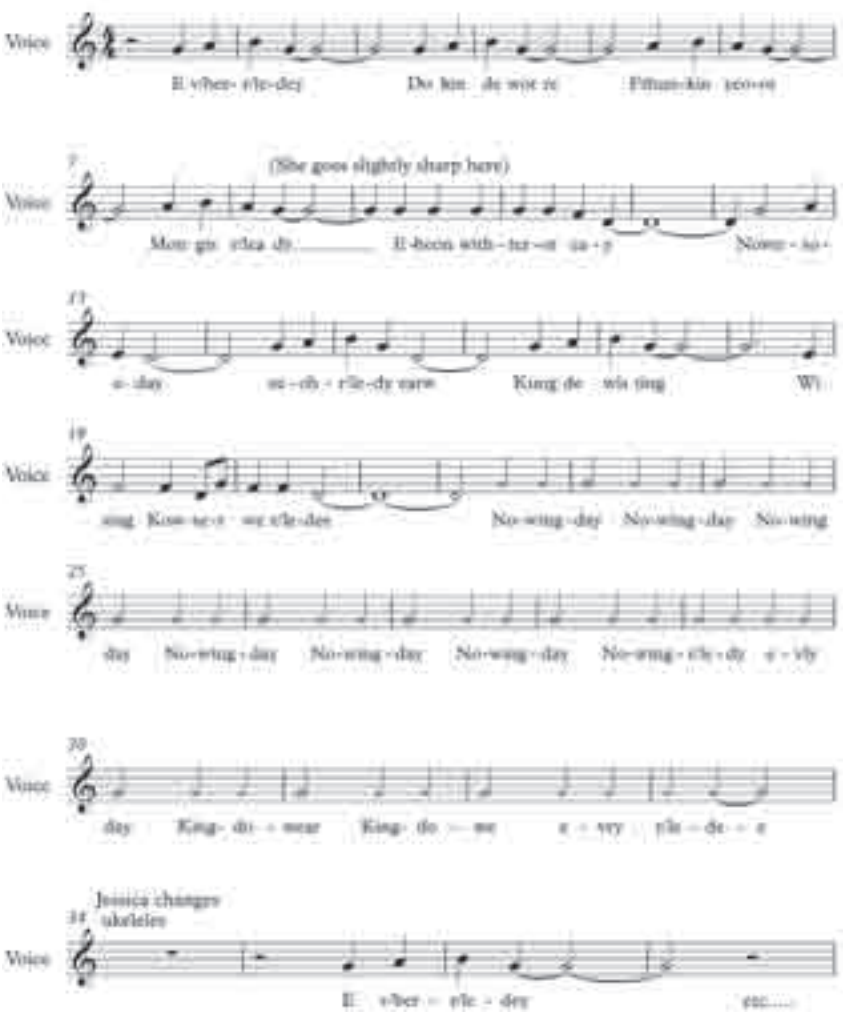
CASE STUDY

To illustrate the potential benefits of working from the outside in, we will share a case study of Jessica, a young three year old Sri Lankan girl. We worked with her both inside and outside the nursery setting. This clip happens towards the end of one of our sessions in the nursery when the simple song without words (2) is being sung repeatedly by the adults around her. Jessica has joined in with the song. Subsequently S, a girl sitting nearby, reads a story while Kirby (our percussionist), Jessica and L play the music to the story. Kirby also gestures the butterfly in the story, while L starts a rhythm that Jessica, on ukelele and Kirby on djembe join in with. Jessica has already begun to sing but has had to stop as the 'structure' of the group at that moment is the story.

Five minutes after the story is told Jessica's musical competence is revealed;

She strums the ukelele with her right hand and puts the fingers of her left hand on the finger board in the correct way. It is obvious that she's mimicking the correct way to play either from watching Kirby's modeling earlier or from another source. She strums more consistently during the minims of the song and the more rhythmical section of the 'no wing day chorus' because the singing requires less focus at these points. She is also accompanied by Kirby on the drum which supports her to keep the pulse going. An analysis of the first 50 seconds of her song here suggests that she is used to singing melodies.

The first 55 seconds of Jessica's song in the nursery



She sings an opening phrase that is repeated, followed by two answering phrases, all of them landing on the tonic. She then sings five phrases that are a variation of the opening. The first, third and fourth of these are longer phrases and the first three fall to the subdominant (D), the fourth to the tonic and then the fifth suggests she has an intuitive understanding of cadences, with the suggestion of a perfect cadence (Dm), resolving to the G major at the beginning of the more rhythmic 'chorus'. Jessica's vocal rhythm reveals that she has practiced using syncopation and phrases that begin half way through a bar. Both of these musical elements are advanced for a girl of her age.

A number of things may have inspired Jessica to sing at this point. The repetition of the simple song without words is one possibility. Just before this footage was taken Kirby chanted the words 'elephant, ele, ele, elephant' which may be where Jessica gets the sound of the 'ever-r/leady' from. We cannot be sure why she sang or how she has developed her musical understanding. When working in educational establishments, we may not know the histories of the children's musical development and are thus constantly having to make assumptions. What happened later however, is an example of how working from the outside in can provide a much deeper understanding of a child's musical background.
Jessica's mother picked her up from nursery later that day and we told her about the session. We invited the family to join the community session. Jessica attended with her mother and aunt and it was here that we discovered the reasons Jessica had sung in the nursery earlier that day. Jessica's aunt regularly sang and danced with Jessica, acting out the gestures and movements from the songs. Unbeknown to us, Kirby had recreated the role of Jessica's aunt, she had sung, played the guitar and made gestures with her. No wonder Jessica was inspired to sing.
We had assumed that in her improvisations, Jessica was singing in Tamil, her native tongue. When we showed her mother and aunt the footage we discovered that it was gobbledygook. Jessica was in fact exploring the sounds of English and Tamil through her singing. In the community session, Jessica spontaneously sung as she had done in the nursery earlier, this time with her aunt and mother joining her. She also sang other songs with her aunt. Some were improvisations (the group following and providing the rhythmic accompaniment), another was a Tamil song with accompanying gestures that Jessica and her aunt perform together. Interestingly, the translation of this is:

> 'Mice mice where are you going? I am going to London to see the London King. How are you getting there? I am going to fly'

They also sang songs in English such as:

> 'One two three, one two three
> Monkeys in the mango tree
> Dropping mangoes all for free
> One two three, one two three

Her mother and aunt pointed out that they sang songs in both languages, as they were concerned that Jessica learnt English as well as Tamil.
We also discovered that Jessica loves Spiderman and wanted to sing the Spiderman song. This is one example of many we had during the community sessions where the expression of both British culture and the home culture of migrant people took place simultaneously. Just after this footage was taken, a Somali girl and her sang a song in their own language. This was the first time they had shared songs from their own country. It took another child to pave the way for this to take place. This illuminated how trust needed to be built within the group before people began to share their own heritage.
This example highlights the importance of understanding the context of a child's music making. Without the engagement with Jessica and her family outside of the nursery, many aspects of her musical expression would have remained unknown to us. This would ultimately limit the extent to which we could scaffold her musical and linguistic development within the nursery. With the knowledge we are now able to:

- re-create the environment that would motivate her to sing including group and individual singing with an adult
- create further opportunities to explore phonetics through improvised song
- provide opportunities for her to sing whilst play the guitar or ukulele
- learn songs from her aunt and repeat these within the nursery, teaching them to the other children

CONCLUSION

The disparity in expression, language, communication and confidence between the outside and the inside was highlighted by the comments of practitioners from the EYC who either attended the Tyndalls sessions or watched documentation of children attending the Tyndalls group. They were inspired to see children from the nursery become so free in expressing themselves when alongside their parents and siblings. It revealed to them how music is a big part of many children's home lives and how little they knew about music within families from these backgrounds, due to the need for it to be hidden from outside view. It also supported practitioners' relationships with parents, allowing for a common ground to be made through music sharing.

The contribution that this project made towards the EYC's development of music within its setting is summed up by Barret a little later in the chapter quoted above:
"Acknowledgement of the diverse music practices with which students engage beyond the school setting, and the roles they take in these practices provides a range of possibilities for broadening the nature of participation in the classroom music learning environment."

WHERE WE ARE NOW, THE NEXT STEPS

The success of the initial project enabled us to secure funding to continue for another 18 months. We will now focus on documenting the children's musical journeys and share footage and music pieces with the school they attend, thus completing the circle from the inside to the outside and now taking the outside back in. By the time we will be presenting this paper at MERYC, these sessions will have been running for five months and so we will be able to share the impact of this development.
For more information see Young, S. and Street, A. (2010) 'Time to Play'

The methodology of this simple song is being presented under our paper, 'Incorporating song without words into free music play'.

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demonstrations

PART IV

DEMONSTRATIONS

TWO EARS AND ONE MOUTH

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> "We have two ears and one mouth so that we can listen twice as much as we speak"
> Epictetus, Greek Philosopher (55 AD - 135 AD)

We won't judge, but we want to make a strong plea for paying more attention to listening in this deafening world. Especially with very young children between 0 and 5 years.
The intense amazement and concentration these children show for sounds and music give us the opportunity to guide them to new listening experiences.
Their natural hearing responses show us that they really listen. This helps them to open up other musical behaviours like moving and singing.
To our mind the foundation of the musical development lies in listening.
Unfortunately in practice little attention is paid to this and as a result of this the natural listening abilities decrease. Could this be a reason for the increasing number of children with learning problems and lack of concentration?
Playful musical methods for listening are the starting point of this workshop.
This will automatically lead to moving, playing instruments, elementary forms of composing and notation and of course singing. We need two ears and a mouth to do that.

SOUND MAPPING AND SOUND ANALYSIS: PROPEDEUTICAL TECHNIQUES FOR MUSIC EDUCATION

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ABSTRACT

The aim of present demonstration is to introduce musical educators to environmental sound listening and to the theoretical background of intrinsic musicality. Participants will listen and rate specific natural sounds. Information from the specialized field of bioacoustics will be transferred as regards as available free-ware software in order to analyse the recorded sounds, allowing the comparison of spectrographic (machine) and graphic (human) analysis.

KEYWORDS
Intrinsic musicality, soundscape, bioacoustic.

INTRODUCTION

According to an evolutionary psychology the natural history of our hominid ancestors and of our own species (Homo sapiens) shaped many of our present drives and predisposition (Orians & Heerwagen 1992). The intrinsic musicality hypothesis suggests that also our present sound preferences and our predisposition to emotionally respond to sounds, are primed by the many years of our evolutionary past - when humans were a fragile species deprived of natural weapons, living in a very harsh environment, where full and detailed knowledge and appreciation of the acoustic landscape was of basic importance in order to survive - (Lenti Boero & Bottoni 2008). For instance, the sound of water, an abiotic

item fundamental for biological life, is nowadays universally appreciated, as evidenced by the many fountains in our cities and people's attraction to streams and falls (Schafer 1977), and certainly was in hunter-gatherers' time, when campsites were settled near water streams for living necessities. Nowadays, the most appreciated biotic soundscapes are those including many different sounds (Oba 1994). This might have been true as well for our ancient hunter-gatherers, for whom a territory rich in sound variation and abundance meant the presence of fauna. According to Lenti Boero & Bottoni (2008) this same preference might have shaped our appreciation of orchestral music. As regards as to timbre and pitch we know that some mammalian sounds, uttered in a low pitch and register, such as a wolf's howls or even a dog answering a wolf's howls, convey deep emotions of anxiety and fear in people (Lenti Boero & Bottoni 2008). The same is true for other large herbivore calls (e.g., stags rutting). In a pilot study aimed at testing the intrinsic musicality hypothesis the sound of big mammalian species, potentially dangerous for us, were less appreciated than sounds of small species, such as singing birds, indicators of forest richness and potential food themselves (Lenti Boero et al. 2009). Since emotional reactions to sounds are so deeply involved in human behaviour, a most important pedagogical activity for sound educators is to make children aware of those basic emotional reactions (Habegger pers. communication). In present demonstration psychological and electronic tools aimed at the above scope will be presented and practised by participants.

SHORT DESCRIPTION OF THE ACTIVITIES

1) Sound rating. Eye closed, subjects will listen then rate on sheets prepared by the author specific biotic and abiotic sounds, such as water, bird and mammalian, recorded in mountain environment by the author or downloaded from public acoustic archives such as:
http://macaulaylibrary.org/ The Macaulay Library has rich media including sounds and videos to spark student interest in understanding the physics underlying biological adaptations. More information can be found at the Physics of Animal Behavior homepage where curriculum resources for elementary school might be found to engage students in investigating questions about how birds and other animals can do things such as produce a complicated song or glide long distances.

http://blb.biosci.ohio-state.edu site of the Borror Laboratory of Bioacoustics is an archive of animal sounds fully digitized. It possesses 495 CDs containing 27,916 recordings of 1,416 species (the largest component being birds: 23,883 recordings of 957 species).
http://www.dosits.org/ site of marine animals from invertebrate to mammalian/ other natural sounds/ anthropogenic sounds.
From the above sites (chosen among many other) sounds can be listened, and in some cases can be downloaded for free.

Each sound string in present experiment will last from 15 to 30 sec., according to typology. Rating will regard: 1) semantic definition of the sound (harsh/ aggressive towards warm/sweet, free semantic definition); 2) aesthetic quality of the sound; 3) emotional state while listening, if perceived.

2) Sound mapping. This technique might better known and practised by educators, but, after emotional rating, could be used to better understand the relationship between sound and graphics. Participants will listen again to the above rated sounds, rearranged in a "composition" and will draw a graphic sound map, as shown in fig.1. Results and implication for music educators will be discussed.

3) Software demonstration. Free downloadable software for sound analysis and sound editing will be demonstrated. In particular:

A) RAVELITE

https://store.birds.cornell.edu/ProductDetails.asp?ProductCode=RAVENLITE
A free software program that lets users record, save, and visualize sounds as spectrograms and waveforms. With RavenLite it is possible to record sounds by means of your computer card, to listen, cut, paste and manipulate downloaded or recorded sounds, to draw sonogram and spectrograms of the sound in black and white and in different colour shades. This software is intended for students, educators, and hobbyists, and can be used for learning about sounds, as an aid in birdsong recognition, and in musical instruction. The experience of "viewing" the sound is most important in education (Lenti Boero 2004). It is a marvellous tool for exploring the essence of a sound: it is possible to reverse playing a sound, to slow it down or to accelerate it, to filter some components and listen it again.

B) ACOUSMOGRAPH.

http://modisti.com/n10/?p=7124

A free software developed since the 1970s, by the Inaís Groupe de Recherches Musicales (Music Research Group) and now at its third release. In the Acousmograph the primary issue addressed is not music listening per se, but rather music notation, i.e. how to represent graphically a musical document (the document itself or the perception of the document), or how to infer a model of the music which can be noted or represented graphically; this software is believed an interesting approach in musical interactivity in the context of annotation of music documents (Pachet 2004), but is a very interesting tool in exploring musical emotions induced by listening any kind of sound.

IMPLICATIONS

Some of presented activities implies a basic knowledge of portable computer use.

SPECIFIC VALUE AND MEANING

Sound analysis is a low cost but high technology activity, it has the advantage of a multidimensional, multidisciplinary approach including open air activities, computer technology, design, and very well introduces children to music. Exploring emotional reactions to sound is a basic educational tool for introducing music to children.

ACKNOWLEDGEMENTS

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SOUND MAPPING AND SOUND ANALYSIS: PROPEDEUTICAL TECHNIQUES FOR MUSIC EDUCATION

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BACKGROUND

Contemporary biomusicologists (Wallin et al. 2000) widen the meaning of "music" in order to include non-human forms, focussing on music biologic origins, with a comparative approach to animal song and human music phylogenetic onset (Brown et al. 2000). Inspiration from natural sounds is present in both ancient and contemporary music (Vivaldi, Gardiner, Messiaen, Murray Schafer).

AIMS

The aim of this demonstration is to introduce musical educators to environmental sound listening and simple techiques of sound analysis as propedeutical to music education.

SHORT DESCRIPTION OF THE ACTIVITIES

Participants will be introduced and will experiment with sound mapping, a simple pencil and paper technique: students are asked to close their eyes for at least five minutes, then they are asked to graphically design the sounds they were exposed, in the meantime sounds are recorded. Some agricultural soundscape maps from children aged 7-10 years, and from the author will be presented. In

addition information from the specialized field of bioacoustics will be offered as well as available free-ware software in order to analyse the recorded sounds, allowing the comparison of spectrographic (machine) and graphic (human) analysis.

IMPLICATIONS

This activity requires a basic knowledge of portable computer use.

SPECIFIC VALUE AND MEANING

Sound analysis is a low cost but high technology activity, it has the advantage of a multidimentional, muldisciplinary approach including open air acivities, computer technology, desing, and music. Pulsed and continuous sounds are naturally sorted in the maps, allowing a naturalistic description of rhythm and harmony.

THE "WORD SOUND" AS A MEANS OF COMMUNICATION AND EXPRESSION

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BACKGROUND

When a parent participates in a music lesson for 0/3 years, with his/her child, he/she enters into a particular environment, where the spoken voice can break a magical and emotionally charged atmosphere, easy to live in for the child, but unknown for the adult.
The verbal communication in a musical context contributes to the interruption of a special and unique bond, created through the voice, the gestures and the emotions stimulated both by the actual sound and by the type of interaction that is created between mother (father) and child.

AIMS

The target of this project, beyond the exquisitely musical side of growth and enrichment of the "vocabulary sound" of the child, is to recall a latent sensitivity in the adult, based on a type of communication distant from the daily one.
Games, glances, smiles, caresses, whispered voice and moments of silence are ingredients useful for the realisation of a musical recipe based on the well-being of the child-parent couple.
Musical activity contributes also to increasing memory and in stimulating the personal production of "word sound"/ a form of musical language that enables communication and increases the attention capacity even in very small children, who are not yet able to express themselves through verbal language.

A SHORT DESCRIPTION OF THE ACTIVITIES

The musical activities include melodies based on the concept of "word sound" (syllabic "sound" combinations: to help load the emotional significance with the various activities) and may include the use of musical instruments, live or recorded music.
The starting point for the construction of the melodies is the child: whose simple vocal productions are the basics of dialogue and music. These are the foundations of the experience. The centre is the child and their products, whether they actually know it or not.
Starting, then, from the awareness of his / her capacities, linked to the physical and psychological development, we can organise the musical growth.

IMPLICATIONS

"Word Sound" is not only sound but also silence.
In everyday life, we tend to consider silence as a moment of isolation from the daily routine, a moment in which we distract ourselves from preoccupying thoughts, a moment in which we do nothing.
In music, on the contrary, silence is very important.
Silence helps concentration and adjustment to the activity: it is the base for listening skills and the understanding of oneself and others.
Only by creating moments of silence can we give the child the possibility to elaborate and internalise the musical stimulus
just experienced, making the proposal resound internally.

SPECIFIC VALUE AND MEANING

"Cikibom" is part of the Italian project "Nati per la Musica".
Its field of action is not only represented by schools, nursery, pre-schools and music schools, but it also includes libraries, paediatric centres, hospitals and family centres.

The musical journey developed in the collection "Cikibom" was born from the collaboration with the library "Falco Magico" in Carpi (Modena) during the school year 2011/2012.
In this project the lessons, structured in a package of six weekly meetings, was enriched and supported by meetings with paediatricians and moments of collective reading organized by the library.

MUSIC EDUCATION IN THE NETHERLANDS "MUSIC ON THE LAP"

(CHILDRE N 2 AND 3 YEARS)

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BACKGROUND

Music on the Lap (MoL) is the name for preschool music lessons for children in the age of 4 months to 4 years, the age range generally defined as the preschool age range in the Netherlands. The aim of the MoL lessons is to let children acquire and develop the basic skills of music by means of a programme strongly underpinned by evaluation of practice, with theory emanating from practice.

AIMS AND ACTIVITIES

The demonstration of a regular Music on the Lap lesson is built on singing and musical activities. A regular lesson contains different kinds of activities in order to focus on the different parts of the developmental areas and contextual aims. 6 to 8 participating children will be present accompanied by one of their parents. Through evaluation after the lesson, the audience will, for example, get insight in the way of working and the decisions made by the teacher beforehand.

IMPLICATIONS

The songs and musical activities offered to the children need to be tailored to their possibilities and capabilities. The offering of music wrapped in an attractive activity and constructed in accordance with the developmental level of the

children motivates them to join in. Knowledge about the general development of young children and connecting with their personal capabilities is therefore important. Consequently MoL does not only take musical development into consideration but also the sensory, emotional, motor, social, language and cognitive development.

SPECIFIC VALUE

As early childhood music teachers we all have our aims and ideals about working with young children and music. Nowadays music is often linked to "useful" things such as language development or social skills to justify singing and music making.
But offering children the opportunity to develop their innate musical potential as well as transferring the songs and music of the culture is equally important. By promoting the integration of music in the daily routine, all young children can be offered the opportunity to have access to music according to their age group, interests and possibilities. Children are born with a broad musical potential and they have the right to develop that potential.

KEYWORDS
Early Childhood Music Education, parent and child

INVOLVING SOUND EXPLORATION IN EARLY CHILDHOOD MUSIC EDUCATION

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BACKGROUND

Tutti Timbri (Bert van Bommel) has developed a range of special instruments, "sound objects", for sound exploration in early childhood music making. The instruments are designed to invite music making without adult guidance and are therefore safe to use by young children. Constructed from natural materials the objects allow for a wide range of sound possibilities.

AIMS

Our aim is to demonstrate how these sound objects can be valuable assets in early childhood music education by explaining and showing how to implement the objects in the musical learning process. The application of these sound objects in early childhood music education – with adult guidance – can add an important extra dimension to the musical learning process.

THE ACTIVITIES

Examples will be given of musical activities in which songs are connected to the sound objects. Musical elements will be explored like loud and soft, timbre and rhythm. Videos will be shown of the actual use of the sound objects and the participants will be given the opportunity to explore the sound objects themselves.

IMPLICATIONS

Connecting the sound objects in an appropriate way to musical activities asks for a well-underpinned musical play process thereby focusing on the application of meaning to the physical and aural components of the sound objects.

SPECIFIC VALUE

Young children's daily lives are flooded with mechanical sounds they often cannot control. As a result listening capabilities are at risk. Well-guided sound exploration with appropriate objects will give young children opportunities to expand their aural capabilities from which they can musically benefit.

posters

PART V

POSTERS

TYPE OF MUSIC MATERIALS IN EARLY CHILDHOOD EDUCATION

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BACKGROUND

In Spain, music education is a recent development in childhood education, but in the last years acquires a greater importance in preschool education and education in general.

AIMS

This poster is intended to provide knowledge about Music Materials in childhood education in Spain. First, providing information on utilization of music materials. Secondly, offering ways to expand teacher training.

METHOD

Regarding the empirical study, the opinion survey was applied with the sample of teachers from public schools, private schools, schools with public financing, and small schools often having only one teacher. Secondly, for the semi-structured interviews and visual analysis of the perception of materials, we selected a random sample of intentional in-kind teachers to respond to specific characteristics of analysis. For the development of the interviews we took into account the teachers´ workplace and place of materials there. For the research of teacher´s perception, the analysis includes the definition of musical material; types of materials and type of teacher.

RESULTS

This research developed in the University of Santiago de Compostela (Spain) has extensive, relevant results about the perception of preschool education teachers (students from 3 to 6 years old) regarding the music materials developed to help in their teaching practice in the context of the education law of Spain. This poster exhibits results about the utilization of the types of music materials in preschool education and possibilities to improve on teacher training:
-Development of direct training on specific music materials through collaborative teaching (coordination, leadership, action groups are essential).
-Development of materials, based on the teachers that need to share times and spaces created in the workplace.
-Training evaluation of music materials through use of guides and their creation.

CONCLUSIONS

One of the main findings is related to teachers´ perceptions regarding musical materials namely; the type of music and teaching materials. And the differing pedagogical dynamics depending on the teaching specialty (due to training) and contextual variables (e.g. school, location, gender, age).

"CIKIBOM": MUSIC COLLECTION FOR CHILDREN 0-3 YEARS AND THEIR PARENTS

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BACKGROUND

The "Cikibom" project was born out of the collaboration with the library "Falco Magico" in Carpi (Modena) and it is part of a broader Italian project "Nati per la Musica", music broadcasting in the age 0-6 years.
The book contains original and traditional music (lullabies and African melodies) all different and developed specifically for children 0-3 years old and their expressive capacities.

AIMS

The project's aims are:
- To establish a relationship based on affectivity in communication with others
- To listen to themselves and others
- To increase their communication skills
- To increase attention span and concentration
- To develop listening skills
- To develop the capacity of sound production and awareness of it
- To exercise the memory and creativity

METHOD

Children were divided into two groups according to age (0-18 months and 18-36 months).
The activity took place in a room of the library, properly cleared of furniture and books to encourage the spontaneous movements in security and freedom.
The parents were actively involved in the project: their participation included vocal performances, melodic and / or rhythmic body movements or gestures.
They served as a model and inspiration for their children.

RESULTS

During the musical activity, a magical and spontaneous musical atmosphere was created, where adults and children represented two equal, conscious and aware partners in a dialogue of sound.
The learning of mutual listening developed during the meetings, which meant that families return home with a great desire to experiment, ready to get involved themselves and ready to play with new "sound words."

CONCLUSIONS

A musical journey developed with a child and his / her parent opens the possibility of discovering each other and themselves in a unique and personal way.
The music manages to be a vehicle for messages, feelings and emotions that cannot be implemented in the same way and does not contain the same empathic charge, if another communication channel is used.

KEYWORDS
Music and language, Music and education, Emotion in early childhood music

MUSIC AND WELLBEING IN HOSPITALISED INFANTS

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ABSTRACT

Distress during hospitalisation is a serious problem which appears to be even more significant when the patients are young infants. Painful procedures, the isolation from their families and their usual environments might also result in poor response to hospitalisation and medical treatment. It is therefore vital to provide the children with the appropriate support to help them to manage and control pain, and reduce anxiety so as to improve their quality of life during hospitalisation.
Music has been found to be particularly effective in engaging and distracting paediatric patients. The aim of this study was to explore the effect of music on the wellbeing of preschool patients with cardiac and/or respiratory problems. 37 paediatric patients, between the ages of 7 days and 4 years, took part in the study, and were recruited at Great Ormond Street Hospital for Children, London, UK. Each patient participated in three 10 minute sessions: a) Music; b) Reading; c) No interaction, in which the children were not engaged in any social activity. At the beginning and end of each session the children's pain was assessed with the Children's Hospital of Eastern Ontario Pain Scale (CHEOPS), and their oxygen saturation level and heart rate were read from a pulse oximeter. Parents and hospital staff who attended a music session were asked to complete a music survey.

Analysis of the data shows a significant decrease in infants' heart rate and pain at the end of the music session. Infants below 6 months of age show a significant increase in the level of oxygen saturation in the blood at the end of the music session, and an even greater one at the end of the control condition. Answers to the music survey suggest that both parents and hospital staff are similarly positive about the presence of music in the hospital. In particular, they agree that music is helpful in comforting the child. In sum, music, compared to reading or no interaction, appears to be effective in helping young infants to improve their quality of life and wellbeing while in hospital.

PLAY! - CHILDREN PLAYING ON AND WITH MUSICAL INSTRUMENTS IN KINDERGARTEN

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AIMS OF THE PROJECT

The collaboratory project between a kindergarten and a preschool teacher education college aims to identify links between formal instrument activities in circle time and free musical play with the instruments. The poster will display various aspects of how the children act – and interact - with instruments.

BACKGROUND

During a period of 4 months, the kindergarten borrowed extra instruments from the teacher training college in order to enable the children to produce more music and to trigger new ideas though the novelty of the instruments. The children aged 3-5 years were given access to the instruments during different periods of the day and with different sized groups; for example in the beginning of the day with a smaller group or during playtime after circle time.

METHODS: INTERVIEWS AND WRITTEN OBSERVATIONS

Initially, the staff participated in a group interview at the beginning of the project. Such an interview was repeated after seven months. In the last session the staff discussed the visible influence music activities had on the children. Furthermore, they emphasized the meaning and the impact of music on both children and employees. Written observations describing how the children play

with musical instruments were made, both by the teacher/researcher and staff in kindergarten. Excerpts of these observations will be shown in the poster.

RESULTS

The analysis of data can be linked to theories of children's play in order to recognize different types of children's play. For example observations can be made of object play through the children's investigation of the shape and sound of the instruments, and constructive play in building and sorting the instruments. Theories of the connection between music and play in general can also shed light on the results of the project. The results of this project indicate that musical instruments should be as common as a play material and as easily available as dolls, cars and bricks.

MORE THAN JUST LISTENING CONCERTS FOR CHILDREN 4 MONTHS TO 6 YEARS

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BACKGROUND

Organising concerts for young children encompasses much more than putting a few musicians on stage to play nice music. In particular, the age group of 1 to 4 years requires an extensive approach in order to connect appropriately to their musical and general development.

AIMS OF THE PROJECT

Two pilot concerts of 45 minutes each have been conducted. One of the aims was to investigate how to acquaint as much children as possible with music in concert. Furthermore music educational aims were explored.
Although young children are very open to all kinds of music their attention span is often not yet long enough for a full concert where only listening is required. Hence, participatory engagement had to be provided.

THE PROCESS

Includes: choosing appropriate songs and music and arranging the songs/music in an interesting and suitable manner to give the children opportunities for active musical participation.

FINDINGS

After both concerts (grand)parents and supervisors were asked to fill in an evaluation form. The remarks were in line with what we had found ourselves. For example: there should be a maximum of children allowed to attend a concert. Also the number of objects to be used by the children – musical instruments and toys – should be limited to a maximum of three for a concert of 45 minutes.
Our initial starting point was that listening would be enhanced through active participation. Many adults who had filled in the evaluation forms reported a similar experience. For example one parent wrote: "moving along with the objects caused a better more intense experience".

IMPLICATIONS FOR FUTURE PROJECTS

No audience is the same. Even the audiences for the two pilot concerts were very different in their participation, listening capabilities and responses. Programming should incorporate the context in which the audience will attend a concert.
It was hoped that the concerts would provide a stimulus to take music lessons and/or listen more to music in concert. Further research should be conducted to investigate if this is an achievable goal.

miror summer school

PART VI

MIROR SUMMER SCHOOL

THE MIROR PROJECT SUMMER SCHOOL

The MIROR Project Summer School is incorporated within the MERYC conference. We are pleased to have this opportunity to introduce conference participants to the project. The committee of the MIROR Project Summer School sincerely thank the MERYC organising committee for hosting the Summer School during the MERYC conference held at The Hague University for Applied Sciences.

The MIROR project is co-funded by the European Community under the Information and Communication Technologies (ICT) 7th Framework Programme and has run for three years, concluding in August 2013. MIROR stands for 'Musical Interaction Relying On Reflexion'.

The MIROR Project is coordinated by Dr Anna Rita Addessi (University of Bologna). The Consortium is composed by eminent researchers in the field of music technology and childhood music education: Dr. François Pachet (SONY_ Computer Science Laboratory, Paris), Dr Gualtiero Volpe (University of Genoa), Prof. Bengt Olsson (University of Gothenburg), Dr Christina Anagnostopoulou (University of Athens), Dr Susan Young (University of Exeter) and Dr Shai Newman (Compedia Ltd, Israel).

INTRODUCTION TO THE MIROR PROJECT

The MIROR Project's main aim has been the development of an innovative technology for music learning and teaching based on what has been called the 'reflexive interaction paradigm'. The technology has been developed in the context of early childhood music education, mainly working with children between the ages of 3 – 8 years. The MIROR platform consists of three components: MIROR Improvisation, MIROR Composition and MIROR Body-Gesture.

INTERACTIVE REFLEXIVE MUSICAL SYSTEMS

Interactive Reflexive Musical Systems (IRMS) were invented at the SONY France Computer Science Laboratory in Paris (Pachet, 2002). The original equipment, called The Continuator, was designed for musical improvisation. The Continuator software is able to interactively learn and reproduce music 'of the same style' as the person playing an instrument – usually a keyboard. The child or adult plays an input on the (Midi) keyboard and the computer generates and replies with a phrase that is similar to but varied from those that the child or adult has originally played. The player can then go on to play further inputs and the equipment generates further responses that are based on their musical ideas. In this way musical dialogues between player and technology can evolve. The players are therefore, essentially, playing with a musical 'image' of themselves. Anna Rita Addessi and François Pachet carried out some initial studies with young children using the Continuator and the MIROR project was designed to build and extend upon these original studies (Addessi & Pachet, 2005, 2006).

The MIROR equipment departs from traditional approaches in music technology in which a predetermined task is built into the software, and the interface helps the child to solve this task or learn a skill. In this kind of music technology there may be many possibilities within the task solving, but nevertheless the content and aim of the musical activity and its learning are inbuilt in the software design. IRMS are designed without a specific learning task in mind. They are designed to be intelligent 'mirrors' of the children's musical contributions.

MUSICAL LEARNING AS INTERACTION

Recent studies that focus on musical creativity in very young children (2-4 years) have suggested that the origin of new musical ideas is structurally anchored in the development of sympathetic interaction established between the adult and child while playing with musical instruments (Young 2004, Burnard 2006, McPherson 2006). Furthermore, according to some theories of early development, the adult/infant relationship plays an important role in children's affective and cognitive development (Fogel 2000, Malloch 2000, Trevarthen 2000, Stern 2004, Imberty 2005). The question which follows – and which the

project team have been exploring - is what models of cognitive development and learning are produced when these relationships are established not between a child and an adult (or another child), but between a child and technological equipment? New technologies can be considered not only as 'tools' for educational support, but also as a kind of language or what de Kerckhove (1991) has termed 'brainframe' that affect, form and profoundly shape the processes of music learning and the musicality of children.

There is a shortage of research on using music technology with young children (Webster, 2002). The reasons for this may lie in ideologies and established traditions of early childhood music education practice. From birth children are immersed in everyday musical worlds mediated increasingly by digital technologies. They arrive in pre-school education equipped with a range of competences and concepts about music and musical process derived from these experiences. The issue is not whether digitised technologies should be part of early childhood music education (for if early childhood education purports to start with the child', then they are already present in experiences children bring with them), but the issues are:

- how pedagogical approaches need to transform in order to best serve the competences children already possess;
- the lack of collaboration between the system designs and educational communities;
- the lack of music education in schools and pre-schools for childhood and early childhood in some European countries – or - where music education does take place, the lack of music technologies in educational practice with young children.

During the presentations, workshop and demonstration that form the MIROR Summer School we discuss these issues alongside explanations of our work with the IRMS and some of our conclusions and findings.

MIROR SUMMER SCHOOL COMMITTEE

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Susan Young, University of Exeter
Michel Hogenes, chair of MERYC2013
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EARLY EXPLORATION OF DIGITAL SOUND: TWO-THREE YEAR OLD CHILDREN INTERACTING WITH THE MIROR IMPRO

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ABSTRACT

How could the introduction and use of new technologies be described in the nursery school? In 2003, Lanskhear & Knobel mapped a review of research on the use of new technologies with the 0-8 years age group. During the 2000s researchers investigated the relationship between new technologies and music education with preschool and primary age school children. There is still little research about the interaction between toddlers and new technologies. The aim of this exploratory study was to observe two children aged three interacting with the MIROR Impro in a nursery school. As part of the MIROR project, the MIROR Impro has been tested with 4 and 8 year old children by Addessi, Ferrari & Carugati (2012). Their results found a particular presence of Flow during the children/machine interaction. The MIROR project is a collaborative project co-founded by the European Union and it deals with the development of an adaptive system for music learning and teaching based on the reflexive interaction paradigm: the MIROR Platform. The exploratory study was carried out in Bologna (Italy) and involved seven children aged 2-3 years old and practitioners. The operator invited the children (individually, in pairs or with the presence of the practitioner) to play freely with the MIROR Impro. The children took part at a preliminary meeting to meet the operators and see the equipment. Every session was video recorded. The observations underline the presence of particular conducts in children when they interacted with the system. During the exploration of the equipment we observed children participating in musical exploration, listening and turn taking. There were some didactic strategies activated by the practitioners, which involved imitation, listening to the musical input of the children, modelling and supporting children. This study enabled us to explore not only the use of technological equipment with young children but also the environment; we were able to explore the use of space to create areas that were most beneficial for musical activities to take place.

KEYWORDS
New technologies, MIROR Project, young children, musical exploration

INTRODUCTION

How could the introduction and use of new technologies be described in the nursery school? This paper seeks to answer this question and describes an exploratory[1] study about the exploration of digital sound by very young children when they interacted with the MIROR Impro. The MIROR Impro is an Interactive Music Reflexive System (IRMS) utilised within the MIROR Project.

This particular study was the fourth aspect of the wider protocol number one "Music-making with MIROR Impro" carried out within the MIROR Project[2]. The MIROR project is a collaborative project co-founded by the European Union (7th Framework programme 2007-2013, technology-enhanced learning, grant agreement n° 258338) and it deals with the development of an adaptive system for music learning and teaching based on the reflexive interaction paradigm: the MIROR Platform (Addessi & Volpe, 2011). The three components of the MIROR Platform are the MIROR Impro for music improvisation, the MIROR Compo for music composition and the MIROR Body gesture for the analysis of emotion and movement. In the first year of the project (2010-2011), results began to emerge. Addessi, Ferrari & Carugati (2012) described some results of protocol number one regarding the musical interaction between 4-8 year old children and the MIROR Impro. They presented results referring to the observation and measurement of the presence of Flow during the children/machine interaction. The results indicated that the MIROR-Impro could enhance Flow state in children, supporting the creative process.

1 It is the first time that the Interactive Reflexive Music Systems (IRMS) have been used with such young children and with the presence of the practitioners.

2 Official MIROR Project web site: www.mirorproject.eu

THEORETICAL BACKGROUND

In 2003 Lanskhear & Knobel mapped a review of research on new technologies including hypermedia, computer and videogames with the 0-8 year age group. They analysed the literature (covering the period of 1996 to 2002) using online databases. Their review of the research indicated that the content of the majority of the literature is on the use of CD-ROM storybooks in both formal and informal contexts. Few studies describe the teaching aspects of using and integrating new technologies into the curriculum and other research focuses on the use of hypermedia with children identified as candidates for reading failure. Lanskhear & Knobel (2003, p.72) proposed the different kinds of interactivity and the social purposes as relevant aspects of new technologies. The combination of interactivity (non-interactive vs. interactive) and of social purposes (stand-alone vs. networked) influences the characteristics of the computing media (hardware and software).

As already affirmed by Webster (2002) there is still little research regarding the interaction between children and music technologies. During the 2000s researchers investigated the relationship between new technologies and music education particularly with preschool and primary school aged children (Rinta, Ross & Graham, 2011; Koutsoupidou, 2009; Young, 2006; Byrne & McDonald, 2002). Ferrari & Addessi (2013) presented a didactic experience realized in a kindergarten with 4-5 year old children and the Continuator. The Continuator is a previous version of the MIROR software, implemented in 2003 by Pachet (2003).

Fewer still are studies on the interaction between under- three-year old children and new technologies. Tanaka, Cicourel & Movellan (2007) proposed an experiment where a robot was immersed in an Early Childhood Education Centre (ECEC) for more than five months interacting with young children. The data suggested that the quality of interaction changed according to the programmed set up of the robot; in particular, at the end of the experiment the children treated the robot as a peer rather than a toy. The results "suggest that current robot technology is surprisingly close to achieving autonomous bonding and socialization with human toddlers for significant periods of time" (2007, p.17958).

AIM

The main aim of this exploratory study was to observe the interaction between very young children and the MIROR Impro. In specific, we were interested in the reactions and conducts of the children playing the synthesizer and interacting with the system; for example if they were aware of the reply of the system and of the rules to play with the system.

METHOD

The exploratory study was carried out in the nursery school[3] "Il Monello" (Bologna, Italy) in May-June 2011.

1. Participants
The exploratory study involved seven young children, 3 boys and 4 girls, and three nursery practitioners.

2. EQUIPMENT

We used the MIROR-Impro prototype v. 2.5 (the software); a music synthesizer KORG X50; a notebook TOSHIBA – Techra (Windows 7, 64 bits); 2 amplifiers M-AUDIO AV30; a USB cable for the connection between the synthesizer and the notebook; a video camera, SONY (recording in HD) and a tripod for the video camera.
The MIROR set up was "Same". The characteristics and the parameters of the MIROR Impro set up influence the musical characteristics of the reply of the system. In our case, the set up "Same" is based on the variation type output: "the variation type is an imitation of the input phrase, carrying in principle the same meaning, but expressed differently" (User Manual MIROR-Impro v.2.5, p. 144). More precisely, "The system starts the output with the input starting note, and

3 Italian nursery schools accept very young children from six to 36 months old. The children generally attend the nursery school all day (07:30-17:30) five days a week.

4 The User Manual is a confidential document so it cannot be included in the list of the references.

produces a continuation from there [...]. The system ends the melody with the input ending note" (User Manual, p. 16).

3. PROCEDURE

One preliminary meeting took place which enabled the children to be introduced to the operators, the researchers and the equipment. The following exploratory sessions had been arranged: a) one child played alone with the MIROR Impro; b) numerous children played with a practitioner and the MIROR Impro; c) one child played with 1 friend and the MIROR Impro and 1 child played with 2 friends and the MIROR Impro; d) two children played the MIROR Impro two times. We invited the children to play with the MIROR Impro for as long as they desired. The task for the nursery practitioner was to be present and to act as they normally would do within daily activities. We carried out three days of exploration and all sessions were video-recorded.

4. DATA COLLECTED

We collected the following data: a) permissions signed by parents, b) videos of the sessions and of the preliminary meeting, c) photos, d) folders of numerical and text data automatically created from the MIROR Impro recordings.

5. DATA ANALYSIS

We analysed the data using qualitative methods. Observing and analysing the video recorded focused upon: a) explorative conducts of the children, b) the interaction between the MIROR Impro and the children, c) the participation and strategies of the nursery practitioners.

RESULTS

1. EXPLORATION OF DIGITAL SOUNDS

The primary interest of the children was the exploration of the synthesizer and of the sound made by playing it. The children pressed all the keys (black and white), looked carefully at the commands and buttons on it asking for information about them, trying to explain to their partner and to the practitioner the function

of the buttons. Two girls asked to press the buttons and after they were given permission to do so, they pressed the buttons alternatively using the piano timbre and the percussion timbre; they laughed whilst listening to the percussion timbre.

2. "IT HAS A LOWER DOWN THE VOICE…LET'S PLAY LOUDER!"

No children recognized the presence of the reply of the system without the help of the practitioner. It is possible to identify two reasons: a) the presence of the partner did not allow the children to listen to the reply; often, when one child stopped playing to listen, the other child was still playing the keyboard so the MIROR Impro's reply could not start, b) the children's understanding of the practitioner's suggestion: "Let's play with the keyboard that replies us". Generally, the practitioner suggested to the children to raise their hands up from the keyboard so that they could listen the reply. Once the children understood the way to launch the reply of the system, they played, listened (see Figure 1 and 2), and sometimes told the practitioner who had replied them (see the example below).

> Example: Two girls begin to play the keyboard, the practitioner is beside them and she observes the children. After 3 minutes and 50 seconds from the beginning of the session, the practitioner says to them: "Let's try a bit, and then we raise our hands". The two children listen to the practitioner and follow her suggestion. They raise the hands from the keyboard. The reply starts and one child says: "Who is it? Who is it?", the other girl says: "It is an older child which has replied us, he has spoken softly".

The children tried to understand who had replied them and how; for one child it was the computer that replied, two other girls said that the older children (present in the school) were replying to them and one girl spoke about the keyboard as a real partner and said to the practitioner: "it has spoken [...] It has a lower down voice…let's play louder." Some children, in spite of their young age, respected the turn and they stopped playing to listen; they said "wait!" to each other to stop the partner to launch the system. This data confirmed the data already presented in the pilot protocol (Addessi, Pachet, 2005) and in the protocol number one (Addessi et al., 2012) which was carried out with older children.

Children interact together listening the reply of the system

3. THE PRACTITIONER, THE CHILDREN AND THE MIROR IMPRO

Before the beginning of the sessions, we invited the practitioners to act as usually they did within daily activities. The observation of the interactions amongst the children, the system and practitioner, revealed that in spite of different educational styles, there were some common and interesting conducts made by the nursery practitioners:

- inviting children to take part in the activities and presenting this novelty listening to the children
- steering the exploration of the synthesizer and of the MIROR Impro (the practitioners generally said to the children "Let's try a bit and then we raise our hands");
- re-launching or focusing the attention of the children on particular aspects
- trying to balance the participation of the two children while they were playing

It was interesting to observe that the actions listed above, characterize a "zigzag" interaction during the session, a kind of backwards and forwards of the practitioner within the interaction. At the beginning of the session, the practitioner invited the children to play the keyboard. In the first minutes of the session, the practitioner listened and observed the children, remaining beside them (see Figure 3). The practitioner generally said a few words and confirmed the actions of the children with their eyes and with their facial expressions (smiling and nodding). Over time, the participation of the practitioner changed. She started to play the keyboard, to re-launch, to ask and speak with the children, she was directly involved (see Figure 4). After a while, the children were generally more self-confident and the practitioner took a step back and listened and observed again.

The practitioner explores the synthesizer with the children

Two children listen the reply of the MIROR Impro, while the practitioner is besides them observing.

CONCLUSIONS

The exploratory experience underlines some positive elements of the participation of the children, their attention and interest during the exploration and the time spent to play. It has not been possible to observe in children elements or gestures of "affection" directed to the MIROR Impro as in the previous studies with the MIROR Impro and Continuator described. One reason may be the duration of the study; our experience was short (three sessions) and focused on the first "approach" between young children and the MIROR Impro. It would be interesting to observe the evolution of the interaction over a longer period of time.

As previous studies (Addessi & Pachet, 2005; Addessi et al. 2012; Ferrari & Addessi, 2013) already affirm, the Interactive Reflexive Music Systems (MIROR Impro and the Continuator) are not invasive, the reply starts only when the children raise their hands. Thus, the MIROR Impro gives the priority to the children. This characteristic makes the system suitable for young children as well as the 4 and 8 year old children.

Considering the setting and the procedure, the presence of the practitioner enabled the MIROR Impro to be utilised within the daily activities. Finally, in terms of the equipment, our observations indicated that the synthesizer was too big for the 2-3 year old children. This was due to some children having difficulties in "mastering" the keyboard and consequently they played only one register. On the other hand, the children were interested in the exploration of the buttons and commands on the keyboard. It may be interesting for future research to explore and study the potential use of different timbres of the digital sounds.

ACKNOWLEDGEMENTS

We would thank the children, the nursery practitioners, the parents and all of the staff of the nursery school "Il Monello" (Bologna, Italy) for their collaboration and participation in the MIROR project.

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THE MIROR PROJECT: AN INTRODUCTION TO AN INTERACTIVE REFLEXIVE TECHNOLOGY FOR MUSIC EDUCATION

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BACKGROUND

The MIROR project is a three-year EU funded project under the 7th Framework programme (Technology-enhanced learning). The MIROR project has been developing an innovative system for music learning and teaching in early childhood music education based on reflexive interaction. Reflexive interaction is based on the idea of allowing children to manipulate virtual copies of their own inputs

through specifically designed technology-learning software referred to as 'interactive reflexive musical systems' (IRMS).

The partners in the project are affiliated to the Universities of Exeter, Bologna, Gothenburg, Genoa and Athens, Sony Research, Paris and Compedia, Tel Aviv.

AIM

The aim of the demonstration is to introduce conference participants to two components of the MIROR technology which are designed to enable and enhance young children's improvisation and composition.

A Short Description of the Activities
The workshop will consist of a brief introduction to the project, an explanation and demonstration of the technology accompanied by video clips to illustrate the technology in use with children in educational contexts. Participants in the workshop will have an opportunity to try out the technology.

IMPLICATION

Interactive reflexive musical systems have educational and therapeutic potential. They provide a medium for children to improvise and compose music based on their own musical ideas and provide a means by which they can develop musical skills of aural perception, and understanding of musical elements and structure.

SPECIFIC VALUE AND MEANING

Early childhood music education is traditionally 'low technology' and the reasons for this lie within the conventions of early childhood music education practice and the images of early childhood and music that pervade music education. The demonstration will also provide an opportunity for participants to consider and discuss these issues.

MIROR WORKSHOP: A PRACTICAL EXPERIENCE ON IMPROVISATION AND COMPOSITION WITH THE MIROR IMPRO AND COMPO

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ABSTRACT

The MIROR workshop is a practical experience to improvising and composing with the MIROR Impro and Compo. In specific, the workshop is designed to allow the participants to play directly with the MIROR Impro and MIROR Compo through guided activities and free exploration. The focus of the activities of the workshop will be on the didactic use of these two components of the MIROR platform as they are targeted to children of 8-10 year old, considering both the point of view of the teachers and of the children. The participants will be invited to "act like children" playing and interacting with the MIROR Impro and Compo: the activities will be carry out in-group or pairs of participants. In particular, the activities proposed are designed for children aged 8-10 year old. The participants will be also invited to "act like teachers" observing and reflecting on musical aspects of the improvisation and composition, strategies and characteristics of the collaborative playing among the participants.

The workshop is structured in different phases: from the free exploration to the realization of tasks and the observation and discussion, among participants, on some issue, regarding the composition, the improvisation, and the potential uses of the MIROR Impro and Compo in didactic contexts.

music in every child project

PART VII

MUSIC IN EVERY CHILD PROJECT

(IN ASSOCIATION WITH EuNet MERYC-
NOT SUBMITTED FOR MERYC PANEL REVIEW)

MUZIEK IN IEDER KIND (MUSI C IN EVERY CHILD) A PROGRAMME SUBSIDISED BY THE CULTURAL PARTICIPATION FUND (NL)

INTRODUCTION

Singing, learning to play an instrument and performing together enhance and promote children's social and cognitive development. And yet, due to social and other barriers, not every child has access to music education.
On 24 December 2009, the Cultural Participation Fund launched the programme 'Music in Every Child'. With this programme, the Fund aimed to make music education for children between the ages of 4 and 12 more accessible. It did so by, among other things, providing project grants aimed at researching which methods and partnerships at local level are effective, or ensuring that thinking on the topic continues to develop. This will enable far more children to actively participate in music, now and in the future. The Fund provided grants to projects involved in music education and support initiatives engaged in reflection, debate and promotion. The subsidy relationship was completed in the summer of 2013
The Fund gave grants to a total of 23 projects in the Music in Every Child programme. These are:

1 Music in me (€ 552.455 by De Lindenberg (Nijmegen)
2 MuziekTalent Express (€ 631.890) by Aslan Muziek Centrum (Amsterdam)
3 Muziek en ik (€ 335.500) by Muzerie (Zwolle)
4 Muziek maakt school (€ 393.300) by FluXus (Zaandam)
5 Het Muziek Lab (€ 750.000) by Hart (Haarlem e.o.)
6 Muziek in de Klas (€ 721.266) by Edu-Art and KCG (province Gelderland)
7 De toon zetten in Oost-Groningen (€ 426.636) by Muziekschool Veendam, Muziekschool Oost-Groningen and Centrum voor de Kunsten Zuid-Groningen (province Groningen)
8 MuziekMakers! (€ 551.605) by Papageno (nationwide)
9 Fraai Lawaai (€ 329.130) by De Kubus (Lelystad)
10 Overal Muziek (€ 730.000) by Music Matters (Rotterdam)
11 De MuziekRoute (€ 388.073) by Utrechts Centrum voor de Kunsten (Utrecht)
12 IK BEN MUZIEK (€ 492.900) by Trias (Rijswijk)

13 Zing zo (€ 231.498) by Muziekschool Amsterdam (Amsterdam)
14 Omdat muziek voor iedereen is (€ 600.000) by Het Leerorkest (Amsterdam)
15 Classic Express (€ 300.000) by Prinses Christina Concours (nationwide)
16 Teresa Carreño (€ 32.700) by Het Concertgebouw Fonds (Amsterdam)
17 Bennie Briljant (€ 50.000) by Prinses Christina Concours (landelijk)
18 Jong geleerd… (€ 300.000) by Toeval Gezocht (Landsmeer)
19 De Muziekbus (€ 200.000) by Stichting Beleven (nationwide.)
20 Símon Bolívar Symphony Orchestra (€ 25.000) by Het Concertgebouw Fonds (Amsterdam)
21 Research Collaboration group teacher and Music teacher (€39.050) by Muziekschool Amsterdam
22 Kinderen Maken Muziek (€ 400.000) Oranje Fonds (nationwide)
23 6th Conference of de EuNet Meryc (€20.000) Gehrels Vereniging

SYMPOSIUM

The Cultural Participation Fund invited four projects to give a presentation on the method they developed for music education at primary schools.

MUZIEK EN IK BY MUZERIE

Muziek in de Klas by Edu-Art and KCG
IK BEN MUZIEK by Trias
Jong geleerd… by Toeval Gezocht

PAPERS

Eight of the projects wrote a paper detailing the background to their project, the method they devised, its implementation and results.

MUZIEK MAAKT SCHOOL BY FLUXUS

De toon zetten in Oost-Groningen by Muziekschool Veendam, Muziekschool Oost-Groningen and Centrum voor de Kunsten Zuid-Groningen
Zing zo by Muziekschool Amsterdam
Overal Muziek by Music Matters
Fraai Lawaai by De Kubus
Muziek en ik by Muzerie
Jong geleerd… by Toeval Gezocht
IK BEN MUZIEK by Trias

OVERAL MUZIEK: MUSIC EDUCATION IN ROTTERDAM PRIMARY SCHOOLS

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ABSTRACT

In its Music Education Master Plan "Overal Muziek" (2011), the six leading Rotterdam musical arts institutions (Codarts, De Doelen, Music Matters, the Rotterdams Philharmonisch Orkest, SKVR and the WMDC), united in the Rotterdamse Muziekcoalitie – outline their vision that if children systematically and actively play music, their academic performance is enhanced and they are less likely to drop out of school. With this master plan, the coalition aims to develop a music education learning continuity pathway for ages 4 to 18. The goal is to tailor this learning continuity pathway to reflect students' development and contemporary culture. In the coming period, the modules described will be further refined in conjunction with the broad network of participants in the Rotterdam education sector. From a shared vision of music education for children and youth, the Muziekcoalitie strives to offer an in-depth, comprehensive programme of music education and to establish learning continuity pathways in music education in Rotterdam by 2016.
In conjunction with schools and other cultural partners, the Muziekcoalitie develops instrumental and vocal methods from a focus on playing, listening, improvising, composing, performing and movement. This approach gives children an opportunity to discover music through a variety of teaching styles. Class teachers acquire skills to encourage the development of (fine) motor skills, a sense of rhythm, concentration, creativity, listening skills and collaboration in the children's general development. Moreover, children learn to make their own music by developing music-making skills over a longer period of time.
"Overal Muziek" aims to develop a programme of vocal and simple preparatory instrumental education for primary school children aged 4 to 12 based on a teach-the-teacher method that can be offered city-wide. Additionally, children aged 8 to 12 at 30 primary schools in disadvantaged areas will be offered an intensified learning continuity pathway. This takes the form of frontal instruction, teaching the children to play an instrument, with the opportunity of progressing to a choir or orchestral programme.
To connect with children's experiences, environment and developmental phase, we base our activities on the theoretical framework laid out in the report 'Cultuur in de Spiegel'.

BACKGROUND

In its Music Education Master Plan "Overal Muziek" (2011), the six leading Rotterdam musical arts institutions (Codarts, De Doelen, Music Matters, the Rotterdams Philharmonisch Orkest, SKVR and the WMDC) – united in the Rotterdamse Muziekcoalitie – share their vision that taking a structural and active approach to playing music enhances academic performance and helps to prevent early school drop-out. The Muziekcoalitie believes that playing music together encourages children to build a positive self-image, social skills, a sense of connection and, as a universal language, satisfies an urge for personal achievement. Rooted in a widely supported vision of music education, the plan presents an analysis of the activities currently available, the lacunae and the weak points, followed by a joint mission and an action plan designed to embed music education in learning continuity pathways at schools.

With this master plan, the coalition concentrated on a music education learning continuity pathway for ages 4 to 18. The goal is to tailor this learning continuity pathway to reflect students' development and contemporary culture. In the coming period, the modules described will be further refined in conjunction with the broad network of participants in the Rotterdam education sector.

In conjunction with schools and other cultural partners, the Muziekcoalitie develops instrumental and vocal methods that focus on playing, listening, improvising, composing, performing and movement. This approach gives children an opportunity to discover music through a variety of teaching styles. Class teachers acquire skills to encourage the development of (fine) motor skills, a sense of rhythm, concentration, creativity, listening skills and collaboration in the children's general development. Moreover, children learn to make their own music by developing music-making skills over a longer period of time.

From a shared vision of music education for children and youth, the Muziekcoalitie strives to offer an in-depth, comprehensive programme of music education and to establish learning continuity pathways in music education in Rotterdam by 2016, so that:

Every child and young person in Rotterdam has the opportunity to develop their musical talent within their own environment and, through curricular and extra-curricular music education that reflects his/her development and interests, can continue to play music.

THE PROJECT OVERAL MUZIEK

"Overal Muziek" aims to develop a programme of vocal and simple preparatory instrumental education for primary school children aged 4 to 12 based on a teach-the-teacher method that can be offered city-wide. Additionally, children aged 8 to 12 at 30 primary schools in disadvantaged areas will be offered an intensified learning continuity pathway. This takes the form of frontal instruction, and will teach the children to play an instrument, with the opportunity of progressing to a choir or orchestral programme.

Our projects and methods are based on the Primary Education Attainment Targets [Kerndoelen Primair Onderwijs (2006)], subdivided into general and musical learning goals and creative expression. Based on the Primary Education Attainment Targets our projects strive to ensure the learning continuity pathways that we develop are accessible and transferrable. Schools can opt to take the entire programme, or select a variety of components.

A comprehensive curricular learning continuity pathway encompasses the following aspects of music practice:

- Active (music lessons, playing music)
- Receptive (visiting concerts and rehearsals, meet-the-professionals, a glimpse behind the scenes at various music platforms/orchestras)
- Reflective (knowledge of repertoire, music history, talking about and experiencing music)
- Productive (composing and improvising)

To connect with children's experiences, environment and developmental phase, we base our activities on the theoretical framework laid out in the report 'Cultuur in de Spiegel'.

The population of Rotterdam is culturally rich and diverse. This is reflected in our programmes, which are based on Western and non-Western music traditions, and in the range of partners we engage with.

The Overal Muziek music education projects comprise the following three elements:

ZANGMAKERS; PUTTING SONG BACK ON THE MAP

During the last school year, Zangmakers, or Songmakers, almost reached the target figure of 100 participating primary schools in Rotterdam. The Zangmakers approach is in tune with primary education and the repertoire developed is relevant to everyday life and the various education priorities. Besides the numerous collaborations with schools, Zangmakers regularly collaborates with events, often ones featuring large children's choirs and soloists.

INTRODUCTION TO AN INSTRUMENT

For 'Introduction to an Instrument' Music Matters developed several new concepts within Overal Muziek that reflect a number of existing education projects. This is the most experimental aspect of the current trajectory. Devising the most effective strategy was quite a lengthy process. Over the last two years, we developed Winston's Music School, a concept that, using a very simple approach, teaches children to make music with their own body. Winston's Music School now consists of 18 lessons (comprising around 120 instructional videos). Winston's Music School is an easy method to learn; after a simple introductory course from a specialist music tutor, primary school teachers can easily incorporate it into their own classes.

A learning continuity pathway in composition has been developed for primary education in Amsterdam and Rotterdam in collaboration with the audio-visual project Watch That Sound. Music Matters asked Watch That Sound to make a module of this, too: a specialist music teacher will coach them in using the process, so they can use it in class themselves. The module will be launched on the market this spring.

EXPANDING IEDER KIND EEN INSTRUMENT

The Ieder Kind een Instrument (IKEI) project run by the informal arts training organisation the SKVR, strives to provide each child with a musical instrument. Launched some time ago, the project teaches children at schools in communities with the lowest social index scores, to play a musical instrument. In the course of its operation, the project has been able to expand and evolve with funding from the Cultural Participation Fund.
At present, there are 22 IKEI schools in Rotterdam, which will increase to 30 schools in the 2014-2015 school year. The Ieder Kind een Instrument programme is becoming a structural part of the school curriculum. The entire learning continuity pathway places great emphasis on singing; each school has a specialist music tutor from the SKVR who gives children aged 4-8 music instruction, introducing 4-year-olds to different school instruments while, over a two-year period children aged 8 and upwards learn how to play an instrument (in class), and play as part of an orchestra.

RESULTS OF THE ZANGMAKERS METHOD

We offer singing lessons at primary schools in Rotterdam in collaboration with Zangmakers, a collective that has developed a unique teach-the-teacher programme. The method has been designed to be easy for primary school teachers to use. It is a fun way to introduce children to singing, and take it further. 100 Rotterdam primary schools will integrate the Zangmakers method into their activities plan around the summer of 2013.
The Zangmakers method is supported by an advanced website (www.zangmakers.nl) that offers a promotional video, a page and programme for every teacher involved, and 43 songs specially adapted and written for primary school children of all ages. The extraordinary thing about this method is that the repertoire reflects the music that the children are familiar with, and relate to. This is quite a change because before now, the songs did not appeal to either the youngest or the oldest groups. The method focuses attention specifically on this aspect.

Number of schools trained or planned as of 28-8-12:	58
On-going contacts with schools:	13
Zangmaker days:	12
Introductory courses at schools:	33
Public introductions:	10
Total number of participants in Zangmaker days:	243
Average number of participants during 12 Zangmaker days:	20

*based on the start of the school year '12-'13

RESULTS: IEDER KIND EEN INSTRUMENT (IKEI)

We will be able to achieve our target of expanding to reach 30 schools for the intensive Ieder Kind een Instrument (IKEI) programme in 2015. 22 schools are currently actively involved with the programme; this figure grows each year by 4 schools. The annual IKEI concerts in De Doelen have become a highly anticipated event among Rotterdam primary schools and beyond. In collaboration with the Rotterdams Philharmonisch Orkest several hundreds of children from different schools perform their musical repertoire together in the large concert hall at De Doelen.

In addition to the IKEI programme for children aged 8 to 12, we also offer the preparatory programme Singing in the Class for children between the ages of 4 and 8. We were able to do so thanks to the introduction of longer teaching hours, a new instrument set out in the Rotterdam education policy paper "Beter Presteren".

The following combinations of music are offered (per school class):
Recorder, flute, clarinet, saxophone/cello, double bass, violin/cello, double bass, accordion/ guitar, keyboards/guitar, violin, keyboards/violin, keyboards, double bass/keyboards, Cajon/accordion, flute, recorder/accordion, clarinet/ guitar, violin/accordion, Cajun/violin, guitar/flute, clarinet, cornet, baritone/flute, keyboards/Cajon, guitar/brass, drums (brass band)/saxophone, clarinet, cornet, baritone.

Total number of pupils	4947
Number of contact hours per week	271.5 (inc. Zingen in de klas)
Number of tutors Zingen in de klas	21
Number of tutors instrumental lessons	31

*based on the start of the school year '12-'13

NUMBER OF PARTICIPATING SCHOOLS GROWS FROM 22 (2012-13) TO 30 IN (2014-15)

2012-2013: **22 schools** continue to follow IKEI:
At 2 of the schools, school choir and school orchestra will be piloted for children aged 10 to 12 (4 groups)
At 4 of the schools, instrumental lessons will be piloted for children aged 8 to 10 (8 groups)
At 4 new schools, instrumental lessons will be piloted for children aged 8 to 10 (8 groups)
The full IKEI programme will be followed at 12 schools.
The instrumental lessons were developed in the first period of "Overal Muziek".

2013-2014: **26 schools**, all with the new IKEI programme

2014-2015: **30 school**s, all with the new IKEI programme

MUSIC MAKES COOL: REFLECTING ON A MUSIC EDUCATION PROGRAM IN ZAANDAM

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ABSTRACT

In this paper a special project is described that was initiated in Zaandam, the Netherlands. Four schools from the immigrant neighbourhood Poelenburg are involved in an elaborate and intensive music education project, initiated by the city's music school. The aims of the project are described, as well as the development of several practical and didactical adjustments, in the on-going development of the program. The paper concludes with preliminary conclusions and targets for continuation.

KEYWORDS
Musical development, cooperative learning, authenticity, community, instrumentation, Da Capo approach, ownership, curriculum development.

INTRODUCTION

The project 'Muziek Maakt School1' was initiated with the intention of sharing the gift of music with children in Zaandam who are not likely to have access to music education; it resulted in a project with four schools and over 800 children. The material for this paper was gathered from project plans, annual reports and a series of magazine articles but also from interviews with the initiators Gertru

1 Muziek Maakt School is hard to translate: literary it means Music Makes School. The Dutch expression 'to make school' means 'enhances the school'. To understand the title correctly Muziek maakt School could be translated as: Music creates a following in the school. In previous publications the project has been named Music Makes Cool. In the paper I will also refer to the project as MMS.

Smit-Pasveer, Erik van Deuren and Claudia Rumondor. The author would like to thank the respondents for their cooperation and openhearted response to all her questions.

PARTICIPANTS

Muziek Maakt School was developed for primary school children aged four to twelve from an immigrant neighbourhood in Zaandam, mainly from a Turkish background. The neighbourhood has four schools that all participate in the project. The schools have different identities and convictions: one public, one Catholic, one Protestant and one Islamic school. Muziek Maakt School started with only fifth grade pupils from the four schools and gradually extended to all the children in the schools.
The 38-week in-school program reaches about 800 children. All the children participate in two annual performances at school and at least one performance in a location outside school.
An additional after-hours program has been developed consisting of several smaller groups. Children are allowed to start off with an instrument of their choice. At this moment the program consists of five groups of six children taking eight-week courses.

The initiators manage the project. Gertru Smit Pasveer is head of the city music school Fluxus. She trained as a harpist and musicologist and initiated MMS as part of a plan to musically adopt a school in Zaandam. Erik van Deuren is a clarinet teacher at Fluxus, teacher at the Amsterdam Conservatory, music arranger and artistic director of Holland Symphonia. Erik was asked to be artistic leader of MMS because of his experience with the youth ensemble Rajakymoes! at Fluxus. Claudia is a young composer who teaches composition at Fluxus. She has lived in Poelenburg all her life and maintains a strong personal connection with the neighbourhood. When Erik and Gertru initiated the project, Caudia joined in as a harp teacher but soon became the assistant artistic leader and one of the creative driving forces of MMS.
A team of approximately 10 teacher-musicians is responsible for the lessons in all four schools. The team has grown over the years because of the expansion of the project and the growing choice of instruments. Professional musicians from Hol-

land Symphonia are occasionally involved as guest teachers and co-perform with the children. Involving performing professionals to work with children offers the possibility for both modelling and cooperative learning.

AIMS OF THE PROJECT

The ambition of MMs is that by 2014 every child in Poelenburg will have been given the chance to make music. To realize this ambition the children follow an introductory program in the first four years of primary school, to 'awaken them musically'. From fifth grade on all children receive a weekly 45 minutes of instrumental music education and an extra 30 minutes of singing. The instrumental lessons are given in groups of 15 children at most; the singing takes place with the entire class and the group teacher. By exchanging instruments twice a year, all children are introduced to eight different types of musical instruments. Performing in public is an important element of MMS because it stimulates the children to cooperate with each other. It is also an important means of personal development and offers them the chance to share their enthusiasm and experience with family, friends and the rest of Zaandam

METHODS OR PEDAGOGICAL APPROACH

When MMS was initiated, it was not designed from a theoretical point of view and the approach has developed largely from practice. The project was inspired by experience with the Fluxus youth ensemble Rajakymoes! Ensemble leader Erik van Deuren describes his working principles for both Rajakymoes! and MMS as 'ownership, awareness and commitment'. Rajakymoes! can be considered a practical example of authentic music education where student initiative is combined with real-life learning situations that stimulate students to cooperate and perform on stage. Gertru describes Rajakymoes as a 'musical hangout' for adolescents.

The MMS-project's practical approach to music methodology has been supplemented by the Da Capo approach developed by Jane Cutler (http://www.dacapo.co.uk/sspage-dacapo_music_centres-teachers-teacher_biogs.html). Based on the methods developed by Zoltán Kodály the Da Capo approach combines elaborate

singing practice with open-ended educational goals. Developing the inner ear and learning hand singing are important elements of the Da Capo approach. Levels can be obtained independent of school periods and the children are not formally tested. Every child participates at his or her own level. Recognizing the intuitive approach of music education in Da Capo, Erik van Deuren initiated training programs to enable teacher-musicians in MMS to use the Da Capo approach. Since September 2012 the Da Capo approach has been implemented in the first four classes in all the Poelenburg schools.

ACTIVITIES

INSTRUMENTATION

The cumulative structure of the project is important. Starting with one set of instruments in fifth grade classes only, the choice of instruments and size of the project gradually expanded to a diverse and complete structure of music education in school. This set-up allowed the initiators to develop logistics and helped embed the project in a gradual way in the schools.
A broad selection of instruments is not very common in music education in schools. The criteria for choosing the instruments were motivated by several considerations. The instruments chosen had to reflect the various categories such as strings, wind and percussion, but were also selected to be able to teach about melody, harmony and rhythm. But almost as important were practical considerations such as size, costs and accessibility. Choosing the instruments turned out to be an on-going process and a learning experience for the project team. After two and a half years the selection of instruments consists of harp, violin, cello, trumpet, clarinet, saxophone, guitar, saz, gamelan and keyboard. The unique qualities of the gamelan proved to be very successful because it enables children to make polyphonic music together on an instrument, with only weeks of practice. The saxophone proved to be a little too complicated to master in only six months so the team is considering other options for wind instruments and also percussion. Choosing a saz might seem unusual but is understandable because the majority of the children and their families will be familiar with this Turkish instrument.

ALL CHILDREN PARTICIPATE

All respondents agree that it is essential that the project is available to all the children in Poelenburg. Considering the fact that MMS was initiated to

stimulate participation in music education for children who are least likely to do so, the team makes an effort to make sure that no child is left out. Gertru tells:

> "The children have to take their instruments home to practice, if the size of the instrument allows this of course! There was this one child however who refused to take his harp home, because he was afraid his parents might sell the instrument in order to buy drugs. We made sure he had access to a locker and arranged for him to be able to practice in school, at the end of a school day."

It is considered important that all children are given the chance to make music, to enjoy and to perform. Talented and motivated children have the possibility to specialize in a favourite instrument in special classes after school or try other instruments that appeal to them. These courses can be attended in smaller groups for minimal costs and are quite well attended.

COMMITMENT OF THE SCHOOLS

The project would not have been successful had there been no investment in the relationship with the school and with the schoolteachers. The schoolteacher must be committed and it is the duty of the teacher-musicians to involve the school team. By working with a permanent team and challenging the schoolteachers to participate with the children, MMS invests in making teachers familiar with music education. This takes time and is not easily assessed. Differences between schoolteachers and traditionally schooled music teachers must be addressed and critical self-reflection is required on both sides. Musicians are not trained to teach large groups and have to develop their own methods to adapt their expertise to school situations.

OUTCOMES

When the project started in September 2011 three schools were asked to participate. Not long afterwards the fourth school in the neighbourhood approached Fluxus to be included in the project as well. This was unexpected but very welcome because it enabled the team to broaden the program to include the whole Poelenburg neighbourhood.

Singing was initially not given a major role in the structure of MMS but during the course of the last two and half years an additional program of singing lessons

and choir singing for all children was added and is now recognized as essential for the project to be successful. Claudia adds that this is one of the best ways to involve the teachers, something that is very important for the durability of such an intensive program.
The duration of the lessons was extended from an initial half hour to 45 minutes plus half an hour of singing every week. A maximum number of children per group was set at 15 and the original plan that each child would play the same instrument for four years was abandoned. The need for performances changed from motivation to means: Children learn from playing together, with their teachers and with professional musicians while preparing for a public performance. The performances were downsized however to more intimate concerts for school and families.

There had been no structural music education in any of the participating schools. It is evident that this changed enormously. It is now more embedded and structured, although not completely. Claudia underlines that one of the main benefits of the project is that children from the immigrant neighbourhood Poelenburg become aware of their own talents and the opportunities there are to realize their potential:

> "They discover talents, gain self-confidence, and learn to cooperate, listen to each other and hear their own voice. Music becomes part of their lives. The children learn to play several instruments, learn to sing and learn to read musical notations. They are proud of their instruments."

Some of the effects were not foreseen, like the growing role of the parents in their children's cultural development.
The research question stated in the project plan was whether successful approaches like Rajakymoes! could be applied to music education in schools. MMS experience teaches, according to Erik, that it takes time and effort for principles like ownership, awareness and commitment to permeate musical education and he thinks these values have not yet oozed out to the level of the children, but have definitely changed the attitudes of the teacher-musicians. On the matter of competence Claudia stresses that the teacher-musicians could use help in training their pedagogic and didactic skills. Workshops are being developed for schoolteachers to enhance their musical competence and increase their commitment. Another challenge yet to be taken is the matter of assessment; this will be addressed in the coming period. Erik stresses that discretion is required:

> "Assessment is inevitable but we must take care that it doesn't burden the project. It is very important not to frustrate the process. Assessment could take the form of process evaluation: not to compare levels but to set goals for further development."

One of the major challenges is the continuation of the project. After a period of sufficient funding, schools will have to commit themselves to contribute financially to the continuation of music education in schools. Some first initiatives to cover the costs with school funding and parental contribution have been taken, but it is evident that this requires a lot of creativity and entrepreneurship.

CONCLUSION AND IMPLICATION FOR FURTHER WORK

One of the main qualities of Muziek Maakt School is the team. Organizing staff and teacher-musicians form an inspiring and growing community that carry the project. Gertru describes the competence of the team members as:

> "creative, flexible, and enthusiastic, possessing both team spirit and the ambition to learn. Authenticity is one of the main characteristics of the project and of everybody involved."

Muziek Maakt School is new in the sense that it takes music education into the class, into the heart of the school. includes all children and is thus becoming a part of the curriculum. In the course of the complete 8-year program, the children become acquainted with a range of instruments. Singing is an important element and performances form a regular part of the educational program. The project is experimental and daring; it started with instrumental lessons for all children in 5th grade, and developed into an introductory program for children from 4-8 and an extensive program for children from 8 to 12. The respondents all agree that development of this project has been a learning experience, and that continuous evaluation has led to significant changes and improvement in the original plan. The effects of Muziek Maakt School are already reaching beyond Poelenburg and music education. In the development of new working principles for art education in schools in Zaandam, Fluxus has built on the experiences lessons learned from MMS and has developed a structured program. MMS has served as an inspiration and a qualitative standard for education programs in school in Zaandam.

DE TOON ZETTEN IN GRONINGEN

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ABSTRACT

Four music schools in the province of Groningen collaborated on the project 'Setting the Tone in Groningen' ('De Toon zetten in Groningen').
The aim of the project was to give a greater number of children a chance to experience music and music education. The project reached over 2,500 pupils! The project was implemented in primary schools and consisted of the following: music education, learning to play an instrument, multidisciplinary and after-school activities. It was designed to integrate into primary education and structured to fit in and cohere with standard subjects on the curriculum.

The first step has been taken.
Working from a variety of perspectives, the music schools focused on primary education. This resulted in three different models. The structure of these models complies with the starting points of the core objectives for music education in primary schools.

The three models are:
- Working according to a method
- Progressing from music education to instrumental education
- An approach that is integrated into and matches the school's objectives

The results are positive and both pupils and teachers are very enthusiastic. Amateur music clubs are also involved, helping to collect the number of instruments needed. Although responses are positive, there is still room for improvement on some points: working according to demand rather than supply, and a better embedding in the environment. It involves a process of change that the participants must, or want to, go along with. Important elements in this process are expertise building and greater involvement.
We conclude that there is a solid basis for expanding on this first step, and embedding structured music education in primary schools. Here, the emphasis lies on: the needs of the primary school, the skills of the school teachers, and the learning continuity pathway at the school. The involvement of the environment is further strengthened, which also reinforces support for structured music education.

THEORETICAL BACKGROUND AND CONTENT

The project 'De Toon zetten in Groningen' reveals that primary schools are doing too little in the way of structured music education. This conclusion is confirmed by diverse articles and studies. We conclude that primary education teacher training programmes do very little to prepare future teachers to teach music in school. Primary school teachers are under considerable pressure from education inspectors to perform well in cognitive disciplines. (This is a broad generalization; there are a number of positive exceptions).
Specialist music tutors at music schools also experience some difficulty teaching

larger groups. A small-scale survey into these tutors' impressions of primary education and their skills brought to light a need for more knowledge about this target group. ('…taking on the music world with a group of children', Benjamin Walter, research paper).
From the outset of the project, we were aware that the initiative entailed a process of change, for both school teachers and tutors at the art institution.

AGE AND CHARACTERISTICS OF PARTICIPANTS

We focused on primary school pupils (aged four to twelve). We also included schools for special education. The project reached around 2500 primary school pupils in a large area (roughly one third) of the province of Groningen.
After-school activities were developed for approximately 150 pupils. This number is set to increase when the after-school brass bands are formed in Eemsmond. This activity will be carried out in partnership with the brass band corps in that district. Four special education schools are involved in the project in the area we cover.
In our objectives, we stated that our main aim was to reach children who would not otherwise come into contact with music. Children in this category generally live in communities or villages that are relatively disadvantaged. In the course of the project we discovered that almost all children in primary education tend to have little interaction with music. We adjusted our objectives to reflect this.

AIMS OF THE PROJECT

The goal of the project is to provide children with few opportunities for coming into contact with music, with a chance to enjoy and be inspired by music. Singing and making music as a group is fun – but it also plays a fundamental part in stimulating cognitive development and developing social skills. Many primary schools are not able to offer systematic music education. This project provides primary school education with a solid basis for that. By working with existing amateur choirs and orchestras, synergy is created between education, cultural education and the amateur arts. This helps to strengthen the link between music in and outside school. The project encourages children to take their musical skills

further, which ultimately forges a structured link between primary education, the world of amateur music, and music schools.

METHOD OR PEDAGOGICAL APPROACH

Three approaches are followed:

- the primary school teacher and the school's music method are the starting point. The method is followed, and the music tutor coaches the school teacher;
- a learning pathway is designed, working towards an orchestra for children aged 9-12;
- the approach centres on the objectives of the school: does the school have a cognitive, social, emotional, cultural or musical focus. A connection is made between music and other subjects taught at school.

Each of the three approaches is based on the same departure points: the learning continuity pathway and achieving the core objectives.
In all cases, the project involves working with smaller groups taken from a class, or the entire class. In the majority of cases, lessons are given by the music tutor. Depending on the method, a small number of school teachers are given assignments and are also primarily involved in the classes taught by the music tutor.

To prepare music tutors to work in primary education, we provide the following:

- Internships: music tutors gain experience teaching in primary schools, with their colleague
- Getting acquainted with the school, observing the group
- Training: working with large groups
- Training: project-based teaching

The following activities are available for school teachers:

- A course on playing the guitar: easy ways to accompany pupils
- Team meeting: identifying the obstacles
- Individual coaching on the work floor

THE ACTIVITIES

BRIEF DESCRIPTION OF THE PROJECT IN STADSKANAAL

- the pupils in the group and the music method used by the school are the starting point. The school's method is followed and the music tutor coaches the school teacher;

In implementing this project over a three-year period, we reached 700 children and worked with 9 schools. The schools use the "Muziek moet je doen" method with which we develop a learning continuity pathway, in conjunction with the schools.

Our activities are executed at primary schools, secondary schools and during extra-curricular activities.

In consultation with the schools, we offer courses for additional and further training.

We formed a brass band with a school and the local music society. Meetings are scheduled with other music societies to discuss possibilities for starting a brass band with several schools.

Our music tutors are given an opportunity to complete an internship (to observe then give a lesson) with our colleagues in preparation for teaching in primary schools.

BRIEF DESCRIPTION OF THE PROJECT IN VEENDAM

- the objectives of the school are the starting point: does the school have a cognitive, social, emotional, cultural or musical focus. A connection is made between music and other subjects taught at school

Musical development is not simply fun, it's important. There is growing awareness that acquiring music skills also has a positive effect on cognitive and socio-emotional development. Musical training is clearly a part of cultural development. There are some excellent methods for teaching music. They set out each departure point and goal, which is encapsulated in the music lesson. With this approach, every aspect of music is addressed.

What do you hope to achieve with music at school? Working with the team, the idea is to identify the key theme – cognitive, cultural, musical, emotional or social.

Involving teachers in music education

Just like any other subject taught in primary education, some teachers will have

more affinity for music education than others. By focusing on an approach that aims to effectively enhance skills through musical training, the programme fits in with standard subjects on the school curriculum. For example: listening skills are among those that create an excellent basis for developing music skills. Lessons that provide children with listening skills are already taught in primary education, as a part of general literacy and language skills.

The process of encouraging primary schools to support the project, and the offer of professional arts instruction

General premise:

Art is wonderful, but not essential. This needs to become: art IS essential, because it plays a part in acquiring skills and knowledge. Art stimulates a variety of skills such as social and emotional development, cognitive and sensory-motoric development. Moreover, this wide-ranging development gives the children a cultural grounding that helps them attain a high education level.

General premise elaborated:

Primary schools raise the following arguments:

- We can't do it ourselves
- We don't want to take it on, because we need to concentrate on literacy and numeracy skills
- We want to, perhaps as part of class module, but don't have a clear idea of how we can incorporate music, etc.

Steps to move forward from the premise to the objective

1 Check the premise: ask questions
2 Explore the question: this generally involves discussing it with the school board or culture coordinator; what does the team think
3 Work with the school to see how far they want to go in the process, based on the results of the 'why' question. School teachers observe their pupils during a music lesson. What developments are they seeing?
4 Formulate what parts of the lesson they want to structure. Teachers are asked to rank, in order of importance, what they would like to adapt to include music education in their lesson plan
5 Clarify the investments needed for structured music education. Relate it to other subjects
6 Make an official note of agreements and integrate them into the curriculum

At a number of schools in Veendam, music education has now become a regular part of the school timetable – much to the delight of the school board and teachers. Some schools at Veendam are still eager to use the expertise of music tutors.

A sample of what we offer:
Primary school de Sleutel, which focuses on social and emotional development:
Ages 6-7 : 20 lessons, each 45 minutes, of musical education focused on playing together, listening to music, then singing it. *
Ages 8-10 : project "opmaat". * 24 lessons, each of 45 minutes. Children learn to play an instrument, or have drama tuition. The music tutor gives instrumentalists music instruction for 8 weeks; the pupil takes the instrument home to practice. After 8 weeks, the pupil is given a different instrument and follows the same procedure. The project means that the students receive 3 x 8-week blocks of tuition on three different instruments. This culminates in a joint production – the children who played an instrument and those who took drama lessons, perform in a play together, with sound effects and songs.
Ages 10-12 : 2 specialist tutors (one music, one drama) visit the school for 12 weeks. They give combined tuition in drama and guitar. This also culminates in a collective presentation. The class teacher makes guitars in the handicrafts lesson. In science lessons, the children learn about sound, and they also discover about the history of the guitar.
After-school activities : A brass band class for 12 pupils with the aim of forming a school orchestra.

Primary school de Noorderbreedte:
Ages 9-10 : Project "Opmaat". See the above description
Primary school de Braskorf :
Ages 4-9 : 24 lessons, each of 45 minutes, of musical development. *
Ages 9-10 : 24 weeks of pop choir training
Ages 10-11 : 24 weeks of brass instrument and pop choir training (songs from the musical 'Grease')
Ages 11-12 : 24 weeks of dance training ('Grease')
Ages 6-8 : Project "Peter and the Wolf". *
In a block of 4 lessons, pupils explore music and the Groningen dialect (to a

limited extent). The pupils learn all about instruments, listen to themes from Peter and the Wolf, and learn to recognise them. They complete assignments and get to try making sounds using the instruments that feature in the musical fairy tale.

Primary school de Wegwijzer : (Zuidbroek)
Ages 4-5 : (kindergarten) General musical development * (throughout the school year)
"Peter and the Wolf"
Ages 7-9 : General musical development * (throughout the school year)
Ages 9-12 : Trying out different instruments, including at least strings, brass and electronic music.

Primary school 't Haimstee:
Heritage project with accompanying music.
A total of approximately 700 children were reached.

BRIEF DESCRIPTION OF THE PROJECT IN WINSCHOTEN

- a learning continuity pathway in music education is designed, aimed at forming an orchestra with children in the upper grades.
How many children are involved in the project?
There are two schools for special education in Winschoten; all pupils at both schools followed music classes for 18 and 20 weeks. In terms of student numbers, this is approximately 270 students.
Has the number of participating schools increased? What are the numbers (number of schools at the start, current number of schools, projected 'final' number). In the 2012-2013 school year both special education schools are once more taking part in the project (spring 2013).
The project 'Muziek in ieder Kind' has also been introduced (the same format as in Eemsmond). 8 schools are taking part.
General Musical Forming/Preparatory Instrumental Education for primary schools is provided at 4 schools (4 x 20 pupils = 80 pupils). There are 4 x 4 orientation modules of 16 weeks at 8 schools for ages 8-10 (8 x 20 pupils = 160 pupils). Special education at 2 schools 2 x 9 groups of 15 pupils (18 x 15 pupils = 270 pupils). Total number of participants at Muziekschool Oost Groningen 2012 – 2013 is 510 pupils.

BRIEF DESCRIPTION OF THE PROJECT IN HUNSINGO

- a learning continuity pathway in music education is designed, aimed at forming an orchestra with children in the upper grades.

The project comprises a number of phases/school years followed by a structured programme for pupils interested in continuing their musical development.

Phase 1 ages 7-9 General Musical Forming/Preparatory Instrumental Education, over 30 weeks.

Phase 2 ages 8-10 Introduction to four types of instruments. Over a 16-week period, children have a chance to spend 4 weeks learning about an instrument at school. The class is divided into four sub-groups; every four weeks, each group learns about a different instrument.

Phase 3 ages 10-12 School orchestra. In this phase the children have selected a certain type of instrument and will learn to play it during this season. Because the emphasis is on playing as part of an ensemble, tuition is provided in the form of 'frontal instruction' to the entire class. The lessons are given in school time. Throughout the school year, a total of 30 60-minute lessons are given throughout the season.

How many children are involved in the project?

There are 14 primary schools in the municipality of Eemsmond. All 14 schools are taking part.

Some schools take part in phase 1 and 2. One school is participating only in phase 1, and one school is taking part in phase 2 and 3. Three schools are taking phase 2 double (several groups).

There is an average of 22 children per group.

In 2012 – 2013, phase 1 is executed at all 13 schools: General Musical Forming/ Preparatory Instrumental Education for ages4-7: 13 x 22 pupils =286.

In 2012 – 2013 16 groups take part in the 4 x 4 orientation for ages 8-10: 16 x 22 pupils =352.

In 2012 – 2013 2 schools have a school orchestra for ages 10-11: 2 x 20 pupils = 40.

Total 2012 – 2013: 678.

In the 2011 – 2012 school year, phase 1 or 2 was implemented at all 14 schools.

10 schools General Musical Forming/Preparatory Instrumental Education four of which are with two groups 14 x 22 pupils = 308.

7 schools took part in the 4 x 4 orientation 7 x 22 pupils = 154.

1 school had a school orchestra (coincidentally, a large class of 31 children)1 x 31 pupils = 31.
Total 2011 – 2012: 493.
Throughout both school years, a total of some 675 pupils took part in the project; the pupils who took part in the project in 2011-2012 also participated in 2012-2013.

THE OUTCOMES

THE RESULTS IN LIGHT OF THE OBJECTIVE:

- In the three years in which we implemented the project in primary schools, we reached a substantial number of children. The number of children and schools that we reached doubled;
- the project succeeded in offering the majority of schools a learning continuity pathway in music education
- music education was linked to after-school activities
- both the primary school teachers and the music tutors are now better equipped to teach music at primary schools. However, this improvement does not mean that we can afford to cease our efforts in this regard. Some teachers have indicated that they don't feel entirely at home with the material and prefer to have a specialist tutor
- contact has been made with amateur practitioners. There has not, however, been enough time to consolidate this. Music clubs don't always have time to help with after-school activities. Some of them don't see the point of their input. Sometimes, children don't relate particularly well to an orchestra because it doesn't have many young musicians.
- one of the most important outcomes is that pupils enjoyed taking part. And parents were able to enjoy seeing their children having fun in music presentations.

CONCLUSIONS AND IMPLICATIONS FOR FUTURE WORK

CONCLUSIONS

In the project 'De Toon zetten' we made a start on promoting structured music education in schools throughout a large part of the province of Groningen, in a short space of time. More than a start, it is a solid grounding. There is no guarantee that structured music education will be continued without extra resources and extra input.
Continuation demands more coaching for the team and primary school teachers. Specialist music tutors will also need additional training in teaching primary school pupils, including ways of encouraging and tapping into children's creativity.

PROGRESS:

The aim is to continue the collaboration between the music schools. Our ambition is to expand the collaborative relationship to include other music schools in the province of Groningen.
This collaboration generates expertise. This expertise enables us to meet the different needs of primary schools. With the skills and experience gained with 'De Toon zetten', we can use this approach to pass on this method to other music schools.
Every music school draws pupils from a particular area. Each music school serves primary schools in its own local community. This is where the contacts are; the resources and knowledge can be found at other music schools.
This approach will allow us to successfully implement structured music education at all primary schools throughout the province of Groningen.

JONG GELEERD… CREATIVE MUSIC EDUCATION FOR YOUNG CHILDREN

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INTRODUCTION

In 2010 toeval gezocht launched its three-year research project Jong geleerd…[1] which aims to develop a form of creative music education for pre-school children. Year one concentrated on conducting a survey of theoretical concepts and practical examples in the Netherlands and abroad. In the second year (the pilot year) we developed pedagogical principles based on the research findings, which were piloted in six reception (children in the age 4 - 6 years) classes. We integrated these experiences and reflections into an adapted working method and structure. The third and final year centred on developing this working method into a tangible form, and putting the entire method into practice. We are also developing a coaching program for school teachers and music teachers wishing to use this approach. This article sets out a description of the structure of the music education that we developed. For a clear understanding of the project, we begin by outlining the pedagogic starting points of toeval gezocht.

1 The title is derived from the Dutch proverb 'jong geleerd, oud gedaan' which roughly translates as 'What's learned in the cradle lasts till the tomb'.

1 ABOUT TOEVAL GEZOCHT

THE IMAGE OF THE COMPETENT CHILD

toeval gezocht sees young children as natural explorers. Their exploration or learning process is not shaped by what adults teach them – a child's learning is driven by a natural urge for creative exploration. They explore, discover and create, unexpectedly find something different from what they were seeking, and enthusiastically incorporate it into their play. A child steps into the unknown without fear. In this voyage of exploration which is crucial to learning, the child looks for explanations, asks questions, defines problems and forms hypotheses and interpretations. Children are born with all the abilities required to develop within and adapt to the (cultural) environment. They possess a natural curiosity and an innate desire to interact with their peers, adults and their environment. Children have an hundred languages – not only verbal languages, but the language of image, music, movement, logical thought, metaphor, and so on. Using these languages to express themselves and communicate is a way for children to engage with and understand the world and, as such, is an active way to learn.

GIVING CHILDREN THE LEAD

To do justice to this image of the child, and inspired by the Reggio Emilia Approach, we developed a working method and system in which we closely observe the children, and document and interpret their processes of exploration. By integrating this system into projects we are able to gain a clearer picture of the children themselves, and the kind of learning strategies they employ. Documentation is fundamental in allowing us to trace the child's learning and discovery journey. In turn, this means that we can allow the child to take the lead in his or her learning process. With this we don't mean a 'laissez-faire' approach whereby everything is determined by the children. Giving children the lead means that the child 'generates' the content. The subject and the content 'belong to the children'. The role of the adult is to support this.

Children always develop and learn in interaction with 1) their peers, 2) adults and 3) their environment. Drawing on the Reggio Emilia Approach, we also focus specifically on these so-called 'three pedagogues'.

Peers: This means that interaction between the children is always a key aspect of our projects.

Adults: The term 'adults' refers to all the grown-up people in the child's environment. Educators, neighbours, (music-making) parents and (professional) musicians.
Environment: This generally refers to the actual space that children use at school such as the classroom and music workshop. But it also implies the children's home, the village, and the context within which the children live.

The focus on and significance of these three pedagogues are vital to the process, which is led by the children.

PEDAGOGIC PRINCIPLES

toeval gezocht is based on the principles of the image of the child set out above, and fundaments of social constructivism. Learning is not a one-way, directed process; knowledge and ideas are constructed through interaction. A pupil is the protagonist in his or her learning process. We base our approach on the ideas developed by thinkers such as Dewey, Vygotsky and Bruner as well as drawing inspiration from by the Reggio Emilia Approach. We also conduct an on-going debate on views about music. One such fundamental question, for instance, asks 'when do sounds become music?' This discussion also offers a basis for observing children's learning processes.

LEARNING AS A CREATIVE PROCESS

We consider learning a creative process in which the individual who is learning guides the learning process, and where learning occurs on the basis of interactive knowledge building, co-construction. This contrasts with the model in which learning is seen as being transferred from adults to children, where the initiative and choice of teaching material primarily lies with the adults. Because the setting and context within which children grow up is continually changing, children growing up in today's world build a different kind of knowledge and need to find solutions different from those of the adults who teach them. The job of adults is to encourage children to explore their initiative, curiosity and creativity from an early age so that these abilities are enhanced rather than lost.

WORKING AS A TEAM

In the toeval gezocht projects, the children are always guided by a team. This means that the class teacher plays an important role in the music lessons. In Jong geleerd… the team consists of a music teacher, the class teacher and

an intern/volunteer. The staff of toeval gezocht coach and guide the team members. Because each team member observes the children's processes from the perspective of his or her particular background and knowledge, there is a wealth of reflections and interpretations. Functioning as a team also presents invaluable training opportunities. Every day, the class teacher learns how the music teacher observes the children, how he or she approaches them, works with them, and vice versa.

You see the children having fun. Even the very quiet ones, the ones who stand out least in the class. They seem to soak everything up. (Marjanne Koopman, class teacher)

INTERNATIONAL CONSULTATIVE GROUP

An international sounding board is involved in the project. Drawing on its specific expertise in music education, the international consultative group offers advice and follows the course of the project. The sounding board group acts as an important stimulus to the music team. The group comprises Dr. Susan Young (Exeter University, England), Nancy Evans (musician and early learning music specialist, England), Prof. Bert van Oers (Vrije Universiteit Amsterdam), Melissa Bremmer (Conservatorium van Amsterdam and Masters in Cultural Education Amsterdam School of the Arts, Amsterdam), Hans van Regenmortel and Sarah Verhulst (both creative music-making specialists, Musica, Belgium), Anja van Keulen (Concertgebouw Amsterdam), Maria Wüst (Masters in Cultural Education Amsterdam School of the Arts, Amsterdam).

2 AIM OF JONG GELEERD…

CREATIVE MUSIC EDUCATION AT SCHOOL

Jong geleerd… is a creative form of music education we developed for early learning (children aged 4 – 6). It takes an in-depth and versatile approach to learning through music, and music development encouraging children to express their thoughts and feelings in music and, most importantly, to enjoy music.
Our mission is for music to become a natural part of their everyday expressive vocabulary. We want children to have opportunities to enjoy all aspects of music, and develop a love for it.

During the last year of Jong geleerd… we are working in three schools in Landsmeer for 6 months, providing lessons lasting at least 1 – 1.5 hours to 5 preschool classes each week. Each class is made up of between 25 and 35 children.

CONNECTING MUSIC AND SCHOOL, HOME AND COMMUNITY

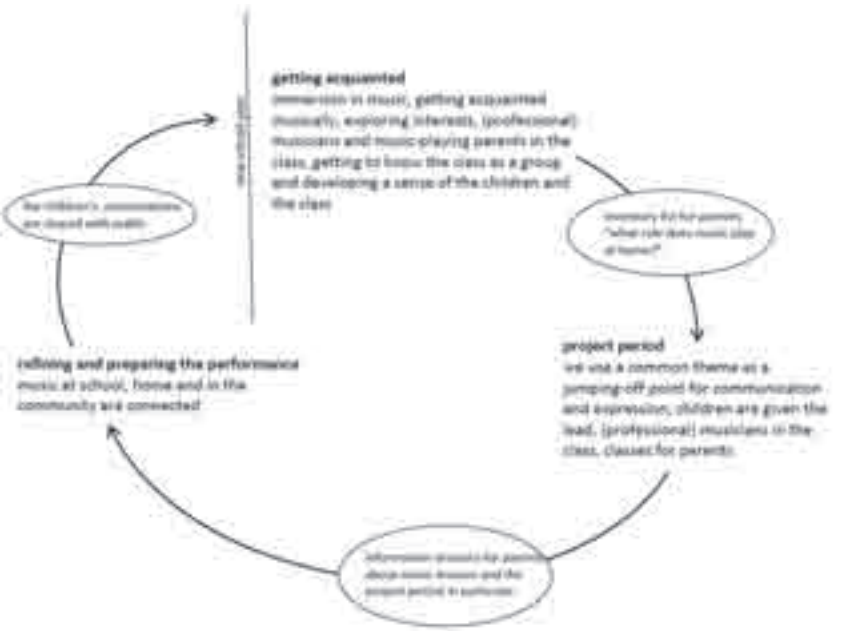
Jong geleerd… centres on an active connection between home, school and the community in Landsmeer. In our last year, we again work with different partners: the three primary schools, music teachers trained by toeval gezocht, volunteers, interns, the Amicitia music association, the Amsterdam Sinfonietta professional strings orchestra, Evert Josemanders (puppeteer, musician, composer), a choir teacher and a variety of music groups from the village.

'Zo klinkt Landsmeer' closing performance 2012

'Coming back' to school in the second year was amazing! From what the children remembered – big things and sometimes tiny details – you can tell that last years' project left a lasting impression. It was amazing to see how many children were having fun and engaged with music quite naturally, with confidence and creativity right from the beginning. (Debby Korfmacher, music teacher)

3 JONG GELEERD... IN PRACTICE

The music sessions are designed to take different forms throughout the school year. We break them down into three different periods that form a logical, alternating sequence. Our intention is not, however, to keep these three periods strictly separate. Depending on the situation and circumstances, each period can be longer, shorter and/or overlap.
The different domains 'singing, playing, listening, moving, composing and improvising, presenting and reflecting and talking' feature quite naturally in each of the three components. The focus lies on musical skill building, centring on personal expression and musical communication. The specific toeval gezocht approach interlinks playing music with other receptive and reflective skills. Throughout the various components, we build links between home, school and the community in a variety of ways.



THE FIRST PERIOD – GETTING ACQUAINTED

Length of music lesson: 1 hour
Throughout a period of: 8 - 10 weeks
Type of lesson: frontal, in collaboration with the class teacher, the music teacher prepares the music lesson, (professional) musicians and parents who play music participate in the class.

The music sessions in the first period focus on immersing the children in music, getting acquainted, exploring interests and telling – and hearing – about the things you know and what you enjoy. The children's input plays an important role. They are encouraged to talk about music, to be imaginative and improvise, bring music from home, sing along with it and dance to it. The emphasis lies on improvised singing and stimulating children's aural powers of imagination.
The children are accompanied by the class teacher and the music teacher. The music teacher and, preferably, the class teacher, present themselves as musician and music-lover.

We have identified a number of building blocks for the music lessons in this component:

SINGING, MOVEMENT
A broad repertoire of (children's) songs, movement to music, experimenting with voice, inviting children to talk about their favourite songs and music.
IMPROVISING
The children are invited to improvise in the moment, based on free-form improvisation. Rhythmical and melodic improvisation, body percussion and group improvisations.
SHARED OPENING (RITUAL)
The lesson starts off with a ritual that is particular to the class, such as singing to each other.
TALKING ABOUT MUSIC, LISTENING AND WATCHING JOINT COMPOSITIONS AND IMPROVISATIONS
In group discussions, we encourage the children to talk and philosophise about music and musical concepts. We also give time and attention to listening to and watching recordings of previous music lessons.
The stage
From day one, the children have a chance to perform 'on stage' like real musicians.
(Professional) musicians visit the class
Professional and amateur musicians regularly take part in the lessons and are actively involved in them.
INSTRUMENTS
We set up a music corner in the classroom. This is a place for children to listen to music, draw music and play music instruments. Like the doll or building corner, the music corner is one of the activities children can choose from each day.

The aim of this period is to create a safe, inspiring and musically rich environment in which music is a part of everyday life. Music as a mother tongue (mother music) that you communicate with and about, and that you develop in interaction with others, just like any other language.

THE SECOND PERIOD – PROJECT PERIOD

Length of music lesson: 1 – 1.5 hours
Throughout a period of: 10 - 12 weeks
Type of lesson: frontal and in groups, children lead their own musical exploration journey. Guided by the whole team (music teacher, class teacher and/or intern), (professional) musicians and parents who play music participate in the class.

This phase of the project explores a theme collectively embraced by the group. It also consists of setting up a special music workshop. The music workshop can take any form – it should reflect the children's interests, and be a place they can identify with. The theme is the basis for musical expression and communication in the group. The children are invited to give voice to their feelings, stories, experiences, opinions, fantasies, hypotheses and opinions about the topic, and express them in music. The children can also make drawings, tell stories or come up with movements about the theme – there is always room for the children's other 'languages'.

This school year, the theme is: How does home sound at school? During the project period, we invite children to explore their home in a musical journey and share it with the class in music lessons. The children can talk about it, are given recording equipment to take home and are encouraged to visit each other and listen. The sounds and music from home act as the binding factor in the group and provide the starting point and inspiration for their musical research, expression and communication. The music teacher selects his material, instruments and interventions to match the content provided by the children. In the music workshops, recordings of how children express their home in sound, drawings, photos and videos, re-enacted situations and recordings of conversations are a visible memory for children and educators, and are used as a basis for in-depth research.

Even in cases in which the theme is pre-determined, we will not be able to predict how this focus will develop in the music lessons.
In this period, we work according to the system of observing, documenting and interpreting. The observed (musical) process, musical concepts, views and ideas of the children direct the development of the project and determine which interventions the team will use to stimulate and guide the children.

To best prepare the team for this, we organise sessions at the start of this project period in which we work with the team to explore what our home sounds like. We also try to make this audible for ourselves by translating it into sounds or rhythms we can share together. Because this theme directly relates to home, we tell the parents about it, and involve them. Organising a parents' evening proved difficult, so instead we send parents a letter outlining our plans, and a series of drop-in information sessions. We also publish reports on the toeval gezocht website so that parents can follow developments in the group.

THE THIRD PERIOD – REFINING AND PREPARING THE PERFORMANCE

Length of music lesson: 1 hour
Throughout a period lasting: 2 - 4 weeks
Type of lesson: frontal, in collaboration with the class teacher and volunteer/ intern, the music teacher prepares the music lesson. Dress rehearsals in concert halls or other spaces that have a central cultural function in the children's environment. (Professional) musicians visit the class.

Every cycle closes with a performance in which the children perform alongside different musical practitioners in the environment. We close with a vibrant music festival - Klankenparade Landsmeer.[2]

This is a way to connect music at school, at home and in the community on a large scale, and takes the form of a festival. Everyone taking part in the project is involved in the festival and, using their own particular skills and potentials, they perform alongside the children. Musical performances are held at different locations throughout Landsmeer – on the street, in schools, in the village hall, in the church, near the river de Gouwe, and in family homes. All participants, and members of the general public, can take a route through the village and visit

2 Landsmeer Festival of Sound

the (living room) concerts and performances. The children perform in their own concerts and are invited to join in with other performances.
We hope that the concluding music festival 'Klankenparade Landsmeer' will illustrate how connections can be forged between music at school and music in the community and in the home.

4 OUTCOMES AND THE FUTURE OF JONG GELEERD…

At the moment of writing this article, the music lessons are in full swing at three different schools. For four of the five groups taking part, this is the second consecutive year. Half of the pre-school children from the previous year have since started the first year of primary school. Despite that, we are amazed to see how concentrated, expressive, engaged and joyous the children are in music lessons. The children regularly talk and share memories about the previous year, which excites and inspires the new children to engage with this creative form of music education. With a natural energy and joy, the children sing for each other, listen to each other and take the time and space to express themselves creatively by playing music.

When the project begins in the second year, the children take more initiative. They take the lead in playing music, are not afraid of making mistakes and play the instruments with verve. They are also more comfortable with singing and improvising than last year. As a teacher, it is exciting to embark on a musical adventure again with the children. I can't wait to see what this school year will bring. (Iris Oltheten, music teacher)

In the first instance, Jong geleerd… was devised for the youngest primary school children. In light of our experiences, these lessons can be used to develop a music education continuity pathway for children aged 4 to 12. This is a step that toeval gezocht intends to work on in future. For instance, in the 'getting acquainted' and 'development' phases, greater emphasis can be placed on the children's acquisition of musical skills and encouraging them to take up an instrument (also as an extra-curricular activity). Our collaboration with the Amicitia music association provides plenty of opportunities for this. For classes of all ages, the project periods in which free expression and communication are

central in the music workshop are at the heart of this working method. Thanks to this, making music together can become integrated into school activities and may eventually lead to the formation of a school orchestra or school choir. We are currently in negotiation with the governing boards of the schools we have regularly consulted, to discuss the form in which Jong geleerd… can be continued once the project is over.

Jong geleerd… argues that music should be a normal part of expression and communication in everyday life at home, at school and in the community, in which children draw on and develop their own music sources and potentials. In addition to inspiring articles about early music learning, toeval gezocht is preparing a publication setting out practical examples and tools, to be released at the end of the project. In addition to this, toeval gezocht is also developing a training and coaching trajectory for schools, training institutes, music teachers and educational institutions.

ZINGZO! AMSTERDAM, A MUSIC LEARNING CONTINUITY PATHWAY

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ABSTRACT

There is an increasing demand for structured music education in schools throughout Amsterdam. At the same time, school boards want class teachers to expand their music teaching skills. In response to this, we developed the programme ZingZo!. It is a long-term vocal learning continuity pathway for all ages of primary school children, with an active role for the music tutor and the class teacher. As of 2013/2014, what began as a project funded by bodies such as the Cultural Participation Fund will become an established part of the activities offered by Muziekschool Amsterdam. ZingZo! Is successful and answers the needs of education and the vision of the municipality of Amsterdam, the principal subsidising body of Muziekschool Amsterdam. The municipality has designated music education one of the spearheads of its cultural policy for the years ahead.
The structure of ZingZo! means that, five times a year, schools implement a complete programme in a block of six weeks. The music tutor visits the class every other week and works with the children and class teacher. In the intervening period, the class teacher works with the pupils. Following this approach, singing becomes an activity the children and class teacher do every day, and music becomes a part of the teaching programme. With an approach founded on awareness and respect, ZingZo! aims to foster (musical) expression, self-development and collaboration with and between primary school children in Amsterdam.
Parallel to developing and implementing ZingZo!, the Vrije Universiteit Amsterdam (Prof Bert van Oers and MSc. Anouk Visee) researched the collaboration between class teachers and specialist music tutors. The results will be publically available as of July 2013. The survey focuses on three Muziek in ieder Kind (FCP) projects: Fluxus Zaandam, the Utrechts Centrum voor de Kunsten and Muziekschool Amsterdam. In the multiple case study the emphasis lies on the interaction between music tutors and class teachers during music lessons for the lower and middle years of primary school.

1 THE THEORY OF DAVID ELLIOTT AND ZINGZO!

ZingZo! integrates theoretical starting points of David Elliott's praxial theory of music education. Action is fundamental to every music activity and ZingZo! encourages children to connect with music through curiosity and exploration. Children are involved in steering the process by creating ownership and, with this, the product as well. Here, relevant questions might be: how should the song be sung? How would we like the song to sound? Who is singing it?
The annual concert / public lesson in which all participating classes of the same level perform ZingZo! at prominent venues in the city fulfils a crucial role in this musical learning continuity pathway. It provides the children with a musical experience they helped to define, together with classmates from numerous social and cultural backgrounds.
Making music is all about people creating something together. In ZingZo! we explicitly attempt to let (musical) expression, self-development and collaboration go hand in hand, on the basis of mutual respect.

2 ZINGZO! ADAPTED TO MEET THE NEEDS OF PUPILS

The school year 2012 /2013 is the second year that ZingZo! has been a part of the schools' programmes. Now, 35 schools are participating, with children aged between 4 and 9. Nine of the 35 schools are also using ZingZo! to teach 9 to 10-year-olds.
At present, we reach roughly 270 classes, or 7,500 pupils in Amsterdam. The schools span the social and economic spectrum, ranging from those in the so-called Amsterdam canal belt with the children of highly educated parents, to a large number of schools in disadvantaged areas with a culturally diverse student population. Every pupil receives the same ZingZo! programme. Given the variety of schools, we ask a great deal of the specialist music tutors, who shape the programme to the needs of the target group.

The ZingZo! lessons that are the basis for the music tutor's instruction provide direction, but offer enough freedom and space for the music tutor to adapt them to different domains and levels. The primary domain is, of course, singing; however the teaching material can also easily be adapted to include

improvisation, composing, playing, movement, etc. Every specialist music teacher tests 'his' children's abilities and potentials in discussion with the class teacher.

Every child receives five blocks of music education a year, each consisting of six lessons. A specialist music tutor gives three 45-minute lessons per module; the class teacher takes the remaining three lessons.

The teaching material for the class teacher is based on the lessons given by the music tutor. Class teachers are not expected to give an entire music lesson. However, we do want them to work with the children for five sessions (five or ten minutes), until the music tutor's next visit. All the activities the class teacher undertakes with the children are prepared by the music tutor.

ZingZo! is based on an ideal: that children experience and see singing as a normal activity for self-expression. That children are able to keep their inborn 'openness' and receptivity to singing as long as possible. That they see music as a good friend! As a friend through whom they can let their feelings show and be heard! A friend that connects them with other friends!

3 THE METHOD IN A NUTSHELL

Creativity and ownership are the key words for the ZingZo! pedagogic approach. Facilitating children, not pumping them with information. Sharing a journey – discovering children's talents and potentialities and what they have to offer. The underlying attitude of the music tutor and class teacher must be based on asking questions and reflecting on the children's talents and skills.

- The method begins with kindergarten children. They are given separate themes each lasting six weeks (one block) that correlate with the themes at school. These are not musical themes, because music is a way of exploring the topic, approaching the theme through song material. Examples of themes are illness, animals, books, traffic, party, going to school and the seasons.
- Starting at age 6, the songs are about learning to read and write. Music supports the class teacher and the children in this difficult process.
- Starting at age 7, ZingZo! begins to focus on music as a goal in itself rather than as a tool used mainly to motivate children and parents, as before. Child-

ren in this year learn to read rhythms and play them on percussion instruments. They learn to play patterns and combine them with singing.

• Children aged 8 to 9 begin to place more emphasis on the emotional side of music. This is why the Amsterdam song has been selected as the main theme. Now, pupils learn to write their own lyrics for the first time. New Amsterdam song writers are also included in ZingZo!, so it doesn't only focus on singing along with old, familiar songs.

• For children aged 9 to 10, the personal nature of this method is the clearest. Every child is given a guitar and taught to play several chords. This aims to help children learn to accompany themselves and each other while singing songs (singer-song-writing). Until the age of 9, the singing component of ZingZo! was primarily geared to singing as a group, but now the emphasis is on the individual and their musical ideas. 'How do you sing the song? How do you want it to sound? Let's hear it!'.

• Children aged between 10 and 11 begin to learn about the history of pop music, which combines what they have been learning since the first year. In pop music, one or more musicians is often responsible for the entire creative process. The performer and composer are one and the same. In ZingZo! children aged 10 to 11 are responsible for what they've made – either individually or in a small group. The children reflect – they write (improvise/compose), test out how it sounds (listen/interpret), perform (sing/play) and reflect on how it turned out.

• In the final year, we add movement and acting to the instruction provided to 10-11-year-olds. In their last year of primary school, the pupils on the ZingZo! programme work towards their final presentation, the musical.

4 THE RELATIONSHIP BETWEEN SPECIALIST MUSIC TUTOR AND CLASS TEACHER

The specialist music tutor is the driving force behind ZingZo!. He/she is responsible for all the lessons and the children's musical development. The class teacher can be seen as his/her indispensable assistant. Together, they work on an equal basis (50/50) on the teaching material. Each educator draws on their own particular sills. The children are the inspiration for the adults but it is they who determine the nature of the musical product. And ultimately, the result is also the

product of the children, with the adults in a facilitative capacity.
An important aspect of ZingZo! is that the specialist music teacher coaches the class teacher during the lessons. The music tutor offers practical examples and tips for using the musical material. These examples – together with the material – are the basis of the lessons the class teacher gives during the blocks.
In the second school year that ZingZo! has been a part of the activities at Amsterdam schools, it's clear that far more children are involved in singing than before. The class teachers involved place more emphasis on music in the class and the participating schools are excited to have structural music education as part of the timetable.
Our evaluations reveal that the class teachers are convinced of the importance of music education, but feel that they lack the necessary skills. This places the implementation of this learning continuity pathway at risk. Subsequently, we conclude that we need to give more attention to teachers' musical self-image beforehand. It is an internal psychological process that fosters the class teacher's self-belief, helps him/her see what they are capable of and be appreciated for their skills. Clear descriptions of competencies are helpful here, along with specific additional training and coaching from the specialist music tutor.

For ZingZo! the following applies: neither the specialist music tutor nor the class tutor can work alone. Collaboration leads to success and offers music education a structural place in the curriculum.

ZINGZO! IN A SUBSEQUENT PHASE

Now that the grant from the Cultural Participation Fund is over, the first phase of the initiative has been completed and the project is entering a new phase.
In terms of content, we intend to adapt all the teaching material developed over the last two and a half years. We will also seek to resolve two aspects that are not well-integrated. One is method-related and concerns the part of the method in which children learn to read music, NootboekZo. The other concerns the way that ZingZo! is structured at Montessori schools, which are organised differently to standard education.
In the school year 2012/2013, Muziekschool Amsterdam reached 35 schools with ZingZo!. We aim to increase that to 50 schools, reaching 20,000 children in 2016.

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