

# MERYC 2009

**4<sup>TH</sup> Conference of the  
European Network of Music  
Educators and Researchers of  
Young Children**

**Abstracts**

22nd-25th July 2009, Bologna - Italy

# MERYC 2009



Edited by

*Anna Rita Addessi  
Laura Ferrari  
Susan Young*



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ALMA MATER STUDIORUM  
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ISME (International Society for the Music Education)

## **Presentation**

The main aim of MERYC is to improve European research and practice with young children and music.

This 4<sup>th</sup> conference, MERYC2009, follows the first meeting at the Danish University of Education, Copenhagen in 2003, the second conference at the University of Exeter, United Kingdom in 2005 and the third at the University of Cyprus in 2007.

Participants at the Conference are educators and researchers representing many European countries including Belgium, Cyprus, Finland, France, Germany, Greece, Iceland, Israel, Italy, Latvia, Netherlands, Norway, Poland, Russia, Spain, Sweden, Switzerland, Turkey, United Kingdom. MERYC2009 aims to promote the participation of researchers and educators from the East European countries, by network relationships and economic support.

Welcome to Bologna and to the MERYC2009!

**WEDNESDAY**

**22 July 2009**



## Session 1

# Interaction and intercultural studies

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### **059. There is no musicality without intentionality. Coming back to the origins of human musicality**

**Michel Imberty**

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#### **The theoretical background**

Important new knowledge in the field of neuropsychology has come to light over the last years, increasing our understanding of the function of regulation of emotion relating to our individual and social behaviour.

**The purpose** (theoretical purpose and application of the biological model)

Emotions seem to have an internal function of regulation of the organism which, when the organism is conscious, produces feelings and representations of positive or negative states. These representations and these emotions depend in part on neuronal structures which allow us to understand the sense and motivation behind other people's actions. The system that lies at the basis of the immediate understanding of other people's actions is that of mirror neurons activity and we may assume that our understanding of other people's emotions works on the same principle. In children, this ability to develop empathy is already substantial and it lies at the heart of non-verbal communication and natural expressivity. This expressivity manifests the intentionality of the action or the intentionality of emotion and it constitutes the general way in which children interact with each other and with their parents. Intentionality requires awareness of the temporal relationship between people who are in the process of interacting and this awareness is always dependent on mirror neurons activity. We can say that intentionality is fundamentally a temporal phenomenon, regulated by inter-subjective communication through mirror neurons, which allows for an affective attunement and constitutes an essential process in the construction of the Inter-subjective interpersonal tie. The ability to adjust oneself to the other can be called "musicality of behaviour" and constitutes a powerful system of emotional regulation of individual and social balance. It is what gives music the bases of its universality as an expression of human subjectivity.

#### **Synthesis of implications for music education**

Educating a child, especially a small child, in the "musical conscience" of oneself, implies developing its own "musicality of behaviour", its cognitive and creative capacities, its ability to be with others in a harmonious and fundamentally sociable way, its well-being for the future and its social and cultural integration.

Keywords: mirror neurons, intentionality, musicality

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## **024. The musical interactions at the nursery: Contents and pedagogical strategies**

**Anna Pileri**

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### **Background**

My PhD concerns the comparative study of musical interactions at the nursery in France and Italy through a multidisciplinary approach based on the following disciplines: the "musicality of the behaviour", a new stream of studies developed in the field of "psychology of music" (Imberty 2000); the study of "social representation of music knowledge" (Adnessi 2007); the "intercultural pedagogy" studies (Genovese 2003); the "competent institution - teaching and context" as relevant aspects of "general didactic" (Manini 2001).

### **Aims**

Identify and describe the use of the voice together with other musical behaviour aspects in connection with the possible interactions between adults and children. Analyse in which way these interactions are connected to education practices, institutional context, music knowledge, personal musical backgrounds and cultural/intercultural experiences of children, parents and nursery staff. The research is aimed also to identify contents and strategies to promote musicality in an important educative context as the nursery.

### **Methodology**

The survey is based on a dual research approach, experimental and research-action, whose samples are as follows: eight nurseries of which 4 identified as control groups and 4 as experimental groups (in that case the staff and families are involved actively by the research). Four nurseries are situated in France and four in Italy. All in multicultural neighbourhoods. The following tools are used for investigation: descriptive observations in situation, check-list to detect the categories of "musical behaviour" of children and adults, interviews, meetings and a submission of an open questionnaire to parents and nursery staff.

### **Results**

The analysis of data show interesting correlations between musicality, musical interactions, music education and social representation of music knowledge at one side, and at the other side the "musical history" of each person, professional roles, music training, professional training, social-cultural context, cultural belonging, educative styles, intercultural experiences and the organisation of the nursery.

### **Conclusion**

The investigation puts in evidence that musical interactions and musical behaviour are not only identified during the specific music activities, but they

appear even more intense during moments dedicated to the care and in free activities during which it was possible to observe also intercultural interactions.

Topics Area: music education, musical behaviour, intercultural music education, socio-cultural studies

Keywords: musicality, interactions, nursery

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## **056. Me and you, me with you: Observation of vocal interaction among very young partners**

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**Anna Rita Addressi**

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### **Background**

The wide field of the music development is characterized by a large number of researches on the analyses of musical elements inside the child/mother interactions especially at home. By the other side the psychology analyzes the development of language and of the social skills observing the interaction among peers, especially in laboratory. Other recent studies point out the presence of a shared "language" among children, characterized by babbling, vocalization, and lallation of different intonation and length. Thus it is interesting understand the role of the voice inside the groups of five infants interacting peer-to-peer in a naturalistic setting as the nursery school.

### **Aims**

The general aim of this observative protocol is to observe and describe the use and the musical elements (like intensity and pitch), of the voice during the interactions among peers in two nursery schools, without the presence of adult.

### **Method**

The observations were carried out in two nursery schools of Bologna (Italy) with 15 young children of 14 month-old. Children were divided in three groups. Each group was observed one time a week for four weeks.

Children were observed during free play in a room familiar to them. To warrant the well-being of children a reference caregiver was invited to take part at all the session. All the session were video and audio recorded, and also a daily diary was compiled by the observer present in the room.

### **Results**

All data collected were analyzed describing the different vocal gestures of children: lallation, babbling, glissato, proto-singing and proto-words, and their "music" elements: intensity, pitch and rhythm. On the base of the data it was possible hypothesized a correlation between the use of the voice and the

number of partners involved in interactions. Furthermore important conducts like listening, imitation and the respect of turn taking are observed.

### **Conclusion**

Our results underline the richness and the variety of the vocal gestures of very young children, when they are free to move in the room and to interact each-other. The data underline that the naturalistic setting, as the nursery school, allows to observe "micro" relations inside the groups.

Topics Area: music and language

Keywords: vocalizations, interactions among peers, observation

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## **076. Time to play: Developing interculturally sensitive approaches to music in children's centres serving predominantly Muslim communities**

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**Alison Street**

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Across Europe populations are moving and diversity is now the norm, particularly in urban centres. Newly and recently arrived communities tend to settle in the same areas, creating zones within cities characterised by a predominance of certain ethnic and religious groups. Music practitioners need to be able to develop intercultural competences to be able to work in diverse communities. In England, the growing Muslim population presents particular challenges to educational integration in music, arts and creative activity because religious mores may result in some constraints around certain forms of activity which are otherwise common-place in early years educational practice.

### **Aims**

The Time to Play Project aims to arrive at understandings and sets of competences for working with communities of mothers and their young children who are predominantly Muslim. It has placed four practitioners in 4 different urban areas to work in creative arts activities and music and, through processes of action research, is exploring the dilemmas, challenges and possibilities this work presents.

### **Main Contribution**

The project has raised a number of different issues on different levels from policy to practice. It will discuss the processes of acculturation for newly and recently arrived families and first/second generation families, and the challenges these pose to developing creative arts and music work with the families.

It will discuss the issue of secularism inherent in UK educational policy in contrast to the way religion permeates all aspects of life for many of the Muslim families. It will discuss beliefs and priorities in relation to music for their children among the mothers and present some practical approaches explored by the project. It will discuss the experiences of the practitioners in developing intercultural skills; in particular the insecurities the project has generated.

### **Implications**

As European Muslims become a more established and integrated group within societies, so approaches in music education need to evolve. Earlier ideas of "multi-culturalism" in curricula need to be replaced with more sensitive and profound ways of working constructed around notions of inter-culturalism, cognisant of post-colonialist ways of thinking and the avoidance of "othering" these imply.

Topics Area: developing interculturally sensitive approaches to music making with mothers and young children in communities of predominantly Muslim faith.

Keywords: intercultural, Muslim, music with parents

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## **Session 2**

### **Creativity and Performance**

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#### **011. "This is my concert!". Characteristics of musical pieces initiated and performed by four-to six-year-old children in an early childhood setting**

##### **Claudia Gluschankof**

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Musical expressions of children ages 4–6 have already been identified (e.g. Moog, 1968/1976), described (e.g. Pillsbury Foundation Studies, 1978), analysed (e.g. Cohen, 1980; Glover, 2000) and even categorized (e.g. Swanwick & Tillman, 1986).

Such musical expressions are mainly those self-initiated during free play periods in early childhood settings (e.g. Gluschankof, 2005), and compositions "commissioned" by the music teacher (e.g. Barret, 1998). Musical pieces initiated and entirely created by young children and performed as a "concert" piece in front of some kind of audience, while little reported and studied, were treated in a preliminary study by this author (Gluschankof, 2002). The present paper aims to deepen the understanding of compositions of this kind, by describing and analysing them from various perspectives.

During an eight-year period, a "concert" was performed at the end of almost every music class taught by a music specialist (the author) in G.M., a kindergarten in a non-urban area of Israel.

In this concert, the children performed musical pieces they had prepared during free play periods in the music area, with all their classmates and several of the adult staff as their audience. These pieces were video recorded if requested by their creators/performers. The resulting collection of recordings includes instrumental, instrumental/movement, and vocal/instrumental compositions. These are described according to number of performers, musical instruments and other props, playing techniques, postures, gestures, movements, and, when relevant, musical transcriptions. They were then analysed for types of compositions, and commonalities and differences among them. Characteristics common to the pieces are: a rich variety of timbres, not only for the prevalent use of several instruments in a piece but also for diverse timbres played on an instrument; variability and repetition of ideas and motifs; and additive structures with a distinct ending formula vs. open, i.e. not knowing when and how to end. These characteristics are similar to those reported previously (Gluschankof, 2005). Among these common characteristics, specific ones were identified in particular children, each of whom employed them in several of their pieces. These characteristics included: the length of the piece, choice of the instrument, playing technique, and dynamics. These features were also identified by the audience of the performers' peers, whose engaged and articulate responses, both spontaneous and elicited, are characteristic of an educated and critical public.

Topics Area: music and creativity, music development, improvisation

Keywords: early childhood, musical characteristics, creativity

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## **016. The Suzuki method**

Music is a magnifying glass for viewing the world

### **Ann Stupay**

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### **Elio Galvagno\*, Fiorenza Rosi\* ,Virginia Ceri\***

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The **Suzuki method** (also called Talent Education, mother-tongue method, or Suzuki movement) is an educational philosophy which strives to create "high ability" and beautiful character in its students through a nurturing environment. Its primary vehicle for achieving this is music education on a specific instrument (often violin or piano, but see below for a more complete list). The "nurture" involved in the movement is modelled on a concept of early childhood education that focuses on factors which Shinichi Suzuki observed in native language acquisition, such as immersion, encouragement, small steps, and an unforced timetable for learning material based on each person's developmental readiness to imitate examples, internalize principles, and contribute novel ideas. The term "Suzuki method" is also sometimes used to refer solely to the Suzuki repertoire of sheet music books and/or audio

recordings which have been published as part of its music education method. Although Suzuki was a violinist, the method he founded is not a "school of violin playing" (like the French or the Russian school of playing) whose students are always easily identified by the certain set of techniques they use to play the violin. However, some of the technical concepts Suzuki taught his own students, such as the development of "tonalization", were so essential to his way of teaching that they have been carried over into the entire method. Other non-instrument specific techniques are used to implement the basic elements of the philosophy in each discipline.

- **Tonalization** is a term coined by Suzuki, and is deliberately similar to the word "vocalization" (as it is used by singers when they talk about warming up their voices). Tonalization is defined as the student's ability to produce and recognize a beautiful, ringing tone quality on their instrument. While initially developed for violin education, the tonalization technique has been applied to other instruments such as the piano. Suzuki believed that a student must learn tonalization in order to properly reproduce and perform music (Lavie, Karen, New Zealand Suzuki Journal, 2005). Outside the Suzuki method, the term used is "tone production", and is part of Western music education stretching back to its beginning.
- Using **sound recordings** is another technique common to all the musical instruments taught in the Suzuki method. Records, tapes, and CDs are used to help students learn notes, phrasing, dynamics, rhythm, and beautiful tone quality by ear. Suzuki pointed out that great artists (such as Mozart) were surrounded with excellent performances from birth, and that the advent of recording technology made this aspect of their environment possible to achieve for large numbers of "ordinary" people whose parents were not themselves great musicians & music teachers like Mozart's father was. So-called "traditional" music educators have used this technique since the earliest days of recording technology; the difference in the Suzuki method is the scale on which Suzuki systematically insisted on daily listening in the home, from before birth if possible, and his focus on using recordings of beginner's repertoire alongside recordings of advanced repertoire.
- "Adult" sized **instruments are adapted** to meet the demands of a small child's body in various ways. This lowers the age at which people are developmentally ready to begin studying an instrument. Scaled down instrument sizes are used for children studying stringed instruments. Curved head joint flutes with displaced keys which are closer together than normal flute keys & holes are also available making it possible for children as young as 3 years old to study the flute through the Suzuki method. Height adjustable chairs, benches, and footrests are used for piano, guitar, cello, and string bass.
- **Suzuki Institutes** were established to encourage a musical community, train teachers, and provide a place where master teachers' ideas can easily be spread to the whole community of Suzuki students, teachers, & parents. These short term music festivals began in Matsumoto, Japan, where teachers & students came to learn from Suzuki himself. In the US,

they often last for a week or two and include daily master classes; repertoire (group) classes; teacher training courses; concerts; discussion sessions; seminars; and various “enrichment” classes in different musical styles, instruments, or non-musical (usually arts, crafts, or dancing) activities. As at any music festival, participants must pay registration and tuition fees to the institute they are attending. Each national Suzuki association handles registration for teacher training, and policies differ from country to country.

- A **common repertoire** for all students of an instrument was established. This body of music allows each student to participate in group classes, helps to foster local and international musical community and camaraderie, and provides motivation for students to learn new music while keeping the “old” pieces they have learned in top form. This is in direct contrast to music education outside of the method, in which teachers tailor the repertoire to the current need and level of the individual student.

Topics Area: music and education

Keywords: playing as speaking (suonare come parlare)

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### **031. Arts education in Cyprus: Developing artistic activities in early childhood**

#### **Nopi Telemachou**

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#### **Andri Savva**

University of Cyprus, Cyprus

#### **Background**

This presentation introduces a 5 month training program at the University of Cyprus intended for in-service early childhood teachers in order to enhance the quality of their arts (music and visual art) education practices. This research program was designed as a form of teacher professional development and reflective practice. Specifically, it draws attention on a broad theoretical framework of arts education emphasizing learners’ (children and teachers) prior experiences, interests and motivation in order to deepen and develop their learning. The significance in studying how teachers implement artistic programs and young children’s artistic learning in specific socio-cultural contexts is highlighted in the present study.

#### **Aim**

The aims were: a) to introduce to in-service teachers ways of developing artistic activities in the context of their *chorotopos* (personal environment), b) to study children’s experiences through creating and viewing.



**Method**

The sample included two in-service teachers and thirty five children drawn from two classrooms into different early childhood settings. Data were collected through interviews, photographic and video material and childhood teachers' reflective diaries.

**Results**

The findings indicate that: 1) Children's engagement in artistic activities through creating (composing, making) and viewing enabled them a) to experience their *chorotopos* b) to understand the potential expressiveness of materials. 2) Teachers developed integrated and interactive artistic activities. Their role was decisive in providing special "scaffolding" to further the exploratory process in an interactive environment of learning.

**Conclusions**

This program illustrates the extent to which professional development opportunities can be used to provide a forum for teachers to examine their existing modes of operation. It could be argued that changes adopted within an activity system, teachers are more readily articulated to practice than those externally imposed to them by theoretical literature. In this way, issues usually associated with the gap between theory and practice may be avoided and theory utilized as a genuine driver of change.

Topics Area: music creativity

Keywords: in-service training, artistic activities, reflective practice

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### 03. Teaching creativity music for children

**Ernesto Ardita**

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**Theoretical background and content**

It is understood the music as a language that is capable of transmitting information. She, like the language reflects a form of organization of thought and communication becomes only when the sender and receiver have the same code.

If that happens between teacher and student, usually the first one takes the role of sender and the receiver of the second.

For example: when conducting a theme song, students who perform the recognition of sounds by association, the children are passive recipients. When doing the chanson and expressions, students develop coordination and motor receptors are active recipients.

It is proposed to develop musical creativity of the students who become issuers capable of transmitting a message through the creation of songs.

- a) The participants: 10 or 12 ready children whit 10 or 11 years old who do not know how to read music
- b) Kind of school : primary school

**Aims of the project**

The aims is the cornerstone around which you set all activities: 1 creativity of movement, 2 creativity of rhythm, 3 invention of a text, 4 invention of a song. When create a new song with music and words with rhythmic accompaniment and dance.

**Method or pedagogical approach**

The methodology of work is based of a group work and mainly in the implementation of appropriate interventions graduated and the possibilities of school children in applying the principles of educational Bruner: manipulative phase, phase iconic, abstract and symbolic step in the use of structured material for symbolization (Dienes blocks, Terminal strips Cousenier and others) and musical notation.

**Conclusions**

When the children create a new song with music and words with rhythmic accompaniment and dance.

**The outcomes**

To achieve this purpose it is necessary for teachers to acquire a code and a simple and effective teaching strategy that takes into account primarily the needs of the students: play, manipulate, discover rules. We see music as a language, and then you can establish links with other disciplines such as Italian, foreign language and mathematics.

**Conclusions and implications for future work**

The training for the implementation of music, have the dual purpose is to train teachers and practitioners, both the students through a process based on creativity.

Topics Area: teacher training, music and creativity

Keywords: creativity, activities, children

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## Session 3

### Music and other arts

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#### **04. Exploring the relationship between musical activities and emotional alphabetization in educational (non scholastic) contexts**

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This study presents a participatory action research, focused on the relationship between development of musical intelligence (EM) and emotional intelligence (EI). The study has involved, for a period of 8 months, 14 children (females) aged from 6 to 7 participating to weekly collective music lessons in a public (non scholastic) educative institution. This institution hosts children and adolescents either in a semi-residential way (only in the afternoon), or in a residential way. In the last case, people having special socio-educative needs, may be present. Through the analysis of children behaviour, confirmed by a SEDS Test (Social Emotional Dimension Scale Test), some problems concerning EI aspects (i.e. self-awareness, self-management, social awareness and relationship management) have been found in the group.

An educational musical project has been carried out where every sonorous activity has been also devoted to overcome the emotional and affective problem being present. The musical competence, particularly focused on symbolic-affective significance of musical language, was transferred, in a implicit and explicit way, into a larger non-verbal communication trough specific music games. Supported by an explicit verbal sharing of musical, emotional and affective behaviours, the activities allowed to overcome the above mentioned problems, leading to improved emotional and social competences. These positive results were found upon direct participant observation during the musical activities. Furthermore, by a questionnaire submitted to educators habitually working with the group, other positive results have been achieved in terms of improved children emotional competence and in particular during every activities done in the same day of music lessons. Conversely, any improved emotional competence during other artistic activities (e.g. drama) was not observed.

The reasons of this difference are discussed. By means of a semi-structured interview, the children's feedback to their parents about their involvement in music lessons, has been also analyzed. A large number of them describe musical lessons in enthusiastic way, focusing the attention more in the affective atmosphere than in the specific sonorous activities.

Then, the relationship between some specific musical activities and the correlated emotional educational outputs has been analyzed in detail with the aim to transfer also the educative project in a scholastic context.

Topics Area: music and education, emotion in childhood music

Keywords: emotional alphabetization, musical communication, special socio-educative needs

## **032. Sign, sound and image: Non-verbal languages in children's communication**

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### **Theoretical background and content**

The project involves pedagogues, educators, children and their parents in Kindergarten. Starting from *baby-sign*, the project goes on to include the non-verbal languages of music, image and body. Music is a privileged *means* to transfer meaningful linguistic constructs relating to children existential, mental and affective sphere, and it's the goal of a formative process towards the acquisition of specific musical competences. The project is under the patronage of the Freie Universität Bozen (professor Liliana Dozza).

### **Age and characteristics of participants**

Educators, pedagogues, music teaching expert. Four groups (8 to 12 children): 0-3 years, 4 Kindergarten in Laives January-May 2009

### **Aims of the project**

- To promote the acquirement of communicative competences and abilities which strengthen the learning of language
- To contribute elements from the fields of music and multi-linguistic communication to the formation of teachers

### **Method or pedagogical approach**

- collaborative learning
- group work
- adult led

### **The activities**

Development of learning modules by the team of educators and pedagogues; "Field experimentation" (educators, pedagogues, children and parents together); monthly evaluation of activities.

1. *Exposition* of children to music, with educators, parents and a music teaching expert;
2. Practice of "singing without words" applied to children songs and to short pieces of classical instrumental music, to support children's first attempts of communication by means of musical and linguistic vocalizations;
3. Use of *baby-sign* according to lyrics, to visual reproductions of concrete objects in the text, to musical instrument which plays the music, in order to test and accomplish the transfer of the Italian and German languages. Music

carries out a role of connection and support in each phase of educational training and eventually assume an autonomous formative function.

4 (from 18 months). Music listening through the use of body promotes communication and acquirement of specific musical and relational competences.

#### **The outcomes**

- Acquirement of specific linguistic-communicative competences in children by means of *baby-sign* and musical listening;
- acquirement of specific musical competences and abilities;
- professional training of educators (musical listening and multi-linguistic communication);
- creation of data-base.

Topics Area: music and language, listening, music and movement

Keywords: baby-sign, listening, language

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## **084. Laboratory movement, rhythm, affectivity through Biodanza method**

### **Francesca Minigher**

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### **Simona Serina**

Town hall of Bologna, Italy

#### **Content and theoretical background**

My work is based on the application of Biodanza method, a group activity that through music, movement and meeting one another develops everyone's potential. Its author, the psychologist and anthropologist Rolando Toro, has formulated a range of movements matched to specific music pieces, according to a theoretical method, which scientific background is in the following:

- as for movement : Lapierre-Aucouturier (1983), Laban (1999)
- as for music : Imberty (1986), Fraise (1996)
- as for educational psychological aspects: Dewey, Spitz (1972), Dilthey, Damasio (1995).

#### **General aims of this method**

- experiencing oneself and one's ways of communicating through non-verbal languages;
- integrating one's own different aspects, getting integrated with people and with the environment.

#### **Specific aims in projects with children**

- getting the group integrated (many kinds of differences);
- improving of the two children 's disabilities (first group);
- active listening to music;
- experiencing affective education through movement.

Participants' age and characteristics: two courses (8 classes each from February to April '08) at "B.Ciari" and " S.D.Savio" Bologna Kindergartens, for five/six-aged children; first group: 16 children from different courses; second group: 12 children from the same course.

**Method**

Group and individual learning

Activities: moving to the beat of the music (walking, jumping...)/coordination dancing in pairs, in group/rhythmic dancing and rhythm changes/ creative games/ dancing the nature elements/ relaxing moments/ proposals of sensitive listening/ affective touch/ voice expression games.

**Results**

Both projects reached their own goals since the group socialized, so did the worse integrated children; a schoolgirl with motility problems and another one with language disease made sensible progresses. Moreover, the children showed a deepening perception of rhythm matched to coordinating abilities, a better ability of recognizing musical pieces, a growing creativeness in living music throughout the body.

**Conclusions**

This method proves to be useful in integrating groups, disabled, disease, differences in general and gives further suggestions for the school work and for the daily relational approach with children as for their creative potential and their educational and affective needs.

Topics Area: music and movement

Keywords: music, movement, emotions

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## **087. Developing concepts of style sensitivity in young children**

### **Nigel Marshall**

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### **Kagari Shibazaki**

Centre for International Research in Creativity and Learning, Roehampton University, United Kingdom

### **Anna Rita Addressi**

Faculty of Education, University of Bologna, Italy

It is almost 30 years since the first pioneering study into the development of sensitivity to musical styles was carried out and the ensuing years have seen only a very limited number of further studies carried out in this interesting and informative area. This limited number of initial studies were carried out almost exclusively on older participants, typically ranging in age from 6 to 19 years old with the findings from these studies suggesting that even the youngest children were already able, by the age of six, to demonstrate an above average ability in recognizing and matching musical styles.

This research paper will present a number of provisional findings from an ongoing study into the way in which young children develop concepts of musical style. The study had two main aims. Firstly to develop and pilot a suitable instrument of measurement which would enabled the development of sensitivity to musical styles in very young children to be explored more fully than had taken place in earlier studies. The second aim was to try to identify if any hierarchy existed amongst the various levels of evidence upon which young children based their decisions around musical styles.

The challenge of investigating this musical development in early years has proved to be something of a challenge because test procedures have relied heavily on the use of language and the demand for levels of concentration, attention and memory span that are beyond most preschooler children. This study reports on the development and piloting of a new procedure which attempts to overcome these problems, and the initial results suggest that many preschool children not only seem to be very able in distinguishing between different musical styles but incorporate a wide range of listening skills and techniques in order to make these musical decisions.

Topics Area: musical development

Keywords: music in early years, musical development, listening studies

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**THURSDAY**  
**23 July 2009**



## Invited keynote

**Ian Cross**

Centre for Music & Science

Faculty of Music - University of Cambridge, Cambridge, United Kingdom

[www.mus.cam.ac.uk/~cross](http://www.mus.cam.ac.uk/~cross)

### **Music, development and communication**

From a conventional contemporary western perspective, music appears to be a commodity that is produced and consumed with the primary purpose of entertainment. Against this conventional view, we find many instances of music in western contexts as an active and interactive behaviour, one that is significant and meaningful well beyond any entertainment value that it might possess. The 'music' that we find in all known societies generally takes this active, interactive and individually and socially meaning-rich form, and we can think of this interactive and meaningful musicality as a capacity of all humans. This universal music, however, harbours some contradictions.

Music tends to possess a multiplicity of meanings in all cultures; unlike language, music's meanings seem unfixed and open. At the same time, music has consistent and universal efficacy in inducing emotion; music *seems* to 'mean what it sounds like'. Music, across cultures, also foundationally involves entrainment, the sense that individuals interacting in – or even just listening to – music are experiencing their actions and feelings within a common temporal framework. Music thus seems to be a universal endowment of all humans, but to possess inherent contradictions; it allows participants the freedom to interpret meanings and significances differently, while at the same time appearing to 'mean what it sounds like' and engaging participants in a commonly experienced temporal framework.

Music is not useful as a means of exchanging information, but appears to be an excellent medium for allowing individuals to interact non-conflictually. In other words, music appears to be an optimal medium for managing situations of social uncertainty, and it is in just such types of situation that we find music manifesting itself in all cultures of which we have knowledge. This hypothesis suggests that the capacity for musicality is as 'natural' as is the capacity for language, and this paper will propose that to learn to be able to interact in music is as important as it is to learn to interact in language.

## WORKSHOP 1

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### The colour of dance

#### Marina Maffioli

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Movement comes to life in space, develops in time, and each of its actions necessitate a certain amount of energy and strength.

How this energy is used represents an important aspect of the variation of movement. A movement would be dull, not very interesting, if it wasn't for these variations within it. The variations in the application of energy to a movement give colour to it, providing multiple dynamics. A movement can utilize a maximum of energy, or a minimum. The former will be defined as strong, the latter as light. An energetic applause, an intense stamping of feet against the floor, are good examples of the first kind; a silent walk on tiptoe, two hands coming closer together without clapping, are examples of the second kind of movements. Through personal and group practice of a number of activities, such as exploration, guided improvisation, and composition, based on methodologies belonging to creative learning, we will experiment with exercises that can be reproduced in school or, in general, in various educational contexts with children 6 to 8 years of age.

Practicing the many qualities of movement such as strength and delicacy, heaviness and lightness, can teach one how to perform the same movement in contrasting fashions. Discovering slowly the body's potential: experiment with certain verbs that indicate still actions, such as pushing, pulling, stretching, twisting, and other verbs that indicate movement, such as jumping, walking, turning, falling, and practicing all of them using different shades of energy.

We will be utilizing stimuli (images and objects) external to the language of music and movement, which can prove useful in exploring further the theme, putting it in practice once again but in a new fashion. We will experience the continuum between movement, listening, the use of voice, and observation, starting with each one's abilities without any pre-requisite.

The workshop: a place for action and learning by doing; a venue of interdisciplinary knowledge, creative and inventive. Skills that can be acquired: doing, knowing how to do, cooperating, planning, verifying, and researching, all learned through an experimental approach. The balance in approaching a methodology combining movement and music is often delicate; possibility of relation: alternating the use of music and that of silence, inspiring movement with a strongly contrasted music, knowing how to adapt dancing to the character of music, how to create a relation between voice and movement, knowing how to inhabit silence. Music theatre in Primary schools; working with professional artists in schools; community & education work and the practice of

professional musicians. Conclusions: offers pointers to retaining, or regaining, the innocence, confidence and freedom to experiment and extemporise from early years through to later educational phases and adulthood, and into professional performance practice.

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## WORKSHOP 2

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### **Musical communication in early childhood**

#### **Fiorella Cappelli**

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This intervention is proposing the simulation of a musical game for early childhood and is aimed at educators and musicians working in different situations: with children and parents, in nursery schools, and in social and healthcare facilities.

By involving the participants operationally, they will carry out a process of observation concerning the motor, emotional and cognitive development of the child captured in spontaneous communication in a variety of forms with the adults and educators. This approach includes naturalistic observation and in-the-field investigation (by video camera) to clarify the professional, artistic and pedagogic commitment of the musician educator. This proposal is envisaged as substantially different from any other form of entertainment and teaching of music: it has the aim of constructing, through music, a privileged communication between the child world and the adult world.

#### **Theoretical background and contents**

The theoretical basis lies in the primary model of mother-child musical communication (D. Stern et al.), whose specific patterns of instinctively and spontaneity are applied, by extension, to the process of socialisation in the different contexts: with peers, parents, educators in play schools and educational and healthcare facilities. It examines the progressive adjustment of the child in the micro system he belongs to (ecological theory of human development by U. Bronfenbrenner with regard to molar activities, interpersonal relationships and roles). The musical game (psycho-anthropological theories) is used as a test for detecting the temperament and the emotional characteristics of the child (L. Barone et al.) and as an indicator that can highlight those cognitive outposts that allow him to understand his expectations and other people's intentions (theory of the mind).

#### **Method**

This intervention uses the method of naturalistic observation by involving the participants in the playing activity, and then focusing on the role of the musician educator as a cultural mediator in the different operating contexts, through collective reflection. The methodological reflection stems from the

direct experience and touches on psychological aspects that concern the dynamics between subjectivity and the group, pedagogical elements like the use of the game of invention and the structured game, as well as other factors of professional mediation such as expressive spontaneity and performing ability in musical communication.

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## WORKSHOP 3

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### **Musica in culla (Cradle Music)**

Workshop with Paola Anselmi designed for children from 0 to 36 months

#### **Paola Anselmi**

Scuola Popolare di Musica Donna Olimpia, Roma, Italy

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Music is learned living it physically and emotionally, thus it contributes to our development as individuals through experiences that involve all that music is about: voice, play, movement, body, listening... Very young children are the essence of emotion and physicality which is their primary channel of communication. In the early years, music, therefore, fits naturally, between the stimuli and the used languages, in a process of acquiring various expressive capabilities for the personal self. During this workshop, practical experiences will be used that will make us understand how children encounter the language of music early in life, and how they relate to this; from these common experiences some of the key points that form the basis of our work with the children will be extracted.

Many ideas for activities will be provided for use with children in different group situations (with or without parents) in: schools or similar structures (Kindergarten and playschool) or in different areas (Schools of Music, Counselling, Health Centres).

Activities will be divided and executed in 4 different areas:

#### **Receptive**

Experience on four listening channels: auditory / body (direct) / body (indirect) (use of "filter" objects)/ visual.

Experience on four parameters of expressiveness: neutral syllables / breath / body involvement / quality of sound (timbre, volume ...).

Variety and complexity of musical stimuli.

Music without words.

#### **Active**

Activities built on the movements loved by children.

Use of manipulated objects.

Make Believe contexts (Settings of the musical activities).

Exploration of movement elements related to space and weight.

**Inter-active**

Development of musical activities related to child's ability to imitate.

Dialogue activities – "incomplete" proposals.

Included use of onomatopoeia in melodies and rhythmic sequences.

Use of puppets.

**Expressive**

Music between sound and silence.

Creative space: fill in with voice, with the body, with small instruments.

Free movement and structured movement.

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## POSTER

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### **09. Number concept and rhythmic response in early childhood**

**Laura Habegger**

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#### **Background**

Observing children when playing percussion rhythmic echoes it was seen that they repeat in an accurate mode just up to a number of sounds that increase depending on children's age and music experience. Probably this number has a direct correlation not only with children's motor development stage but with the development of numeracy (1), that include working memory capacity and conservation ability (2). Moreover, we need to consider if it can be done an analogy among the children's ability to enumerate homogeneous and heterogeneous sets of objects (3) and their capacity to perceive and repeat rhythm patterns, that could be composed both by similar and/or different sounds considering their single duration and intensity (accent), even if produced by the same instrument.

#### **Aim**

The aim of this study is to explore the possible correlation between the rhythmic response and the development of number concept in children from two to four year-old.

#### **Method**

Three groups, composed by 10 children two, three and four year-old respectively (N=30), were tested using a traditional battery for early numeracy and motor development assessment and on their capacity for imitate rhythm pattern series specially designed for this research. All testing sessions were video-recorded with the parents and children consent.

#### **Results and Conclusions**

As expected, it was seen a correlation between number concept, motor development and rhythm patterns performing accuracy.

Implications for music education strategies and materials are also discussed.

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Topics Area: music development, music and education  
Keywords: rhythm development, numeracy, motor development

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## **021. Musical movement representation in early childhood music education**

**José Retra**

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### **Background**

In the research literature children are gradually transforming from passive learners to intentional humans who are with body and mind actively taking part in the construction of their own musical knowledge and skills.

The extended surroundings of different aspects that influence the music making of young children, uncover the need for a new epistemology in early childhood music research: the embodied view.

### **Aims**

Music is Movement. This study aims to understand the role of movement in the musical learning process of children aged 18 to 36 months and hopes to contribute to theory development in order to support practitioners in early childhood music education. The investigation attempts to take an embodied view in order to establish movement responses of young children to a musical stimulus as an important form of kinaesthetic representation through which children come to understand and memorise different aspects of music.

### **Method**

Departing from an interpretative paradigm, in a naturalistic setting - regular early childhood music courses - the movement responses of the children during specific musical activities were captured on DVD. These activities have their origin in a preliminary study in which activity conditions, movement types and movement functions were found. The analysis consisted out of an extensive coding process of the movement behaviour of 25 children in relation to the music educational aims of the activities and the reflection on it through interviews with the principal participating teacher in the study.

### **Results**

The final results of the study will be presented. The six main themes will be discussed: movement; tempo; objects; information construction; teacher influence; kinaesthetic representation and the internal and external research methodology that emerged from the process.

### **Conclusions**

As this research project is in its final stages at the moment, conclusions will be presented at the time of the conference.

Topics Area: music and movement  
Keywords: education, movement, representation

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## **023. Accordage: Voice, sounds, rhythms, gestures, and music which cradles birth and growth**

**Anna Pileri**

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Project of training and research at the centre for families "Più Insieme" in the City of Bologna.

### **Theoretical background and content**

The study approach that characterizes this experimental project, finds its major scientific reference in a new stream of studies, matured within the ambiance of the Psychology of Music, born recently as: *Musicality of the Behaviour* (2000 M. Imberty, D. Stern). This approach, which defines the relationship between the individual and the music, sees the beginning of the child's musicality coinciding with the foetal life. This "ancient link" with the music brings us to interact spontaneously with the "sound universe" and in particular with the mother voice that is recognized and distinguished from other voices immediately after birth.

The experiences gained from the foetal life should be expanded and enriched through early musical education which can help to consolidate and develop the acquisitions of the first years of life.

Here the reasons for this project that included 6 meetings of 2 hours each and involved 2 pregnant mothers (4 and 5 months), 1 father, 7 mothers with their children from 20 days till 3 years old, 2 educators and 1 assistant.

The meetings contained different activities characterized by interplay of repetition and variation as breathing exercises; free vocal improvisation on a harmonic interval (for example a perfect 5th ) played and repeated on the piano; free vocal improvisation on a jazz blues (music minus one: piano, bass, drums without soloist); children songs (and other repertory) proposed by educators and parents to the children; body movements interpreting different styles of music; graphic memory of the experiences; final conversation.

### **Aims**

Activate awareness that can guide families and educators on how to "attunement" with children through the voice in relation with gestures, movements, ecc. We analysed and stimulated the musicality of these aspects in order to have a positive result on the child's development, on the relationship between adults and children, among children and even among adults.

### **Methodology**

The "musical history" of each person is the starting point of the project that outlines both cultural and intercultural aspects. It requires each participant's direct involvement with his or her musicality that in a relation context can be played by reciprocal imitation, reinvented through different interpretation/



improvisation of sounds, songs, music, rhythms, gestures and movements, (re)discovering the joy and magic of the childhood.

### **Results**

Meeting after meeting, the adults, gained awareness of their personal musicality. Children and adults learned to have confidence and to “tune up” their musicality to others choosing their own way and time to express through the weaving of different (musical) languages.

### **Conclusion**

As observation showed, adults became more sure in their musical expression which resulted in a richer interaction with their children who became more attent to musical stimulations (also at home). Other meetings are planned with the same group that will include also the newborn children.

Topics Area: music education, development of the music, music intercultural education

Keywords: musicality, expressivity, interaction

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## **026. Musical interaction between adult/child aged 0-3 during the change of diaper routines at the day-care centre**

### **Lorna Edith Volpi**

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### **Anna Rita Addressi**

Faculty of Education, University of Bologna, Italy

### **Lucia Di Bari**

University of Bologna, Nursery Education Degree, Italy

### **Theoretical background**

This poster deals with the observation of the vocal interaction during the change of diaper routines at the day-care centre/nursery. This observation is part of an action-research project about the musical dimension of the daily routines with under four children. Throughout routines the child learns rhythms and times that allows him to revise and fix sequences of actions (Bruner 1983, Emiliani 2004, Fogel 1993, Sansavini 2003). At the same time other authors have underline the importance of repetition during the musical interaction between mother and infant (Imberty, 2008, Trevarthen 2008).

The questions that arise are as follows: How do the interactions between the nurse and the child during the change of diaper at the nursery? Which are children’s musical conducts during the daily change of the diaper? Which the adult’s ones? What are the constants and the variants between the routines at the nursery and at home? In order to analyse this interaction we used the concept of “conduct” by Janet (1938), also elaborated in the musical field by Delalande (1993).

**Aims**

To study the musical "conducts" of children during the daily changing of the diaper routines at the nursery. The first step of our study deals with the analyse of the interpersonal communication nurse/infant based on the Relational Coding System by Fogel.

**Method**

The change of diaper has been video recorded in 2 Italian nurseries, once per day, over a 15 days period, always at the same time. The children were five males, (6, 7, 8, 9 and 10 month old); three females (6, 8, and 9 month old). The nurse is the same in every nursery. The videos were analysed by observational grid, check-lists and microanalysis of video fragments.

**Results**

The data analysed so far show that the "asymmetrical" communication (frequent vocalization of the nurse) is predominant. We can notice here a relevant differences between the change of diaper at the nursery or at home, as observed in the previously study: in the first one there is a frequent verbalization by the nurse, whereas in the second one it was observed a "symmetrical" communication between parent and child. Data are still under analysis; poster will show the complete results, with photos and graphics.

**Conclusion**

The data show that the musical interaction nurse/infant have a positive valence in the daily life of the child and that the changing of diaper could play an important part in the musical development of child. The mechanism of repetition/variation stimulates the vocalisation of child but if the adult is able to listen to the vocal production of the child and reply them in appropriate style.

Topics Area: music development, socio-cultural development

Keywords: music daily routines

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## **039. Moving with the music: The "Rio Abierto System" at the nursery and in the kindergarten of Bologna, Italy**

**Patrizia Naldi**

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**Background**

The theoretical background of this approach finds its base in the "Rio Abierto System" (founded in 1950 by Maria Adela Palcos – Argentine) that aims on psycho-physical integration (mind, emotion and body) through specific strategies based on psycho-motric expression with the music. It is a System dedicated to the theme of music in human development (psychological, spiritual) connected to the expressivity of the body. This approach resulted from an harmonic combination of elements referred to the "Rio Abierto System" together with original inputs.

**Aims**

This is one of the first application of the "Rio Abierto System in education with children aged from 2 to 6 years, along with their parents and teachers.

The project is implemented with the following purposes:

- harmonious development
- release the body to free the mind
- express and share the emotions
- involve teachers and educators through music and movement
- stimulate the creativity

**Method**

We start from the body. Its expression through music and movement, and the changes on the physical level will be the most striking part of a complex transformation that will also involve mental and emotional aspects.

This approach includes movement, music, massage and relax.

**Finding**

The project conducted in different nurseries and kindergartens of Bologna reveal real need to express emotions. The results of this work demonstrates how children develop more communicative skills using different expressive languages. Furthermore, the opportunity to move with different styles of music and channelling emotions seems to have a positive effect on giving peace to children and adults involved.

**Conclusion**

The key aspect of these projects is the specific use of music which gives children and involved adults the opportunity to express and share emotions, and also gives a deeper contact with themselves and others.

Topics Area: music and movement

Keywords: music, emotions, movement

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**041. Is music a relevant tool in deaf children's auditory education?****Françoise Rochette**

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**Emmanuel Bigand**

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**Background**

In the field of auditory training in deaf children, the tasks, the duration of training and the stimuli to use are fundamental. As auditory perception involves 4 processes (identification and discrimination constituting the basic levels, auditory scene analysis and auditory memory the higher levels) (McAdams & Bigand, 1994), we have worked out a weekly auditory training composed of these 4 tasks X 4 types of stimuli (experiment 1) in a progressive

programme in the aim to assess a transfer of learning to untrained linguistic tasks (20 sessions). In our second experiment, we used 4 tasks x music.

Participants: four profound and two severe children participated to our two experiences (mean age = 9 years)

Materials: platform "sounds in hand" linked to a computer.

Procedure: comparison within-group before training (T1) – after training (T2) – after 6 months without training. After second experiment (T4) of performances in trained tasks, in a phonetic discrimination test, in the Fo-mean values and speech rate.

### **Results**

Children demonstrate an enhancement of their auditory skills after training but a positive effect on untrained tasks, as in a phonetic discrimination task, in the monitoring of their voice (Fo-mean and Fo-range) and in the speech-rate

### **Conclusion**

The use of various auditory stimuli is not more relevant than music in deaf children's auditory education. Furthermore, music is perceived as pleasant and maintains motivation. This material allows better auditory performances in trained tasks but also possibilities of transfer of learning to linguistic abilities.

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Topics Area: music and language

Keywords: deaf children, auditory education, music

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## Special guest

### **Luigi Berlinguer**

Member of the European Parliament

President of Italian Committee for Practical Learning of Music in the school – Ministry of Education, University and Research

**An educational revolution - Fare musica tutti**

Chair: **Marcello Limina**

General Director-Regional Ministry of Education

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## SYMPOSIUM 1

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### **The development of reflective communities of practice in early childhood music-making**

Organiser: **Alison Street**  
Discussant: **Susan Young**

By 2010 the Government aims to have established 3,500 Children's Centres in England. They offer services to families with children under five. This has led to many practitioners working and learning from each other in inter-professional teams.

This symposium aims to explore the nature of the role and skills of the early years music specialist working in changing contexts and with a range of professionals. The papers will draw attention to the challenges involved; the need for professional development when working in multi-agency teams, or where routine caring has to be balanced with encouraging young children's expressive musicality; in planning for continuity of projects and in seeking relevant approaches for families with young children.

In Paper 1 Jessica Pitt will explore a number of models for co-working and co-learning in which the role of the music specialist as 'expert' is challenged, and where emphasis is placed on mutual engagement, joint enterprise and the development of shared repertoire in a multi-agency approach.

In Paper 2, Margareta Burrell will reflect on aspects of music making with young children, with an emphasis on the potential for movement to enhance self-expression and emotional development. With reference to the framework of music therapy sessions, she aims to illustrate the importance of raising awareness among setting staff and trainees of the process of supporting children's responses to musical activities.

In Paper 3 Karen Mackenzie aims to evaluate a project in which two music specialists work weekly with generalist Early Years Practitioners in nine nurseries over the course of one year. Emphasis is placed particularly on developing singing in the nursery throughout the day and on planning for the potential growth in expertise of practitioners to ensure continuity.

In Paper 4, Alison Street will discuss the issues involved in working closely with parents in supporting their babies' musical responses. Evidence will be taken from a project in urban settings in the UK, where six professional musicians have developed approaches with Children's Centre staff, towards engaging with parents in developing conversations about their babies' musical competencies.

## **054. The place of music in developing communities of practice among children's centre professionals**

**Jessica Pitt**

Kirkley Children's Centre, United Kingdom

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By 2010 there will be 3,500 Children's Centres in England: one for every community.

The "one-stop" shop approach to services offered by these Centres to families with children under five has led to many professionals working and learning together in inter-professional teams. Musical activities successfully bring families into these Centres and early childhood music is often seen as useful for the wellbeing and equipping of parents and children in ways of interacting that are fun and shared. Early secure attachment can be fostered and encouraged through these activities. The co-working of health, social work and community practitioners brings together a wealth of knowledge, skills and diverse worldviews. This can challenge notions of "lay" and "expert" knowledge [Breachin and Siddell 2000 in Rixon 2008:222].

This paper will explore a number of learning models: Wenger's concept of "communities of practice" [1998] where mutual engagement, joint enterprise and a shared repertoire are key dimensions to multi-agency group working and Engeström's "Activity" Theory [2001] focusing on conflict and collisions of new and old ideas to generate new learning, and the social pedagogical approach where the arts are seen as integral media for relating with children.

The transfer of musical skills such as listening, turn-taking, non-verbal responses, expressions of emotion and mood, eye contact and co-operation may be useful means not only for encouraging interactions amongst families but also in creating new ideas for team cohesion and expression.

Professionals working in early childhood are taking part in inter-professional training courses and music in early childhood is often included in such professional development. Musicians are finding innovative and accessible means to transfer useful skills to a range of professionals, however there may be questions about accreditation of learning and the "quality control" of such training. How is excellence measured and against whose criteria? Conflicting worldviews at the heart of Children's Centres can influence the focus of training offered, e.g., health models seem to prefer the scientific approach and social work models the social-constructionist paradigm.

Topics Area: music and education

Keywords: music, inter-professional, learning

## **063. How can we encourage emotional intelligence through music making?**

**Margareta Burrell**

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This presentation will try to highlight the possibilities of using music towards the emotional development of the young child. It will discuss the importance of raising awareness among staff and trainees when making music with children to carefully consider and handle this powerful medium. Self-expression through music and movement is spontaneous, personal and very telling; it requires care, empathy and thoughtfulness. The role of the parent, educator, or in this context, music leader needs to be highlighted and given credit for.

This presentation tries to raise awareness that the way we model respectful communication and playful interactions- especially in music making-, can have a positive and preventative influence, which can go well beyond musical, cognitive, physical and aesthetic development, but towards emotional and spiritual intelligence. Colwyn Trevarthen says "the evidence from early infancy suggests that emotion shapes reason". Daniel Stern calls "the relational emotions" - which are specifically adapted to the real-time regulation of the balance of initiatives and reactions between persons, determine the relationship of affectionate attachment, trust and companionship and defend against abuse, mistrust and disregard-are fundamental to the ecology of emerging human consciousness (Trevarthen 2002).

Music therapy supports this process by providing a safe and supportive structure, with stated, clear boundaries of confidentiality and respect.

There is a commitment of the therapist to an ongoing relationship through music making through whatever the process will evoke and bring up.

The client is free to respond in his/her own way. The music therapist is committed to support that response within the framework of the music therapy sessions. This presentation will give practitioners a chance to reflect upon music making practice with children through that looking glass.

Topics Area: emotion in early childhood music, music

Keywords: emotion, music therapy, interaction

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## **062. Encouraging singing through the nursery day: How musicians collaborate with early years practitioners**

**Karen Mackenzie**

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A description of an ongoing project funded by Youth Music in which two music specialists visit nine Sure Start nurseries in Kent once a week over an academic year to lead music making with special emphasis on singing as a form of expression. In each setting two Early Years Practitioners (EYP) volunteer to be the regular assistants at these sessions and to perpetuate singing as a natural activity throughout the nursery day.

The project arose from a previous design which took place in the same nurseries in 2007.

The current project addresses the challenges of training EYPs to work musically with children and attempts to overcome the difficulties in sustaining regular training that were encountered in the original plan.

These difficulties have been identified as: understanding the working relationship between music specialist and EYP; relating the formal circle time for music making to the free flow sessions; identifying staff who will carry the training forward for themselves and with their colleagues; raising awareness in nursery managers of the effect of music making, especially singing, on the children; appreciating the importance of releasing staff to attend training and giving practical support to the staff in developing their skills and confidence.

In addition the project attempts to create opportunities in time and place for EYPs to work together regularly in order to increase their understanding of musical development in relation to the Early Years curriculum and to recognise their role in relation to the music specialist.

This report evaluates the training programme designed for the current project and highlights the areas that have succeeded in increasing music making activities in nursery settings.

It explores the notion that two members of staff training in partnership might support each other's development and, even though investment in their training requires a high level of time and cover, the result is a stronger team of practitioners in the work place.

One objective of the design is to create a base of EYPs who, as a result of regular attendance at elementary training, elect to proceed to a higher level of musical activity and leadership.

Topics Area: music and education

Keywords: training, singing, nursery

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## **047. The development of a shared rationale for using music with parents and their babies**

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In England the expansion of the Government's Sure Start Children's Centre programme has led to investment in provision of services for families with children under five years. A key aim of the programme is to lift young children out of poverty by 2010 and to ensure ready access to health, care and education.

This paper will track the development of "Musical Babies", a project run over 6 months in 12 Children's Centres in a central city location, involving 6 professional musicians working alongside generalist Early Years Practitioners (EYPs) to deliver musical activities for parents and their babies under two.

In order to benefit from this provision each centre has to assign at least one practitioner to work with the musician, to attend 3 reflection meetings and to collaborate through reviews and plans of each session.

The aims of the project are to provide opportunities for musical play, to use music to enjoy time together, and to work *with* parents/carers rather than do *to* them.

These aims are reviewed regularly and act as important points of reference for all over the period of the project. Analysis of issues emerging from joint reflection days exposes not only the strengths and weaknesses of the collaborative process, but also the challenges involved in developing a shared rationale in which parents are potentially engaged in talk about the value of music for their child's development. If the relationship between parent/carer and the child is at the heart of the musical learning process, the role of the visiting musicians is potentially complex as they juggle with the expectations and levels of experience not only of their practitioner colleagues but also of the parents and babies they endeavour to support.

Implications are drawn about aspects of continuity in professional development, about matters of time and space allowed for music in these contexts and about engagement with parents concerning the nature and relevance of musical play with their babies.

Topics Area: music and education

Keywords: musicians, parents, reflections

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## Session 4

### Listening

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#### **017. Infants and babies as the audience of philharmonic concerts**

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##### **Adriana Kortas**

Pomeranian Philharmonic, Poland

Since May 2008 the Pomeranian Philharmonic in Bydgoszcz – one of the leading ones in Poland – has been organizing philharmonic concerts for infants, babies and their parents. The idea and program of these concerts took inspiration from Zoltan Kodály's concept of music education and from Howard Gardner's theory of multiple intelligences. In both these approaches music is conceived as a kind of specific language which should be learned as early as possible. Zoltán Kodály emphasizes that the music for children should represent the highest artistic qualities. The quality of the child's first contact with music depends on the extent of their parent's musicality and their musical skills. Most of the parents and even the certified caretakers don't feel properly prepared to sensibly and competently guide the musical development of children. However, according to the theory of music development, every period of human life offers new chances for music development.

Becoming parents gives us one of them. The purpose of the concerts is to stimulate the music development of both children and their parents.

The concerts are organized once a month on Sundays. There are separate concerts for infants and for 2-3 years old babies. The program of the concerts is prepared by the Philharmonic team of music presenters specializing in concerts for children. The performers are musicians of the Philharmonic. Concerts take place in a specially arranged hall, furnished with coloured carpeting and pillows to sit on. Although the concerts stir up enormous interest, a concert cannot be attended by more than 50 children.

The music program is prepared with special emphasis on the artistic quality.

At every concert a different set of musical instruments is presented. Besides listening to the music, common singing and learning of a song are taken into account. Parents are also provided with suggestions and materials for making music at home. The current project was given a pilot status. The behaviour of the children and parents and their reactions to particular pieces of music are carefully observed. Further concerts are planned as well as the recording of a CD with the most willingly listened pieces and the songs for the young and older children.

Topics Area: exploring music and sounds, music and education  
Keywords: concerts for babies

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## **025. From the onomatopoeias to musical form: Resources of circularity of listening and performance**

**Paolo Somigli**

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The paper describes a project developed in Degree Courses for Nursery and Primary School Teachers in Italian University. It aims to introduce children of the first years of Italian Primary School to music, both in terms of listening and performance; thus it is founded on the continuity and the circularity of listening and performance. Listening and musical production are the two necessary components of music education, and must be seen in their relationship, not as independent factors (see the proceedings of the conference *La musica tra conoscere e fare: [www.saggiatoremusicale.it](http://www.saggiatoremusicale.it)*). During 20<sup>th</sup> Century, music education emphasized primarily musical performance. More recently, many scholars have rediscovered the value of listening in music education and its aspect of activity. This article aims to show the importance of a kind of music education which develops harmoniously both listening and performance.

Its theoretical and methodological background is the model of music education of SagGEM (Group for research on music education of “Il Saggiatore musicale”), the didactics of listening proposed by Giuseppina La Face on the basis of the studies of Maurizio Della Casa and Irène Deliège, the didactics of production and the idea of music laboratory suggested by Orff-Schulwerk’s principles and by recent studies (especially by Cosimo Caforio and Carla Cuomo on the basis of the pedagogical studies and researches by Franco Frabboni, Liliana Dozza and other contemporary scholars). T

he work starts with activities based on onomatopoeias and develops through the listening of music by Mozart, Saint-Saëns, Schumann, and experiences of music production, arriving to the comprehension of musical form and of the relationship between musical structures and meaning both in listening and production. Music listening provides important means and models for communicating with music. Production helps to strengthen these means and models and offers the possibility for a more careful listening, while a more careful listening allows a more careful production in a relationship of virtuous circularity.

Topics Area: teaching/learning performance, didactics of listening  
Keywords: listening, making music

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## **028. Verbal language, music and didactics of listening**

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Verbal language is an essential instrument in building knowledge and cognition. In describing with accuracy and pertinence different musical processes, we have to organize with particular attention speeches and discourses that 'build' and 'consolidate' the knowledge. This paper reports a didactic experience in listening with little groups of children (7-8 years old); the experience is based on some operatic arias (for example from *Il Maestro di cappella* by Domenico Cimarosa and others operas). Starting from the common language, used to describe sensory and emotional experiences (*bright, sweet, cheerful, melancholy*) children are guided in building a verbal speech more and more specialized and directed towards the musical comprehension. Speeches primarily uses concepts, adjectives and circumlocutions related to different spheres (rhetoric, literary, psychological); then it becomes more specialized, technical and connotative at the same time, pertaining to the musical structure, instrumentation, and other musical characteristics of composition.

Topics Area: music and language

Keywords: music, language, verbalization

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## **082. Listening to biotic sounds: A pilot study**

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### **Introduction**

Intrinsic musicality implies that both biotic and abiotic sounds should be emotionally appreciated in terms of the potential (positive or negative) value of the specific resource or environmental situation in which our ancestors experienced them (Lenti Boero & Bottoni 2008).

In present study we report pilot results of biotic sounds listening.

**Methods**

Two sound kits (K1 and K2), each including:

- a) early infant cry;
- b) early infant babbling at 8 months;
- c) adult mammalian vocalisation (elephant/or gibbon);
- d) a singing birds (canary/or chaffinch);
- e) two vocal musical excerpt (*Speaking in tongues* by S.Chandra/or

*Rosensfole* by A.B.Garnas, J.Garbarek) were uploaded on a Ipod mounted on IRhythms loudspeaker. Sounds were in .wav format and lasted from 56 to 80 sec. Listening took place during public FSE initiative "Night of research", aiming at sensitising the public toward basic research in Aosta Valley. Seventy-four subjects of both sex (K1=51; K2=23), aged from 10 to 63 years, freely participated in this pilot study, and individually compiled a four questions questionnaire relating to sound description, timbre, aesthetic quality and felt emotions during listening. Questionnaire was specifically prepared by two professional musicians.

**Results and Conclusions**

Judgements on early infant cries confirmed previous findings of sound aversiveness (Lenti Boero et al. 2008), on the contrary, early infant vocalisations were much more attractive, and animal sounds with clear melodic contours (song birds and gibbons) were highly appreciated. Results are discussed in term of the intrinsic characteristics of the sounds, and within an evolutionary psychology interpretative frame.

**Acknowledgements**

This study was supported by grants from MIUR in 1995, 2001/03, 2005/07; from the Pierfranco and Luisa Mariani Foundation in 1999/2000 and 2002/04, by local funds from University Valle d'Aosta from 2005 to present, and by an FSE grant to M. Filippa.

Topics Area: exploring music and sound

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## Session 5

### Teacher's knowledge and training

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#### **06. Study on professional concern level of the early childhood teacher candidates studying musical teaching in Turkey**

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#### **Background**

Some worrisome multi dimensional and complex problems come out in the youth that is the freshest human power and the most productive source of the society. Increase of the anxiety causes person not to know what to do about his future. The most important factor negatively affecting individual's success in professional music education is "unemployment anxiety".

For them graduation from a university means the beginning of a life of either employment or unemployment. Job selection, plans about the role in real life, friendships, fear of unemployment and other responsibilities are some of the factors creating anxiety.

#### **Aims**

The objective of this study is to discover professional concerns of the early childhood teacher candidates studying in music teaching departments. In the study, the answers are sought for the following questions: do the professional concerns of the teacher candidate vary depending on their "gender, income level of their families, whether they decided to study musical teaching on their own intend and their grades".

#### **Method**

This research is a descriptive study made for the purpose of determining the "concern levels" of early childhood music teacher candidates.

The data of the research were collected in two stages: "Personal Information Form" for students and "Concern scale for teacher candidates" (Fuller, 1974; Rogan, Borich and Taylor, 1992). "Concern scale for teacher candidates" consists of three chapters, egocentric, job-centric and student-centric concerns. Working group of the study consists of 80 early childhood music teacher candidates studying in Marmara University Faculty of Education.

#### **Results**

According to the study, statistically meaningful variances exist between the variables such as "gender", "grade" and "income level of the family" and professional concern levels.

## Conclusions

It can be suggested that the early childhood music teacher candidates' anxieties about the job should be evaluated with different variables like "attitude developed towards the field" besides the variables within this study. Moreover, similar studies can be carried out in other occupational areas. Thus, effect of anxiety on education process can be evaluated within cause-result relation in a more sound way. In the light of these results, for psychological support, units and experts needed for any kind of anxiety in every phase of music education should be made more active.

Topics Area: music and education, music psychology

Keywords: musical teaching, professional concern, candidate teacher for music teaching

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## 015. An early learning TaTaMus - Model in young adult's learning environment

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This research's (Nykänen 2008) main idea was to bring early learning in to young adults learning environment with the help of TaTaMus -model.

The theoretical backgrounds are David Kolb's (1984) and Howard Gardner's (1983) theories. I built a synthesis between Kolb and Gardner where also TaTaMus-model's main ideas occurred: experience, creativity and holistic way of learning. The research-strategy was action research. The strategy supported the theoretical background and also the main ideas of TaTaMus-model.

The participants of this research were 20-25 years old practical nurse-students in Vocational College of Omnia. Omnia offers vocational training to young people who have completed comprehensive school or have passed the matriculation examination. TaTaMus-model was used in two different vocational core study modules: Learning to learn (1cr) and Occupational interaction (2cr) 2/January - 12/February 2007.

The creative model gave possibilities to handle different subjects in a new creative way combining the cognitive and affective learning in teaching.

I collected the material with four inquires (n=15-18 each) and I also used my own diary. The aim of this research was to see if this model I created in Early Childhood Music Teaching and also have used with various age-groups, would also worked among young adult's normal teaching. I also wanted to focus on early learning and its possibilities in both teaching and learning. TaTaMus-model consists of three elements: the story, the dance and the music.

Each element has its own purpose in learning process: story helps in interaction, dance in holistic approach and music in learning.

The TaTaMus-model's generation-process is: telling a story, creating the impression, creating the presentation, the presentation.

This model is proceeding in these four stages from story towards the presentation. TaTaMus-model benefits are possibilities developing teaching through creative subjects, giving the students an active role in learning process and it also helps in motivation.

The outcomes in this research were that TaTaMus-model worked out fine in normal learning environment: it brought joy in learning, enthusiasm and positive collaboration between students. The students were asking: "where do the creative elements vanish from school after elementary school?".

The latest brain research (Ischinger 2007) say that creative subjects should be widely used in school. Many teachers know the fact but they don't know how to do it. TaTaMus-model showed the possibilities of early learning in practise. In my future research I would like to find out more about its affects in learning and also its possibilities in different learners and Community Music.

Topics Area: music and education, music in everyday life, teaching/learning

Keywords: early learning, creativity, interaction

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## **019. The younger, the better: Teachers' ideas on piano teaching in the early age**

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**Anna Rita Addessi**

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### **Background**

This work is based on a previous research project developed by the University of Bologna [Addessi 2004, Addessi 2005, Addessi, Carugati, Santarcangelo 2006, Addessi 2007, Addessi, Carugati, Selleri 2007] the aim of which was to study teachers' musical competence [Olsson 1997a, 2002]. The topic was approached on the basis of a socio-cognitive theory, known as the *theory of social representations* [Moscovici 1981]. The fundamental hypothesis is that the teachers' main attitudes to "music" and "musical training" are influenced by their personal underlying and implicit competence and that the latter works as a 'social value' which might influence the practice of musical education, their professional identity, as well as their approach to learning how to teach music. With the same background we studied teachers' ideas on piano teaching in the early age.

### **Aims**

The aim of this project is to apply the theory of Social Representations to understand what teachers think about a good basic approach to the piano, in particular for children in the preschool age.

There are several problems: first of all to identify useful steps to organize the acquisition of contents and skills in a funny and enjoyable way.



**Method**

We contact piano teachers from Music Academies and private music schools. Teachers with different musical backgrounds were selected in order to compare a wide variety of perspectives. We handed out a questionnaire.

Each topic included open and closed answers. Firstly, the answers were classified into different categories. Next, we studied the various conceptions about what teachers thought the gradual acquiring of skills and competence of a child should consist of.

**Results and Conclusion**

In particular it emerges the relevance of having a piano teacher that knows how to communicate effectively with children and the importance of the method. It is considered fundamental basic ear training and rhythmic education. Without these two preliminary steps, you'll find that children don't learn well and will become frustrated with the instrument.

Topics Area: teaching, learning, performance

Keywords: piano teaching, music knowledge, social representation

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**090. Creativity in teaching/learning of music in pre-school****Anita Vizina-Nilsena**

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**Introduction**

The Article analyses the situation of pre-school children's in Latvia.

Every culture is based on the traditional culture. Traditional folklore composed for children surrounded the little ones from the very first days of their life, introducing them to outside world, developing their speech, imagination and perception of morals, harmony. Folklore is a music culture which can activate not only a person's highest and most precious feelings- aesthetical, ethical, intellectual but can also encourage all the person's psychic and psycho physiological activity; promote attention, willpower, motoric, logical and emotional memory, form musical, ethical and aesthetical images, too.

The musical creation of children is one of the most productive arts of children's artistic creation, because music is one of the most emotional arts.

Musical activity allows all musical abilities to function, such as the sense of rhythm, ear for music, perception of music...Improvisation and musical games are most accessible shape of children's musical creative work, it totally complies with abilities, that is why it should be started in early childhood and continued at school.

**Aim of the study**

Main goal of this article is to represent results of research on the methods of teaching/learning music with creativity for the pre-school teachers.

**Materials and methods**

In this article creativity is viewed as characteristics of the teacher's and children's personalities. This characteristic has been formed through collaboration of the teacher and pre-school children's.

**Conclusions**

From times immemorial music has been considered an emotionally, intellectually and aesthetically effective form of arts, that has a positive influence on the formation of a child's personality since their birth.

Therefore Latvian folksongs are a real corpora of pedagogical conclusions and a unique means of education that does not restrict a personality but lets him think, judge, conclude and afterwards act according to the nation's wisdom.

Creativity can be developed in pupils only if the teacher is using creative approach to teaching music

Topics Area: music and creativity

Keywords: Latvian music folklore, teaching/learning, creativity, personality

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**FRIDAY**

**24 July 2009**

## Session 6

# Theoretical approaches to early childhood music education

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### **053. How can neuroscience affect the theoretical concept of and practical application to early childhood music education?**

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#### **Background**

Behavioural studies on infants' and young children's musical behaviour in an informal learning environment call for empirical research to prove the observational findings. The explication of neuronal correlates for music learning may confirm some observational findings and can explain the underlying neuronal structures or networks involved in genuine music learning.

The paper summarizes topical knowledge of early childhood music learning based on several neurobiological research studies and a long-term teaching experience with young children. In the given context, the term "learning" will be used in a neurobiological sense as the development of mental representations and the change of synaptic connectivity, but won't refer to the training of practical skills.

#### **Aims**

The paper firstly presents a brief review of the neurobiological research on music learning with a special focus on early learning abilities including a discussion of the actual function of mirror neurons in children's music learning behaviour, and secondly demonstrates the theoretical framework for a link between neuroscientific (neuromusical) research and music teaching and the learning practice including a critical view on the fashionable trend of "neurodidactics" or "brain based learning".

#### **Main Contribution**

Professional music teachers, especially those in early childhood music education, need a profound understanding of the learning process in terms of the development of neuronal structures (what influences change in synaptic transmission) and the formation of cognitive structures and musical abilities (what supports the natural growth and corresponds to the developmental stage). The paper aims to contribute to an advanced teacher education and policy development.

#### **Implications**

An obvious and necessary interaction between neurobiological and pedagogical knowledge calls for many implications in the daily practice of teaching in early childhood music classes.

Consequently, it may also affect the teaching attitudes and behaviours of educators, the more realistic expectations of parents (in view of the highly problematic "Mozart-effect") as well as the challenges regarding the political focus on early education and the function of music in this context.

Topics Area: neurosciences

Keywords: music learning theory; mental representation; genuine music learning; neuro-didactics; mirror neurons

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## **08. Concepts of intrinsic motivation and their relevance for music**

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### **Background**

In teacher training and in kindergarten teacher training the trainees spend a lot of time with learning how to familiarize their pupils with a certain topic.

My personal observation tells me that they tend to adapt these methods also in music lessons. A recent watching let me realise, how a young teacher wanted to introduce a song about weather and sunshine. She brought sunglasses, an umbrella, sun-cream and further accessory and then let children guess what the theme was. It was her believe, that she introduced a song in this way.

The observed teaching model showed a great gap between the pretended introduction and the moment, when the song was sung.

### **Aims**

Persons with long lasting experience in music education know that there are other, more direct ways of starting musical experiences in a children group. The example above is a typical example of a confusion caused by teacher training for subjects such as biology, botanic or geography, maybe even math. Regarding the fact that music has a very direct impact on us we need to consider the current state of the art in motivational psychology and find out more about suitable ways of bringing new musical pieces, new songs, new musical experiences into the lives of children. We even may be able to contribute some crucial inputs on teacher training and knowledge about motivation from the perspective of music education.

### **Main Contribution**

The main contribution consists in a literature review on motivation psychology and discusses the findings in their relationship to and their applicability on music education. A second contribution, rather bound for generalists in kindergarten and ground schools, comprises the possible accesses to learning processes through musical ways.

### **Implications**

For practitioners, the findings are a contribution to an advancement of music pedagogical interventions.

They lead directly to a variety of applications in the practical field. For researchers the paper at hand can help to build bridges into a discipline near to ours, and helps to keep the discourse running between educational science, motivation psychology and music pedagogy.

The presentation also tries to demonstrate the usefulness of an ongoing debate between music pedagogy and its related sciences and enables to reinterpret the role of a music teacher.

Topics Area: pedagogical theories, musical interaction, role of a music teacher, primary motivation

Keywords: primary motivation, related disciplines interaction, role of a music teacher

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## **027. Silence, music, listening: Meanings and implications in the "scientific pedagogy" of Maria Montessori**

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The presentation offers a reflection on the educational role of *silence*, both as an essential *figure* of music (sound derives from silence and it ends in silence) and as an essential condition for listening, concentration and "serious and committed work" carried out by children in Montessori kindergartens.

Order defines a constitutive relation among child, environment and the elements which make it up, as Montessori explains in *The secret of childhood*.

The aim of this analysis, based on observations taken in schools, lies in the demonstration of the fundamental role performed by music and by the Montessori space-environment (through order) in promoting the development of freedom and creativity on one side and the development of listening on the other side.

### **Main contribution**

In other words, thanks to rhythm and music, school can promote the development of the notion of order and capacity of listening (both of the world and the other from self), as well as it is possible to promote silence (which assumes multiple meanings and educational values, as I will illustrate), concentration and development of an inner order (Gallerani, 2007a) thanks to care and organization of the space-environment.

### **Implications**

Silence and order help concentration, rhythm and they are the basis of the capacity of listening and better understanding of oneself and the others (Gallerani, 2007b). Education to listening is strictly connected to what we can call auditory intelligence: the ability to listen or the capacity to remember are the basic components of comprehension, understand music and being able to create it, and of dialogue based on listening between me/you (essential prerequisite of the wider "communicative competence" and an essential "competence for life").

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**036. A dialogical view on language, meaning and music making****Olle Zandén**

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**Background**

There are traits within contemporary discussions on arts education that reveal a monological ontological stance that ought to be challenged. For example, there is often an emphasis on the child's own expressivity and on the right of each child to express it's own, private musical ideas and feelings without being hampered or assessed by teachers or peers. This could be tantamount to saying that dialogue would corrupt the expressive meanings of the autonomous individual and that monologue is the true expression of self. Dialogical theory has roots in various disciplines: Vygotsky, Mead, Trevarthen, Stern, Bakhtin and Linell among others have claimed the generative power of social reciprocity in human interaction. One core idea of dialogical theory is that meaning is always co-constructed by participants in a situated interaction. Not only is meaning making an emotionally informed process, but meaning itself is seen as processual.

**Aim**

The aims of this presentation is to outline a dialogical view on, to use Linell's (in press) title, "language, mind and world" and to discuss what benefits such a view can offer to research and practice in the field of music education and learning.

**Main contribution**

All education is about change, about promoting meaning making processes. Processes are at the heart of dialogical theory. Dialogical meaning theory does not only concern oral, verbal communication. It is also relevant for analysing and researching preverbal- or nonverbal communicative action, interaction and meaning making. Teaching music or making music together are always

multimodal practices that are locally as well as socio-culturally situated and that are or can be replete with emotions and meaning.

A dialogical perspective on music making and teaching could reveal new aspects of musicing and learning and aid in reformulating questions on for example musicality, expression and identity.

### **Implications**

A dialogical view of children's music making could for example focus on participation, interaction, collaboration and musical meaning making. Dialogical theory can of course also be used to analyse teachers' or children's talk *on* music. A dialogically grounded analysis of discourse can shed new light on old conceptions.

Topics Area: dialogical theory of meaning

Keywords: dialogicality, socio-cultural, disc

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## **Session 7**

### **Music, languages, literacy**

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#### **01. Music as basis of teaching and learning in pre-school in a multilingual area in Sweden**

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##### **Background**

My PhD study concerns three pre-schools situated in a multi-ethnic area in Sweden in which all the pre-school children are multilingual. Two of the pre-schools use music as the basis for teaching and learning.

They emphasise that music enables everybody to participate, also at times when their spoken language is not sufficient. In the third pre-school music is not in focus to the same extent.

##### **Aims**

The key aims of this study are:

- to investigate the various functions of music in the daily work of these three pre-schools
- to examine how music is legitimised in the pre-schools' agendas

##### **Methodology**

In the design of the methodological approach, four aspects of "reality" were considered. These aspects are: the *intentional reality*, the *experienced reality*, the *reality observed by the researcher* and the *achievable reality*.



Data was gathered in a three-part data collection which entailed studies of steering documents for the pre-schools, interviews of pre-school teachers and observations of pre-school children and teachers in action. In total ten pre-school teachers and one language teacher were interviewed, all from the pre-schools focused in this study.

Observations were so far carried out during four consecutive days at each of the three pre-schools.

### **Findings**

The possibilities and problems of these three pre-schools activities related to music and language development are highlighted in this research.

The preliminary analysis shows that music is generally considered to function as a way of creating enjoyment and safety among the pre-school groups. There is a firm belief among the pre-school teachers that it is important for children to participate in language-developing activities. Various musical activities are said to widen the children's aspiration and confidence for participation in the language activities.

This finding indicates that music as a means for language development constitutes a basis for safety and enjoyment which in turn affects the development of language skills.

### **Conclusion**

Didactical objectives in which contents, methods and goals are debated are vital for the legitimating of all pedagogical intentions and pursuits. So, can enjoyment as deliberate basis for teaching and learning in music be scientifically acknowledged?

Topics Area: music and language

Keywords: music, language, pre-school

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## **02. Effects of phonological and musical training in phonological awareness and naming speed of preschoolers with different first language**

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**Oswaldo Lorenzo Quiles\*, Roberto Cremades Andreu\***

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### **Background**

There is multiple studies which show that certain phonological processing skills, such as phonological awareness and naming speed or rapid naming, can predict reading acquisition (Anthony, & Francis, 2005; Bowey, McGuigan, & Ruschena, 2005; Savage, Frederickson, Goodwin, Patín, Smith, & Tuersley, 2005).

Also, musical instruction improves the phonological awareness of beginning readers (Gromko, 2005; Standley, 2008), and can be an effective instrument for the learning of a second language (Slevc, & Miyake, 2006).

**Aims**

The aim of this study is to evaluate the effectiveness of two phonological training programmes, one of which included musical activities, on phonological awareness and naming speed related to the child's first language (Spanish vs. Tamazight).

**Method**

The participants in this research were 97 preschoolers (4.5 years old) from Melilla's Autonomous City, Spain. 45 children spoke Spanish as their first language and 52 spoke Tamazight (an orally transmitted dialect spoken in the Rif zone of Morocco). A two-year pre-test/pos-test study with three groups was designed (two intervention group and a control group). Measures of the letter knowledge were taken as well as phonological awareness (rhymes, syllables, and phonemes) and naming speed performance.

**Results**

The results of the pre-tests showed that the three treatment groups were comparable in phonological processing skills (phonological awareness and naming speed) and that the two language groups differed only in knowledge specific to the Spanish language (i.e., letter names, and speed in the use of Spanish labels). Both Spanish and Tamazight speaking children benefited from both phonological training programs as reflected in their improved performance in all phonological awareness tests (rhymes, syllables and phonemes) as compared to children in the control group. In the Naming Speed Task, the results showed significant main effects for test time, group, and language.

In addition, though in general Tamazight speakers were significantly slower in the naming task than were their Spanish counterparts, those who had participated in the training with music were actually faster than their Spanish peers by the end of the treatment.

**Conclusions**

Phonological training with and without music is effective in improving two predictors of reading readiness in young children: phonological awareness and naming speed. It may be concluded that the use of songs and music in educational settings does not interfere with phonological instruction; it actually enhances it, especially in inclusive educational settings.

Topics Area: music and language

Keywords: phonological and musical training, preschoolers, naming speed

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## 083. Development of predictive perception of music in children

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The author of this treatise proposes a theoretical model and a practical method of predictive perception of music and its development in children from two years old and up. Predicting does not mean guessing precisely what signals will appear in the information stream, but is instead probabilistic.

The elements of music speech and their connections are learned in special sequence from less probable to more probable. The more often an element appears in classical and modern music, as well as appropriate styles of folklore, the more probable it is. This idea also has place in linguistics. The program presupposes lessons held weekly or twice a week under the leadership of specially trained teachers.

The program is tested in one-on-one lessons, in groups with 3-8 children, as well as larger groups, in music schools in Germany, Colombia, Lithuania, and Russia, in kindergarten in Germany and Ukraine, and in primary schools in Germany, Ukraine, and Russia.

The paper describes the following forms of work:

- 1) learning probable rhythmic elements and patterns by means of special form of "rhythmic solmization";
- 2) learning probable melodic elements and patterns by means of a special form of sol-fa, including a combination of movable tonic and the fixed do, as well as a special approach to associations between degrees of the relative scale and the 12 colours of the spectrum;
- 3) learning probable harmonic elements and patterns such as triads and seventh chords and meaningful structures by means of special form of sol-fa.

This method is illustrated with graphic examples (music) and video fragments from lessons. As a main result: a subconscious reaction by the children when hearing the described elements of musical speech in the process of listening to classical and modern music and high attention and interest on hearing.

As a side result: it also could be a good basis for those children who will decide to pursue professional music education in adolescence.

Topics Area: perception, music and language, teaching/learning performance, European music heritage

Keywords: predicting, understanding, memorization

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## **088. The sound of the alphabet: Teaching literacy through music. A research project into Italian nursery schools**

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The need to develop new effective teaching strategies to further children's literacy learning has increased with urgency in recent years. In many countries, including Italy, the pre-school curricula have requested that more research should be conducted into implementing new strategies to increase literacy learning opportunities for all students. According to researchers over the past 20 years, phonological awareness has been labelled as one of the best predictors of how well children will read. It has been proved also that music stimulation enhances phonological awareness itself.

The present project wanted to determine whether a more specific music programme, which has been made particularly with teachers in mind (rather than music specialists) might be related to significant gains in the development of young children's phonological awareness.

The research has been carried out in two phases.

In the first phase, an entire nursery group of 5-years-old children were involved. Their activities were based on games with words, rhymes, rhythms and auditory activities; one of them ideated in collaboration with a composer using an ITC support. For five months (February to May 2005) the big group was divided into two smaller ones, each of them composed by 14 children: one the experimental group, the other a control group. A pre-test and a post-test subjected to the children, which included a questionnaire for parents, nursery teachers and a former group of primary school classes, gave quantitative and qualitative data to support the hypothesis that pre-school children who receive five months of music instruction show significant greater gains in development of their phonological awareness compared to children who do not received music instruction. These results are confirmed by the analysis of the questionnaires filled-in by parent and teachers, where it was also found that the children benefited in other ways; these particularly were related to motivation and confidence in reading and writing assignments.

In the second phase, which is still ongoing, a group of 15 voluntary nursery teachers attended a programme with specialised teachers in order to present some examples of music activities to children. A pre-test and a post-test will be submitted to about 200 children. We are looking forward to seeing the results due on May, when our research will come to a close.

Topics Area: child music education and literacy

Keywords: music, literacy, child education

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## Session 8

# Musical experiences

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### 048. The changing role of the visiting musician

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This paper will discuss a model of partnership between a visiting musician and a Children's Centre in Birmingham UK as part of the Musical Moonbeams project funded by Birmingham Early Years Training Team. The Musical Moonbeams project model moves away from purely musician-led sessions that can lead to dependency on the visiting musician to fulfil the music part of the curriculum, a mismatch of pedagogy and the setting's needs not being met. Instead, the model allows the Children's Centre to take co-ownership of the content, pedagogy and day-to-day structure of the project. It also allows for flexibility in the role of the visiting musician. The belief being that such an approach is more likely to engender whole centre involvement and leave a lasting legacy of ongoing quality music activity. In keeping with the action research methodology that underpinned the project, the question initiating the work was *"What strategies would best support the staff at the Children's Centre to develop quality music experiences for children and enable them to better understand children's musicality?"*. The second part of the question was arrived upon with the staff ensuring the research was collaborative and searched for understanding that was contextually relevant and that would result in beneficial change. The paper looks at the structures and strategies put in place at the local level of the Children's Centre and under the project umbrella to achieve a lasting legacy, rather than at pedagogy and activity with the children. Areas to be explored and illustrated with video clips include; pre "activity" planning; the purpose and content of project reflection seminars; the role and actions of the senior management of the setting and the musician; the structure and content of weekly visits and follow-up; strategies for encouraging whole staff involvement; successes, dilemmas and challenges.

The presentation will conclude by proposing that developing music practice in Children's Centres should be a co-constructive process, not just at the level of activity with children, but at all levels, with staff at the Children's Centre and between different Children's Centres and musicians taking part in the project to ensure effectiveness and avoid stagnation in practice.

Topics Area: early years educator training and mentoring, music and education, music and creativity

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## **010. To see the voices in the "MUSI-TAF": A musical-cultural program for young children**

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### **Background**

The "MUSI-TAF" ("MUSI-KIDS"), an educational, musical program for Kindergarten children, was "born" as a result of professional solitude of Hagit Myers, a kindergarten teacher working in an isolated settlement, whose colleagues in the large municipal area of MISGAV (located in northern Israel), also expressed similar feelings. The geographical distance from culture centres created a need to bring artistic experiences to the children. Musical education through "live" concerts enables creative co-operations between local artists, teachers and children. These concerts, therefore, are the highlights of the whole program, as they enable children to experience music directly, to "see the voices". The curriculum is planned for 1,500 participants, aged 3-7.

### **Goals in musical-cultural education**

- concert as a way of living,
- development of creativity and imagination,
- extension of concentration and listening time periods,
- getting familiarized with various musical instruments and music styles.
- learning musical terms,
- developing the child's aesthetic preferences.

### **Goals in social education**

- getting to know individual and cultural self-identity,
- getting to know one's neighbours and their cultural heritage,
- developing social values: openness to different cultures, joint creation,
- empowering kindergarten teachers, personally and professionally,
- parents involvement, connection between communities.

### **Methods**

- preparing children and teachers for the concerts through active learning,
- teachers are mediators for the program's contents,
- inter-disciplinary programs combined with other arts, related to learning materials,
- spiral programs, returning to familiar issues together with exposure to new ones. The end of each "spiral" process, performed four times each year, is the concert: the highlight of the whole experience,
- organic learning program, dynamic, constantly changing according to feedback from children and teachers, and according to their needs, the community, and the reality in which they all co-exist.

### **Evaluation**

- documentation for over 10 years,

- interviews with teachers during MA thesis studies, referring to influences of the program on the children, the parents and the teachers themselves,
- yearly feedback from children and teachers,
- receiving the prestige "Initiative Teacher Award" for exceptional initiation of the program, acknowledged by the whole community.

Topics Area: music and education, music in everyday life, socio-cultural studies, teacher training, music in pre-school education

Keywords: music, live concerts, kindergarten teachers

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## **045. Educacion Musical Infantil. The early childhood Music Education Project of the Barenboim-Said Foundation in Andalucía**

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Since September 2005 the Barenboim-Said Foundation in collaboration with the Ministry of Education Andalusia started the Early Childhood Music Education Project (EMI) in Seville, Spain. The project began in 5 public kindergarten with 575 children aged between 3 to 5. Nowadays the project has been extended to 23 schools in 3 Andalusian cities introducing music education to over 2400 preschool children.

Aim of the project is firstly to "use" music for a humanistic education. It means to consider the children not only as a cognitive intelligence only but rather as a whole in all their aspect of expression: cognitive, emotional, social, kinaesthetic, verbal-linguistic. In fact EMI dos not stress musical training.

Of course children learn to make music but almost as a "collateral" effect.

The goal is to help children express themselves through music.

Secondly the project aims to reach as many children as possible, regardless of their social or economic backgrounds, or any previous exposure to music.

This is the ideologically reason why EMI has been introduced into public kindergarten only and during the normal school daily routine.

The project consists of short music class units of half an hour given to all preschool children from Monday through Thursday during the school year.

The music units are given by music teachers together with the regular class teachers. The music teachers must also participate in regular workshops for early musical education five times a year. These workshops include instructions in the methods such as Dalcroze, Orff etc. as also other subjects like singing for children, music therapy etc. The music teachers in the Seville program include the school curriculum in the children's musical activities, so that educational topics flow seamlessly from lessons with their regular teachers to lessons with the music teachers, and vice versa.

The musical curriculum of all the schools in the program is coordinated among the teachers, who meet every month to discuss the activities and exercises they have done with the children. EMI can be considered as a model for introducing humanistic education through music in any given school structure

Topics Area: music and education

Keywords: early childhood music education, humanistic education, Spain

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## **089. The Dutch project on an orchestral education programme**

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### **Background**

Dutch music education in schools generally is based on under expectation of student's musical development. There are few examples of music education for the preschool that are based on a social constructivist theory. From a social constructivist viewpoint a child is seen as *competent*: learning in and from the complex (musical) world, in interaction with other children and adults, co-constructing (musical) knowledge.

### **Aims**

The objective of this research was to design and execute interventions for music education in the preschool that are based on the image that a child is *competent*, and evaluating the opportunities and challenges of this type of music education.

Methods: In this qualitative evaluation research three categories of interventions were designed, based on a literature study:

1. "content" interventions: confronting children with complex music (in contrast to "school music"), visiting a concert in a concert hall and allowing children to explore various musical roles as composer, improviser, performer etc.;
2. "pedagogy" interventions: learning music through musical interaction, exploring violins in small groups and bringing in professional musicians to work and learn with;
3. "media" interventions: playing on violins (in contrast to instruments made for children).

These interventions were executed by a music teacher and preschool teacher, musicians and a pedagogue in three preschool groups (approx. 20 pupils), half an hour twice a week, over a six month period.



These interventions were evaluated by means of observations and interviews with children, teachers and musicians.

**Results**

It was found that the “content” and “media” interventions offered most opportunities for execution. However, both musicians and music teacher experienced a lack in skills when helping children to explore the roles of improviser and composer. The “pedagogy” interventions appeared most challenging: there was too little time for too many pupils to learn through musical interaction, and the musicians experienced difficulty in guiding the exploration on the violins in small groups.

**Conclusions**

Social constructivist music education is perceived as complex and could only be partially achieved due to lack of skills of the music teacher and musicians as well as the constraints of the particular school environment.

The paper ends with recommendations for future music education.

Topics Area: pedagogical theories

Keywords: social constructivism, preschool music education, intervention study

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## DEMONSTRATION 1

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### **091. Body percussion as a teaching resource on the treatment of dyslalia in Spanish children**

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#### **Background**

The most common and frequent speech defect in Spanish to 6–7 years old children is dyslalia, which means defective pronunciation of certain language phonemes. The aim of this workshop is to present musical activities based on body percussion to practice the articulation of the phoneme /r/ in children with *rotacism*, defective pronunciation of /r/, in the primary education in Spain.

In case of dyslalia, the execution of rhythmic activities and the use of songs improve considerably linguistic deficiencies and psychomotor type since in the treatment of these deficiencies the elaborated songs are worked in a way to reinforce, among other things, the buccofacial mobility or the rhythm and speed of speech, giving special attention to the correct articulation and vocalization of the words that form the above mentioned songs (Moreno, Suárez, & Martínez, 2003; Ygual, & Cervera, 2003; Ygual, Cervera, & Rosso, 2008).

#### **Aims**

The main objective of the activities that appear next is to work on the pronunciation of the phoneme /r/ in those children who present *rotacism* that, as has been said before, is a problem of functional dyslalia that derives from the disability to pronounce the phoneme /r/ correctly.

#### **Specific value and meaning**

The development of musical activities focused on the work of the rhythm and the voice is of great use in the treatment of phonological disorders which are derivatives from functional dyslalia, since it helps children to behave with spontaneity and to increase their degree of motivation, at the same time that it stimulates their creativity.

Moreover, these types of activities serve as a model of didactic-musical material of easy application in this kind of treatment, because of the fact that it is possible to elaborate different songs adapted to the disorders and the specific needs of each child.

Topics Area: music and language

Keywords: dyslalia, body percussion, rotacism

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## DEMONSTRATION 2

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### 068. Feelings and emotions as a basis for teaching and learning in early childhood music education

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#### Background

Some characteristics of a fruitful learning process and a good learning environment that aims to nourish the child's innate artistic capacities:

- the activity is child-centred, encouraging the child's own creative potential (using drama and arts integration, the element of play, improvisation etc. In short: sensibility to the child's own initiatives and ways of processing information and emotions),
- it promotes the art's capacity of evoking feelings, moods and emotions and connects them to learning situations. This helps to create a more meaningful relationship to what has been learnt and the music that has been used,
- it makes use of sensory integration: music is combined with movement as well as visual and tactile elements, but also with earlier experiences, memories and the child's contexts,
- it makes use of the group's potential (ability to learn from others, increased motivation through a social context, interaction as a way of learning...),
- the teacher uses versatile musical examples; "good music" that allows many different viewpoints and levels of enjoyment (children can enjoy the music according to their own abilities and needs),
- the different modes of working are used appropriately and with variation (singing, playing, listening, moving, writing, drawing, composing, improvising, storytelling, discussing...).

#### Aims

The aim of the workshop is to give some practical examples of how to apply the characteristics mentioned above in the teaching process.

#### A short description of the activities

The workshop consists of a creative learning process based on one's own experiences, integrating music, movement, visual elements and stories.

#### Implications & specific value and meaning.

The workshop gives ideas and experiences that can be used in different arts education settings with children as well as further education of teachers and educational development. How to take into account the learner's individual

artistic capacity and experiences in group settings is a shared challenge for all arts educators.

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## DEMONSTRATION 3

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### **058. About plastic ducks and hands and feet. Some practical results from the Music in Movement investigation**

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#### **Background**

Departing from the notion that movement is an important element in the musical learning process of young children, the practical implementation of the results of the Music in Movement research project will be addressed in this demonstration. Theory put into practice.

#### **Aims**

To explain and demonstrate a few activities of the main study and their possible use in early childhood music education. Songs with movement, supported when necessary by objects.

#### **A short description of the activities**

The activities from the main study of the research project will be described, explained and demonstrated. Short video clips of the children performing the activities will be shown. Where appropriate the audience will be asked to participate with song and movement to experience the musical process.

Among others the following activities will be discussed:

*Plitse Pletse Plater* - the use of objects in relation to movement

*Clap clap this is how the hands go* - the use of tempo in relation to movement

#### **Implications**

It is hoped that a practical demonstration in which the body is literally used and seen being used will offer inspiration concerning the use of movement in early childhood music education and its application.

#### **Specific value and meaning**

To put into practice the embodied view which underpins the research project.

Topics Area: music and movement

Keywords: education, movement, activities

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## DEMONSTRATION 4

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### 057. The children and the Continuator

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**Background**

The DiaMuse Project collects the experiments with young children interacting with a particular interactive musical system, the Continuator, created at the SONY-Computer Science Laboratory in Paris. The system is able to play with the same style of a human playing a keyboard. The pilot protocol was realised with 3 to 5 year old children in a kindergarten in Bologna (Italy). Other experimental protocols were then realised in Northampton (UK), and in Italy with more didactic purposes.

**Aims**

The aim of the demonstration is to show how the system works, the experimental protocols carried out with the children, the main results and the future perspectives.

**A short description of the activities**

Firstly a demo of the software will be made. Then the experimental protocols and the most significant results will be introduced. Some videos and observational grids will be showed and discussed. The audience will be asked to do short experiments with the system and propose new experimental ideas.

**Implications**

One of the most important implication of this project has been the elaboration of the new paradigm of "reflexive interaction", that is the interaction based on the mirroring effect. The results show that between the children and the system an interaction is created very similar to infant/adult interaction as described by several psychologists. Interestingly, over the interaction with the

system, the children reach high level of “optimal experience”, develop attentive listening behaviours, and learn to improvise by playing the keyboard. From a technological point of view, the experiments have provided evidence for some aspects that need to be improved, as such the ability of the system to both generate harmony and control formal structure, and an interface more suitable for children.

**Specific value and meaning**

According to this child/machine interaction approach, the child acts as a music-maker and he/she is the centre of the learning process. The project underlines the importance of the “spiral” collaboration between technological and psycho-pedagogical research. An European project has been planned aiming to exploit the educational potentialities of this kind of interactive systems.

Topics Area: music education and new technology

Keywords: Continuator, interaction children/machine

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## POSTER

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### 038. An intercultural sound project at a kindergarten

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#### **Background**

This project is an experimental path in the field of the sound and intercultural education at the kindergarten that was developed during my University stage at "G. Rizzoli" kindergarten (Bologna). The idea of the project was born during my studies at the Faculty of Education, University of Bologna (2005/08) after my meeting with professor Addessi and my attending of an examination in intercultural education. The project is subject of my thesis.

#### **Aims**

- to investigate: a) the music conducts of children between 13 and 16 month old in contact with a specific material (disposable tin oven-proof dishes) in relation with their age; b) if there are differences between the choices made by the native families and the foreign families of a sound material used by the baby at home,
- to involve all families to the "life" of the kindergarten and to let them meet each other,
- to observe parents acting with their children in the sound field (Do they let their children find a new way to discover sounds or do they give input?).

#### **Method**

Three big stages:

- the first one was the time of the knowledge of the spaces, the observation of the babies attending the "little" class of the kindergarten, the preparation of the material and the spaces, the organization of time;
- the second included the four meetings: two with only babies and two with babies and their families (for the last meeting the families have been asked to take from home a sound object liked by their baby). All the meetings have been filmed;
- the third one was the time of the valuation and the writing of my thesis.

#### **Results**

- the children have fulfilled a lot of music conducts (for ex. the passage from the knowledge of the "material object" to the "sound object", Delalande)
- no differences between the objects taken by the natives and the others taken by the foreigners
- the voice volume of the participants was very high

**Conclusions**

Music and sound can be important instruments and chances to popularize an intercultural education.

Topics Area: intercultural music education, exploring sound in early childhood

Keywords: intercultural, sound, kindergarten

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**051. Towards an elementary musical theatre****Maria Grazia Bellia**

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**Franca Ferrari**

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**Theoretical Background**

Since the 1960s, theorists of music education have become increasingly favourable to the notion that invention forms an essential part of the learning process. The tendency has thus been away from the previous methods that left little room for creativity (Deriu, 2005). Scholars such as Delalande (1993), Keller (1978), Porena (1979), Paynter (1992) underscored the importance of allowing children to experiment with the elements of music by engaging in real compositional work. That composition is now within their reach is partly thanks to avant-garde movements that broadened our conceptual horizons. Yet even those teaching methods that encourage creative and improvisational group activities among children pay little heed to how movement can enhance the playing of an instrument and the use of the voice.

**Aim**

The purpose of the research is to ascertain whether the use of movement in a teaching environment fosters musical invention within a "scenic space", and if so, to what extent. An approach centred on the use of movement seeks to develop a child's capacity to structure a sound event in space and time, and uses visual stimuli that the children are asked to transform into patterns of sound. By "scenic space" we mean a place where children are free to explore, compose and represent sounds using instruments, voice and movement. By "musical invention" we mean the development and organization of musical ideas within a compositional framework.

**Method**

*Subjects:* Children aged 9 in their fourth year at a primary school. The children are divided into an experimental group and a control group.

*Procedures:* Both groups were invited to invent music using visual stimuli devised by the researcher. The researcher prepared some cards with graphical images that were progressively presented to the children over eight meetings. During the creative phase, the children from the two groups worked both with the researcher (brainstorming) and on their own.



The assigned tasks and work phases were identical for all, but whereas the control group remained in a fixed spatial arrangement, the experimental group was encouraged to change the position of the instruments and move about freely while creating their sound.

*Materials:* Orff instruments, Tuboing©, ordinary household objects, video cameras, digital audio recorder.

### **Synthesis of the content**

Every meeting was transcribed, filmed and recorded in digital audio.

The students' output was analyzed with reference to a matrix prepared by the researcher. The analysis considered the quality of the musical gestures in relation to the sound, the interaction among the children, the expression of musical ideas, the choice of instruments and their arrangement in space, the musical behaviours adopted, the length and elaborateness of the compositions inspired by the original stimulus and so on.

### **Conclusions and implications for music education**

The experiment yielded results suggesting that the use of space and movement enhance musical creativity. They also seem to confirm the importance of exploration and experimentation in the field of an "elementary" children's musical theatre.

Topics Area: music and education

Keywords: movement, creativity, theatre

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## **075. Musical signals and their visual metaphors: How do young children transfer auditory into visual patterns**

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### **Dirk Moelants**

University, Belgium

### **Background**

The ability to transpose music into visual patterns form a step in the cognitive development of a child. Young children are able to hear musical patterns in different rhythm, pitch and volume however it is not absolutely clear if children can transpose what they have heard into meaningful visual patterns. This ability depends on different factors, such as their motoric and cognitive development, as well as on their cultural background.

### **Aims**

Investigate from which age young children are able to relate musical and visual patterns, both by recognizing a musical pattern in a visual pattern and by actively rendering a musical signal into a visual pattern. Furthermore investigate how this relates to their overall development and their embodiment of music.

**Method**

Children aged 4-11 attended a music theatre performance with a trumpet player as main actor. In total, 135 of them participated in an education post-performance session as an activity within their regular school program.

The structure was as follows: first 5 minutes recalling memories about the performance and 2 minutes free drawing on free music from the performance. Next the children listened to 8 simple musical patterns played on trumpet, then were presented the sounds a second time and were asked to 'draw what they hear'. After a musical game intermezzo they were asked to listen to the same patterns and choose 'the right' visual pattern out of five alternatives.

**Results**

The ability to relate the musical structures to abstract visual patterns increases with the age. Drawing meaningful patterns by themselves seems more difficult than associating them with models. Differences between dynamics seem to be the easiest to transfer, while differences in pitch turned out to be the most difficult.

**Conclusion**

Only children over 10 years old start to perceive more complicated rhythmical patterns as meaningful, whereas younger children can already recognize and visualize regular patterns, especially if they involve dynamic changes. Special metaphors like high and low appear to develop only during primary school age.

Topics Area: music development

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**012. Social representations of "musical child" held by university students****Anna Rita Addressi**

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This poster deals with a research project currently being undertaken at the University of Bologna about the musical training of university students studying to become teachers in nursery, kindergarten and primary education. The general hypothesis of the project is that "musical knowledge" can be investigated as a social and psychological construction as described by the theory of Social Representations, affecting music education and teaching practice.

**Aims**

The aim of the project is to study the social representations of music, musical child, music education and music teachers held by the university students.

**Method**

A questionnaire was submitted to the university students before and after the courses of Music Education. The subjects were asked to complete some sentences (Music is..., Musicality is...) and answer some questions about the musical child, the concept of music education and the professional profile of music teachers. We first classified the answers into different categories. Then a multiple correspondence analysis was carried out by means of a specific software.

**Results**

We found different concepts of "music" and "musical child". The multiple correspondence analysis showed interesting correlations between the concept of musical child and the concepts of music, musicality, music education and teacher competencies. The results of the questionnaires submitted at different stages (beginning of the course, end of the course) were compared in order to estimate if any "turning points" exist in relation to the two topics: music and musical child. Firstly the data show that the concepts of music as language, structure and emotion decrease and new and interesting concepts appear: music as intentionality, music as concept, music as child. The concepts of musical child as Gifted, Able and Enjoyed child decrease over the teachings, on the contrary the prototypes of Natural, Educated and Creative child increase.

**Conclusions**

The data analysed so far show that the university courses and the change of social role (student/teacher) affect the social representations of music and music education held by the students. The university music training could be therefore one of the fields for explicating students' music knowledge and developing their self-efficacy. The full results will be presented and discussed in comparison with the university curriculum realised over the music education teaching.

Topics Area: social psychology of music education, teacher training

Keywords: social representations of music, musical child, teacher's music knowledge

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**040. A sweet spoon's sound****Barbara Bedei**

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**Anna Rita Addressi**

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**Background**

"A sweet spoons sounds" is the title of the project of sound education realised with young children in the middle section of a nursery in Bologna (Italy), and it was the subject of the author's thesis degree. The theoretical background of the project were the concepts of "conduct" (Janet 1923, Piaget 1973),

"musical conduct" (Delalande, 1993) and "promotion from inside" (Bondioli, 2002; Mazzoli, 2003), and the models of sound education based on the observation (Frapat, 1994; Addressi, 2008).

### **Aims**

The main aim was to bring the children to musical invention, by means of an activity encouraging the exploration of the sounds. In particular, the speech was aimed to the observation of musical "conduct", focused therefore on musical intentionality (Imberty 2008) that motivates the action of the child. By proposing opportunities to experience the sound, the targets was to stimulate their curiosity and the exploration of sounds, in an attempt to make possible the passage from the exploration of the "material object" to the exploration of the "sound object" (Delalande, 1993).

### **Method**

Five meetings in the open-space of the nursery were realised with four children aged between 16 and 18 months during which it was proposed them to explore a simple and use daily material, as the spoons. Procedure: 1st step-*Stage the space*: about seventy metal spoons, twine and elastic cord are served to build a sort of "sounds tent" hanging from a wall next to a room of the nest, while a part of spoons has been placed on the ground, to reach of children; 2nd step-*Exploration*: the children were accompanied in the space set up and left free to explore the materials and sounds. The adult just video recorded the meeting; 3rd step-*Observation*: the adult analysed children's musical conducts through video observation; 4th step-*Relaunch*: intervention by the adult (relaunch and strategies of "promotion from inside") to widen the experience of children into musical invention. All the meetings have been recorded.

### **Results**

The following children's musical conducts were observed: pulling spoons, dropping and beat the spoons on the ground, beat the spoon against the door, the glass, the mirror, attack with spoon the spoon hanging, rub your hands on all the spoon. The adult relaunched these conducts, by mirroring, modelling and scaffolding strategies, leading the children forward musical invention.

### **Conclusion**

The didactic project has allowed the children to live a rich experience of musical interactions with the environment, their companions and the adult/practitioner. The project also allowed the author of acquiring new professional tools concerning the observation of children's musical conducts and practical strategies in music teaching with under-four children.

Topics Area: music development, socio cultural studies, training teacher

Keywords: sound education with under-fours, musical conducts

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## 092. Music therapy for young children

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### **Pio Enrico Ricci Bitti**

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### **Background**

A recent definition (Bunt & Hoskyns, 2002), presents music therapy as "the use of sounds and music within an evolving relationship between client/patient and therapist to support and develop physical, mental, social, emotional and spiritual well-being". Music therapy can improve the quality of life for all persons and meets specific needs of children and adults with disabilities or illnesses. Music therapists work in different contexts. In particular, in educational context music therapists are often hired to provide music therapy services listed on the Individualized Education Plan for children with Down's syndrome, autistic spectrum disorders, cerebral palsy or other disabilities, emotional, behavioural and learning difficulties, sensory impairments, speech and language delay. The multifarious applications of music therapy need to discuss adequately their efficacy in relation to the so-called "Evidence-Based Practices". The MusicSpace Trust, a registered charity, is an established international network of centres for music therapy that promote music therapy interventions and research; MusicSpace Italy constitutes the Italian branch of this network; it is active since 1999 and promotes Music Therapy projects in schools, hospitals and different centres. MusicSpace Italy offers also a Post Graduate Music Therapy training course in collaboration with the University of Bologna.

### **2. Aims**

To discuss the construct of "Evidence-Based Music Therapy" (Vink & Bruinsma, 2003) in the specific field of music therapy for young children in relation to: 1) data analysis from recent literature; 2) clinical practice with young children carried out in MusicSpace Italy.

### **3. Main Contribution**

Research in music therapy for young children support its effectiveness in a wide variety of healthcare (Kain et al., 2004; DeNora, 2006; Douglass, 2006; Oldfield, 2006; Avers, 2007) and educational settings (Wilson & Smith, 2000; Loewy, 2004; Wigram & Gold, 2006).

### **4. Implications**

The analysis of recent literature and the clinical practice with young children in health and educational contexts, show the need to develop a theoretical framework referred to "Evidence-Based Music Therapy" that integrate best available scientific evidence with clinical qualitative experience of music

therapists and that combine this factors with the values, expectations and wishes of young patients.

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Topic Area: music therapy

Keynote: music therapy, developmental disabilities, clinical intervention

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## **093. European exchanges at the Faculty of Education of the University of Bologna**

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The wide range of degree courses of the Faculty of Education of the University of Bologna covers all stages of education from the Early Childhood to Primary School Teachers Training. The Faculty came into being with a new organization in 1992. Before that, it has had a long and proud history as a Primary School Teacher Training degree. Nowadays, apart from teachers' education, it offers undergraduate and graduate degrees in the broad field of Educational Sciences, including Social Work, Human Resources and Lifelong Learning Education, Pedagogy and Media Education along with two Masters Degrees in International Cooperation. The Department of Education runs two PhD programmes, in Pedagogy and Psychology. Our Professors have an extensive range of international research activities and projects.

They coordinate about eighty European exchange programmes, mostly with Spanish, German, French, Belgian and Dutch Universities, but also with Swedish, Portuguese, British, Irish, Polish, Turkish, Slovenian, Greek, Austrian and Romanian partners. Incoming exchange students are offered a blended E-Learning service which aims to introduce them to the basic concepts and specific academic terminology relating to each subject in Italian language. They can use the acquired knowledge during the exam, with any courses that recognize the distance learning contents as an integral part of the programme. Moreover, the International Office of the Faculty supports the Professors' international activities and develops and implements the Faculty international policy. It fosters, runs and supports an array of co-operation agreements with foreign Universities in order to encourage the mobility of lecturers, research fellows and students.

Some of the most relevant exchange possibilities are represented by the LLP/Erasmus (previously known as "Socrates/Erasmus" programme), the Erasmus Placement and Leonardo da Vinci study and stage mobility programmes, along with the Overseas Programme and the Erasmus Mundus External Cooperation Window partnerships, which open up Bologna to the Countries beyond Europe and allows the students to attend courses and take examinations in partner Universities in North America, South America, Asia, Africa and Australia, and vice-versa. Finally, the Faculties support their students also with scholarships for thesis research activities all over the world. Among the research projects, the Faculty of Education is involved in several European Projects in the field of Music Education as well, coordinated or with the active partnership of Professor Anna Rita Addressi. It is worth mentioning the partnership in the "EuroTEAM- European Network for Teacher and Music Education" coordinated by Prof. Nigel Marshall (University of Roehampton), the Research Alliance of Institutes for Music Education (RAIME) and "Psychomuse:

Groupe de Recherche en Psychologie de la Musique”, coordinated by Prof. Michel Imberty (Université Paris X-Nanterre), the participation onto a European PhD programme in “Music Education” with the University of Granada and the preparation of a Seventh Framework Programme. Aside the research projects, there are Erasmus bilateral agreements for students and professors mobility with outstanding scholars and Universities, such as Prof. Michel Imberty (Université de Paris X – Nanterre), Prof. Bengt Olsson (Göteborgs Universiteit), Prof. Werner Jauk (Karl-Franzens Universität Graz), Prof. Antonio Alcazar (Universidad de Castilla-la Mancha) and Prof. Oswaldo Lorenzo Quiles (Universidad de Granada, campus Melilla). Furthermore, the Faculty coordinates and is partner on several International Projects in various fields, such as Tempus, LLP Leonardo da Vinci and LLP Comenius. It is also active in the International Cooperation field, with Masters Programmes in International Cooperation and Cooperation projects in Palestine, Bosnia-Herzegovina, Belarus or El Salvador among others. In conclusion, the Faculty of Education operates according to the so-called 1999 “Bologna Declaration”, focusing on the main objectives for higher education in the European area, evaluated ways of promoting the European model thorough the world and of increasing its competitiveness, developing specific research projects, programmes and cooperation according to its wide engagement in the extended field of Educational Sciences.

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## SYMPOSIUM 2

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### **Audiation, listening and musical performance**

Organizers : **Carla Cuomo, Giorgio Pagannone**

Il simposio si focalizza su un modello di insegnamento-apprendimento della musica finalizzato alla 'comprensione musicale'. I tre interventi delineano un percorso che, a partire dal concetto di *audiation*, raccorda in modo "circolare" la didattica dell'ascolto e la didattica dell'esecuzione musicale nella scuola di base e in contesti educativi non professionalizzanti.

The symposium focuses on a model of teaching-learning music aimed at 'music understanding'. The three papers outline a path that, starting from the concept of *audiation*, links in a "circular" way the teaching of listening and the teaching of music performance in school education and non-professionally-oriented educational contexts.

Topics Area: teaching/learning music

Keywords: audiation, listening, performance

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### **065. The development of audiation ability for listening and musical performance**

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The paper deals with the topic of *audiation*, and starts by describing the concept and outlining the genesis of the neologism created by Edwin E. Gordon. The term is compared to other terms that in the history of music education have described analogous concepts such as: "inner audition based on imagination" (Willems), "inner representation of music" (Sloboda), "mental picture" (Delfrati), "inner hear" (Jacques-Dalcroze), and "inner sense of music" (Schumann).

*Audiation*, i.e. the ability to hear and comprehend in one's mind the sound of music that is not physically present, is developed in early childhood through a process called "preparatory audiation", which is articulated in types and stages. It later becomes fundamental when listening to music with understanding and performing it.

A music education curriculum should enable the student to develop at the same time the "sense" and the "physical perception" of making music.

Considering the notation decoding ability as the main goal of a music education curriculum hinders the music syntax comprehension process and does not let the student acquire the ability to coordinate the body movements necessary to produce the sounds on an instrument with the sounds heard in the mind during music reading, performance by memory and music improvisation.

Topics Area: teaching/learning music

Keywords: audiation, listening, performance

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## **064. The "line" and the "texture": From listening to music theory and return**

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**Giorgio Pagannone**

University of Valle d'Aosta, Italy

The paper describes some teaching units for Music Education, which aim at acquiring a basic knowledge of Music Theory. The proposed method is based on a direct approach towards the sound dimension and is realised in guided listening units, which are intended to enhance the listening ability via a conscious focus on the cognitive appropriation of the structure of musical language. The first part of the paper, written by Stefano Melis, refers to the basic concepts related to the dimension of *melodic linearity*.

On the basis of spatial and kinetic analogies, the proposed examples show how to analyse and graphically represent the global melodic *contour*. The attention is primarily focused on understanding the dynamic aspects of the melodic line during its temporal development and learning some of the primary factors which determine the phenomenon of *directionality* in musical structures.

Finally, the author focuses on some gestaltic laws (*similarity, contrast, figural pregnancy, symmetry, parallelism*) and their role in determining the fundamental aspects of the formal and syntactic structure of the melody.

The second part, written by Giorgio Pagannone, illustrates the concept of *texture* ("ordito"), namely the density and vertical configuration of a sound fabric. Drawing on the concept of "sound space", and making use of some simple graphics, the author explains the three main types of texture: *monophony*, a single line in relief, without background; *homophony*, namely the gestaltic principle of figure/background (or even melody/accompaniment); *polyphony*, namely the intertwining of more melodic lines, or multiple layers of horizontal linearity.

The final example shows how the three identified types can dynamically follow each other within the musical discourse, and how this succession can also take a symbolic-semantic value and outline a narrative plot.

Topics Area: teaching/learning music  
Keywords: audiation, listening, performance

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## **066. The musical performance as critical exercise**

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The paper discusses a pedagogic approach to musical performance in school education, which is based on the *continuity* between listening and music production. The approach focuses on learning *processes* rather than *products*, and centres on performance intended as "critical exercise", that is "exercise of competence". This involves working on cognitive and meta-cognitive thought and, in the latter case, on the "control processes".

In particular, this approach is realised in guided listening units, which are intended to enhance the listening ability via a conscious focus on the cognitive appropriation of the structure of musical language and of the contextualising historical musical of music which is studied. This teaching is based on reflective practice that allows the students to build the "idea" of a specific music.

This "idea" will be fed to the general musical understanding that will interact with the knowledge and understanding of the specific music to perform and therefore its performing. The *continuity* between listening and music production, in the direction of an competent performing, if the student understands how to achieve the track compared to that idea. The proposed methodology guides the student to this achievement by working on cognitive processes, in teaching a historical link with technical practices, and metacognitive processes which name is "control processes" like *problematization*, *prediction*, *planning*, and *monitoring*. Goal is to educate students to develop a metacognitive thinking, useful not only to study music, but in general to direct their own learning.

All this will be discussed on a concrete example, based on *Melody* by Robert Schumann, n. 1 from *Album für die Jugend* op. 68 (1848).

Topics Area: teaching/learning music  
Keywords: audiation, listening, performance

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## Session 9

### Music, communication and babyhood

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#### **043. Music as a mean of communication in the child's first social interaction**

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#### **Characteristics of participants. Time and place.**

This paper focuses on an experimental musical activity carried out during 2 series of eight meetings in 2008 with a group of 18 month old children and their parents in the Musical Playgroup of the Centro Studi Musica & Arte of Florence.

#### **Aims of the project**

The project uses the musical game as an instinctive and immediate proto-language in order to communicate with children thus developing a structuring relationship between infants and the familiar and social ambit (presence of parents and peers on the educational set).

#### **Theoretical background and contents**

The main issues (such as the development of Self-concept and the acceptance of the Other) which lie at the basis of the ludic activity come from the mother-child communication model, from the theory of communication and from several basic theories of early childhood development. The musical game consists of a series of units which are functional to children's psychological growth: a systematic set of stimuli allowing a mnemonic process of acknowledgment, forecast and anticipation (when interrupted, it causes renewed interest). The musical flow thus becomes a dynamic flow of regulations (with breaks and readjustments) whose short interruptions allow the children to internalise meanings, actions and emotions.

#### **Outcomes**

The musical game acts as a stimulus to the Self-concept and as a tuning mechanism with the Other: this is a subjectively lived time for the child and at the same time fully shared through continuous inter-subjective exchanges.

#### **Method**

The musician/educator proposes micro-variations of the musical game, on the basis of early children's skills of temporal elaboration and discrimination of acoustic data. The aim is to represent, by the syncretism of his means of expressions (voice, look, gestures and movement), meaningful series of actions, intentions and feelings (formats of non-verbal actions).

It is an individual work.

**Implications for future work**

The aim of the experiment is to develop a three year training activity with 18-42 month old children, thus verifying music's influence in the child's early ability of attribution and comprehension of other people's mental states as described in the children's Theory of mind.

Topics Area: musical communication, music and education, emotion in early childhood music  
Keywords: childhood, music, communication

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**037. Encouraging musical communication between babies and parents: Report of a case study from Corfu****Zoe Dionyssiou**

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Establishing a good communication between children and parents is a matter of concern for many new families. Music can help considerably to establish a good communication between babies and their parents, as it offers them a framework for a series of activities and ways of interaction, such as moving, playing, singing songs, performing, making gestures and exploring the world around them. Music offers them new pathways of communication and interaction.

This paper reports on the teaching practice developed by the researcher in a series of lessons-meetings with babies accompanied by their mother or father, and the outcomes of those meetings. The lessons took place in a community medical centre in Corfu in two groups of ten babies each. The babies in the first group were between 6 and 15 months old, and in the second group were between 16 and 24 months old. The meetings lasted for 45 minutes, every second week, for eight months, during the school year 2008-09, making between 10 to 12 meetings in total. The aim of this project was to encourage musical communication between parents and their babies.

The target group of the study was babies between six months and two years old, but the outcomes of this project can find application to a bigger range of children. The lessons were based on a series of musical activities, such as singing, listening, moving, dancing, playing musical instruments and other activities. In every meeting we repeated some songs, movements and actions. Parents were asked to repeat some of these activities at home.

After each meeting the researcher reported the reactions of each baby, trying to understand their behaviour towards music and comment on their preferences, difficulties and possibilities. Towards the end of the meetings a series of interviews with some parents investigated if, to what extent and how the meetings encouraged a musical communication between babies and their families. This study supports that music provides a unique framework for communication between parents and babies.

If parents get some support towards this direction, they can certainly manage to encourage and strengthen this musical communication in order to establish a better relationship with their children.

Topics Area: music and movement, music and education, music in everyday life

Keywords: babies, parents, musical communication

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## **081. Investigating the amodal perception in early childhood: Experiences in nurseries**

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Perception has traditionally been considered as a function operating with different and independent sensory modalities. Nevertheless, recent studies focussed their attention on the senses cross-modal interaction.

Stern offered his concept of the infant's amodal perception defining it as a global nonverbal experience, that does not disappear; gradually driven "underground" with the development of language, it continues to have an unrepresented, "unverbalized", "unnamed", but "nevertheless very real existence". We asked how to propose to very young children a listening experience that would encourage the transfer of the morphological characteristic from a perceptive manner to another one.

Eighty babies, between 12 and 36 months old, of 12 different nurseries, took part in this study. They received a music session for about 10 minutes, during the whom we provided them colours and paper sheets as well.

This kind of listening experience allows to analyse the relationship between sound (listening) and graphic gesture and movements.

Children were free to participate to the audio-pictorial experience as they wanted and the educational staff was asked non to interrupt verbally the experience and they were only asked to dispose all the necessary elements (commonly colours, papers and sponges) and to collect observations following a standard protocol.

We proposed four pieces having the following morphological characteristics: the first piece had a wave-motion, overlapping resonances, moving and fluid shapes; the second had long lines of more or less fix sound; the third was characterised by brief and sharp vocal forms in rapid movements; the last one, a children song, had a precise, marked rhythm and a simple and cantabile melodic line.

The variety of the extracts was very important to observe the different children reactions. The audio-video analysis of listening experiences in equipped settings allowed us to identify common reactions in children, via an amodal

synaesthesia with very precise morphological characteristics of the different chosen pieces. They presented as well as some shared reactions, due to the imitative inter-subjective relationships occurring during sessions.

Topics Area: music and creativity

Keywords: early childhood, amodal perception

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## **046. The benefits of parents-infant music courses as perceived by parents belonging to two different social groups**

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Music courses for infants and parents have become a popular activity in many countries. The nature and composition of such courses varies greatly as well as the models behind them. In some countries it is most common to find music courses as business models targeted towards parents with above average leisure time and disposable income. Yet, there are music courses for infants and parents that are, to some extent, integrated into social equality programs aimed at parents with low incomes or social challenges. The latter model is frequently managed by church communities, social programs at the municipal level or in conjunction with higher education of early childhood specialists.

The aim of the present study was to evaluate how an established music course for parents and infants would benefit two different groups of parents.

One group consisted of affluent parents who could afford a rather expensive brand-name baby music course. The other was a group of mothers (age 16 – 24) who belonged to a support group for young mothers. The latter group participated in an identical course at no expense to the participants.

Both groups received identical infant-parent music courses during a 10 week period. The courses were taught by the same teacher, the same musical material was used, and all parents received a book and an audio CD with complementary material for the course. The participating parents were interviewed before and after the course and the course sessions were videotaped. Interviews and videotapes were analyzed by the researcher and by independent judges. Comparisons were made between groups regarding dynamics during sessions and in terms of reported experiences of participants. Similarities and dissimilarities between groups were identified and analyzed.

Implications for practices of music classes for infants and parents are discussed. Furthermore, the results suggest that high quality music programs for infants and parents have multiple effects on interactions between parents and infants regardless of social background.

Topics Area: music therapy

Keywords: infants, parents, social groups

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## Session 10

### Music in everyday life

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#### 077. Young girls singing with karaoke at home

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#### **Background**

Informal enquiries in four primary schools had revealed that approximately a third of children aged 7 and 8 years used karaoke equipment at home or via the homes of friends or relatives. Karaoke singing would seem to be a feature of the out-of-school musical lives of a fairly large proportion of children, predominantly girls, in England and deserves further exploration.

#### **Aims**

The study investigated karaoke use among children aged between 5 and 10 years. It enquired about the equipment the children have, where and how it is used and what repertoire they sing. It investigated karaoke as part of family musical activity, aspects of the children's singing performances and the learning processes involved.

#### **Method**

Research conversations with 42 children aged between 5 and 10 years were carried out in a primary school on the English/Welsh border to identify those children who used karaoke at home on a regular basis.

Home visits were negotiated. The children were asked to demonstrate their singing with karaoke and to talk about how they use it. Interviews were carried out with the parents. Three 7 – 8 year-old girls will be selected as the focus of this presentation.

#### **Main contribution and implications**

The video and audio recordings were analysed to arrive at a number of integrated interpretations drawing on the sociologies of childhood and technology and the field of 'new literacy' studies.

New literacy theorists propose that digital technologies are changing the nature of literacy and literacy practice. Much of their theorising can be transferred to music.

The three girls were learning to sing at home via a number of auto-didactic strategies enabled by the new technologies and, in those families where karaoke singing was part of family life, through participatory musical processes. Their singing of selected popular songs, particularly with the animations provided by some software, was closely tied to their emerging identity as "tween" girls. It also aligns closely with a new wave of contemporary "talent" shows on TV. The implications for school music, which



continues to remain unresponsive to the challenges posed by out-of-school musical activity enabled by new technologies, are far-reaching.

Topics Area: karaoke equipment in the home environment, singing, auto-didactic learning, family music practices

Keywords: new technologies, everyday music, singing

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## **029. The Mussorgsky family project**

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It has been widely observed that a gap exists between classical music organizers and the general public. Attempts to bridge this gap (e.g. Hindemith) have been largely unsuccessful. Concert workshops and concert talks (e.g. Davies) too have not brought about the desired change and this despite the knowledge that classical music is beneficial to the personal development and enhancing to the quality of life.

The Mussorgsky Family Project has been designed to pioneer a practical method to overcome the issue at hand and has been sponsored by the National Lottery via CALAT. The project has been running since September 2008 and will conclude in March 2009. Participating are 41 families who attend any of the seven Croydon Family Groups which supports parents with children under the age of 5.

In a first phase parents exchanged their musical experiences, engaged in musical activities with their children and were introduced to basic classical musical concepts (e.g. time periods). In a second phase parents were asked to produce in groups and in conjunction with their children a musical collage. During the third phase parents and children played on various instruments (e.g. Glockenspiel and keyboards) along to "Il vecchio castello" and "Bydlo" from Mussorgsky's pictures at an exhibition. Five families additionally attended a drum workshop in a recording studio. Phase four consists of three groups performing their results to each other in the afternoon and participants are being asked to attend the piano performance of the whole composition in the evening. Phase 5 will see the families making a clay sculpture in teams as an interpretation of one of the pieces within pictures at an exhibition.

In the final phase some musicians will visit the 7 groups demonstrating the use of their instruments and the project concludes with a trip to a concert in central London. The ongoing evaluation shows that the project has been able to generate enough interest to have at least 10 families involved in music making outside the regular meetings. If the project remains successful it could be rolled out on a larger scale.

Topics Area: improvisation, European music heritage, music and education, musical behaviour

Keywords: informal learning, families, music making

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## **035. Recorded music in children's everyday lives**

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### **Background**

The spoken research paper is based on a PhD-project in progress addressing how children between four and six years of age use recorded music in their everyday lives. In the country where this project is situated most children probably have access to CDs, audio cassettes and Mp3-files in their family homes and pedagogical day care facilities.

Recorded music and the way it is used by children presumably have extensive impact on the children's relations to music, musical tastes and attitudes.

In addition, children most likely perceive their own-initiated engagement with music as meaningful, both at an individual/psychological and social level.

### **Aims**

The aim of the study is to increase the research based knowledge concerning the significance of recorded music in children's everyday lives, focusing on music appreciation, musical action and agency. Children's aesthetic responses are regarded as per formative. Two questions addressed are: (1) what do children do while listening to recorded music? And, (2) which functions does recorded music have for the children involved?

### **Methods**

The study is based on qualitative inquiry (observation and interview), which is conducted on the two everyday life arenas mentioned, and inspired by institutional ethnography. This approach allows taking into consideration that music's perceived meaning (what music affords) is contingent, embedded in and regulated by discourse, as well as depending on the individual's needs.

### **Results/Conclusions**

Preliminary results and conclusions from observations in two preschools, points in three interesting directions:

1. recorded music can function as frames for (a) the (bodily) acting out of stories, story fragments and themes available in the lyrics/music, and (b) reflective dialogues between the children;
2. the children's activities (performances) seem connected to perceived atmosphere and energy of the music, and, thus, to agency, but are also regulated by discourse;
3. it seems fruitful to discuss children's individual style as well as group style within the musical style of the particular preschool, concerning both which music the various children choose to listen to and the modes of listening/engagement in music.

Topics Area: music in everyday life

Keywords: recorded music, children's culture, doing music

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## 034. The musical childhood of an Italian songwriter

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### **Background**

Little studies have been carried out so far about the musical childhood conception held by the pop-rock songwriters. In this poster we introduce an empirical study about Eugenio Finardi, a famous Italian songwriter.

During his life at first as son of musicians then as a father, he has been able to acquire an experience dealing with childhood and musicality, so that it can be supposed that he have experimented the importance of music education in the child development.

Have these experiences affected his songs and musical style?

### **Aims**

The aim of this study is to analyze the link between Eugenio Finardi, and the musical childhood, beginning from the songs written for his children until the last songs about his life.

### **Method**

At first a biographical survey of the songwriter has allowed us to choose the topics to be explored further through the documentation regarding the music education. Then an interview has been realized. Thanks to the interview, Eugenio was referred to a self reflection about his childhood and music experiences. Then, other questions were asked concerning the relationship of children with sound. The questions were clear, short and targeted, except the first (Autobiography based on sound) in which we looked for a his autobiographic report, without any external interference.

### **Results**

Answers of the songwriter have been analyzed according to the following topics: autobiography based on sound, relationships of children with the sound. Being born by an opera singer mother makes him sure of his musical life as if it was the destiny to make him part of this sound picture.

He confirms the importance of the listening of different types of music especially those of own country in order to bring the children to their cultural roots without forgetting the emotions arising by the listening of different music. The witness of this opinion is the same Eugenio who with the statement "... I was born into a musical instrument ..." is mindful that being born at the centre of a musical environment is crucial to the emotional development of the personality.

### **Conclusions**

The results confirmed the starting idea according that the musical education in the early age is very important, also for a songwriters.

As a man Finardi showed a remarkable sensibility and an inclination to the spiritual research, as father he showed a considerable solicitude for his children especially taking care of their musical education.

The musical childhood appears in his songs especially in those dedicated to his children with the particular solicitude and sensitivity arising from a life fully immersed in a musical environment.

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Topics Area: socio-cultural studies

Keywords: songwriter, music, childhood

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**SATURDAY**  
**25 July 2009**

## **SYMPOSIUM 3**

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### **Sound exploration from the ages of 10 to 36 months: The ontogenesis of musical conducts**

Organizer : **François Delalande**

The aim of this symposium is to explain the methodology, and to present a few results, of research lead by a group of 15 musician/researchers, over a period of three years, in several nurseries in the area of Lecco (Italy). Six amongst them will present, in this symposium, an aspect of this research.

The chief condition of observation consisted in analysing the behaviour of one child left alone in a room exploring the sound possibilities of an instrument (a zither or a pair of cymbals). When a child produces a sound with any object, it may happen that this sound surprises him, and that he produces it again, not exactly the same one, but introducing some variation.

This interest for sound, determining repetition and variation, can be regarded as the starting point of a form of musical invention. During the first year, 55 children from the ages of 10 to 36 months were filmed in this situation of solitary exploration.

The analysis shows that the children have a tendency to strengthen the first sound discoveries; to produce constructed sequences; to combine sonorities by using other sound sources in the room; and differences between personal "styles" are evident. The role of the adult who brings the child into the room, leaves him alone and afterwards takes him away is also analysed.

The second and third years of research were used to study the effect of various "set-ups" (amplification of the zither, two children exploring together one or several instruments...) and to find the best pedagogical follow-up to such situations.

Topics Area: music development

Keywords: early childhood, sound exploration

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## **070. Analysing the first spontaneous musical behaviour: A pedagogical and anthropological objective**

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Everybody knows that a young child (from three months) can be interested, and sometimes fascinated by a sound he produces, often by chance, thanks to his own gestures. It is the beginning of a "circular reaction" which consists in repeating the gesture that produces the sound. After about seven months of age, the baby is able to change a little the gesture he repeats in order to obtain a succession of sounds slightly different. So, he produces a sequence by repetition and variation which can be regarded as a first form of musical invention. This behaviour is typical of the sensory-motor period of development. It is probably a universal background on which musical activities develops, later, in different ways, according to the cultural context. It is also the starting point of a pedagogical project which consists in helping the young child to increase his musical imagination and sensibility by creating sound sequences and later compositions. Children are invited to search by themselves instead of learning by imitation. That is why 55 children, aged from 10 to 36 months, were filmed in such a situation of solitary sound exploration. Other "set-ups" help to favour other musical conducts and enables the children to get other "musical experiences". A few video registrations will be shown.

Topics Area: music development

Keywords: early childhood, sound exploration, ontogenesis

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## **072. Nido Sonoro: The plan of the three year research with its quantitative data and some qualitative results**

**Silvia Cornara**

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In this spoken paper we like explaining the 3 years plan (2002-2005) and the results of the research "Nido Sonoro", carried out in structures for the early childhood in the province of Lecco. By this research our aim was to observe and analyse the children's spontaneous behaviour confronted with a sound object. As to realize this aim, we established a severe protocol, which was applied in the first year of the research and let us collect a great number of data: every child was taken by an educator into a room where there was a sound object (a zither or a couple of cymbals) and, after a short period of adapting, was left alone as to explore. The educator went into again when the

child seemed to feel tired or the exploration was over. So we could watch and record 55 children under two observations spaced in about 2 months.

The active explorations were written out second by second, so that to be analysed and compared. By this wide observation corpus and the realized analyses we could find answers for some requests we had made since the beginning: how are the children behaving? Are they exploring? And how much? Which kind of gesture-sound are they doing?

In the second year we could follow two ways: going on the individual observation by short longitudinal research and the experience of new situations. Even the explorations of the second year were recorded and analysed. We wanted to realize how the children could behave meeting different "setting up" (amplification; a couple or a small group of explorer; different sound object placed in the room...): would they increase their exploration or not? Because of the small number of children in every situation, we can't express some general rules, but we can describe what a child can do in a particular situation in front of a "setting up".

During the third year the nursery educators could choose and apply some of these setting up and told their experience in written diaries.

Topics Area: music development

Keywords: sound exploration, early childhood, research

## **074. Exploring the sonorous object in the early infancy:**

### **1) Finding something new and developing the musical idea;**

### **2) The amplification**

**Manuela Filippa**

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Young children (in this study from 10 to 36 months old) often explore the object sound through two pathways: (a) by alternating very different exploring gestures, and (b) by devoting a long concentration to one precise gesture or sound, going deeper and transforming it with micro-variations and repetitions. Such new gesture or sound, emerging from the other represents for the child a kind of surprise, a new "discovery".

*The first aim of this work was to analyze some examples of children musical production in which the child focuses on a single sound or gesture, adds micro-variations in order to improve it, and subsequently develops it. We analyzed eight exemplary cases of "discovery" through the following items:*

1. type of "discovery",
2. when does it happen (beginning, middle, end of the exploration)?
3. does the "discovery" evolve into different explorations and how?
4. how long does it last?
5. does it happen with or without the presence of an adult?



Our observations lead to some previous conclusions: the "discoveries" are unique and they differ substantially from each other.

Moreover, they generally occur in the middle of the exploration, and they usually evolve in a musical idea. We also observed that the "discoveries" are more likely to occur when the adult is absent. *The second aim of this work was to evaluate what happens to the exploration when we amplify the instrument.*

We observed that:

1) the instrument amplification results in a concurrent amplification of children's gesture: it gets wider, the arm stops in the air until the resonance ends. We can argue that the gesture simbology and the produced sound are strongly linked.

2) The amplification is a valuable tool useful to explore the sound morphology, e.g. the dynamics, the staccato and the resonances.

3) The amplification is a successful tool, for discovering new types of gesture: little sounds, that are normally weakly perceived, are magnified and, consequently, children may start exploring them.

Topics Area: music development

Keywords: early childhood, sound exploring

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## **071. Transport of sound-gesture to other object during a sound exploration of an instrument**

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During a sound exploration of an instrument the children sometimes transport the sound-gesture to others objects but it doesn't happen always.

For example when they are playing a cymbal with a stick, they start to beat it on the ground or on others surrounding surfaces.

In my spoken paper I will show some different kinds of transport, trying to understand when and why it happens or not.

The transport of sound-gesture could be motivated by different factors:

1. the simple impulse,
2. the curiosity to listen to the different object's sounds,
3. the research for alternation and contrast in a musical construction's first form.

I will analyse some video samples taken from the research *Nido sonoro* leaded by Professor Delalande.

This research is about children from 10 to 36 months old.

Topics Area: music development

Keywords: instrument exploration gesture

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## 069. A style matter in children aged from 10 to 36 months

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**Luisella Rosatti**

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*Does a child have a style?*

*Do all the children have it or only some of them do?*

*Can a child's musical techniques be considered 'individual', personal?*

*Is his style innate or learnt?*

Children show different musical productions and the differences are remarkable.

The study and the analysis of musical "performances" of children aged between 10 to 36 months to find out the child's personality, how it shows itself and affects his musical, motor and cognitive personal responses.

The sound production refers to an initial exploration of the zither, followed by further repeated explorations which allow a longitudinal observation.

The stages of the work here presented are the following:

- definition of style,
- definition of the style indicators,
- description of the videos about children's instrumental exploratory experiences,
- analysis and comparison of the videos,
- results and conclusions.

The work started from the analysis of scientific studies that give a definition of what style is in music and psychology.

The revolutionary theories about the existence of different kinds of intelligence and styles of thinking have been the main focus of this study.

The style indicators have been carefully stated before examining and comparing the videos showing children's experiences of instrumental explorations. The indicators have been chosen and detected in three specific areas concerning respectively the explorations strategies, the instrumental activity movement behaviours and the sound production formal characteristics. These components are mixed together by each child in such a personal way, highly influenced by their own sensitivity and feelings, that it is possible to identify each child's own "signature", "mark", "stamp".

This "stamp" makes each child's track unique, distinguishing him from all the others. Style develops and comes out in later explorations, by repeating the "trovata" (Delalande, 2009), i.e. the initial musical idea.

Therefore, both storing and keeping musical ideas alive through repetitions and refrains are important aspects of what a child's style is.

### References

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Topics Area: music development

Keywords: early childhood, style question, sound exploration

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## **073. Acoustic relations between children and adults**

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Some videos will be shown to observe/determine acoustic relations between the teacher and the child during the play and emotion of an educational event. We will ask ourselves how and to what extent the presence/absence and reciprocal proximity/distance of the adult can affect a child's explorative activity.

We will assess the actions required for the teacher to stimulate and continue the child's acoustic exploration, the strategies implemented and which verbal and, especially, non-verbal components come into play: how they alternate and interact, and how effective they are.

Lastly, we will take into account the exchange of glances, gestures, actions and expressions that form a dialogue of silence, expectation, small gestures and significant words which can also at times create a game of sound between two people.

Topics Area: music development

Keywords: relation, induction, non-verbal

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## Session 11

### Voice and song

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#### **020. The influence on musical development of singing to infants with/without words**

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**Laura Ferrari**

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**Maria Perri**

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#### **Background**

It is quite common that parents, and in particular mothers, sing to their babies many songs with different aims (to sleep and to soothe them, to play with them etc.). The cultural music traditions show a certain variety of repertoires with different types of lyrics, referred sometimes to situations typical of the baby life (toys, animals etc.), and sometimes to the life of adults.

Those songs are sung normally with words mainly because a song is, in itself, an object made by music and words.

Among the various theories on musical development, it could be mentioned the Edwin Gordon's one: among his various educational proposals, Gordon practiced and suggested to sing to infants without words in order to allow them to perceive and appreciate better the melody.

#### **Aim**

The principal aim of the present study is to verify the consequence on the development of the ability to sing in tune if children are educated by listening to songs proposed by parents with or without words.

#### **Method**

The procedure chosen in this study was the analysis of the musical babbling and of the first imitative songs produced by a group of children who participated to the *inCanto Project*. This is a research project which involved, in a weekly course of music, 119 mothers-to-be and their children after birth, principally based on singing, playing percussion instruments and moving.

The mothers were requested to sing and listen to music daily at home, to complete and return daily diaries and to give the researchers the recordings of the children's vocal productions.

In this project, the mothers were requested to sing to their infants according to a specific protocol.

One group of them was requested to sing using just one syllable: *ba*, or *la*, or *pa*, a second group to sing always with words; a third group to sing sometimes with and sometimes without words.

### **Results**

No particular difference between the children used to listen to their mother singing with or without words was noticed. The melodic richness and variety of their musical babblings and later on the good intonation present in their first imitative songs, showed a good perception and reproduction of melodies, despite a quite poor pronunciation of the words.

### **Conclusions**

It seems that the presence or absence of the words doesn't affect the attention of children toward the melody and their perception of it.

Topics Area: music development

Keywords: singing, infants, words

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## **018. The vocal development in the first year of life**

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The vocal development of infants depends on the one hand on the physical state and on the other hand on the way children are interacting with their parents. Preverbal interaction between mothers and infants is structured by melodic and rhythmical synchronisations, and imitation, variation and extension of the infants' verbal and nonverbal utterances.

Eye-contact, physical touch and movements segment the streams of interaction and support the production of infants' vocalizations.

The mother involves the infant in a communicative context by regarding the child as a competent communicative partner. Supportive structures of the adult, for example synchronisation and extension of the infant's vocalisations, help to establish local coherence in communicative sequences. This is the basis for the vocal development and for the acquisition of communicative abilities like turn-taking and the use of deictic expressions in forms of verbal and nonverbal pointing gestures. The project is a longitudinal study of eight mother/child dyads from 2nd-9th months of life, videotaped once a week each month, including descriptions of situation (location, time of day, eye contact, movements, physical touch, distractions like toys/attention to toys etc.), interaction (verbal expressions and vocal interactions; criteria for observation: onset time, duration, number of activities) and intonation (pitch, melody, rhythm, "pauses"). The audio and video data are analyzed by PRAAT and ELAN. Results from intonation analysis show the salience of imitation and variation of infants' vocalizations for the vocal development in the first months. There is an obvious interaction of physical touch, emotional state and structure and timing of vocalizations.

Topics Area: music and language, preverbal vocalization, music and movement  
Keywords: perception, emotion

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### **033. Song openings of young deaf children under four years of age who are using cochlear implants**

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This paper focuses on the singing activity of deaf children under four years of age who are using cochlear implants (CIs) and presents a strand of a larger study that aimed to observe, record and analyse the musical activity of seven deaf children using CI in the UK, for a period of one calendar year.

The singing activity of deaf children has been the focus of only a limited number of studies that have chosen to deal with the ways children of school age reproduce pitch relations in song or have investigated singing as an isolated activity. The present study attempted to view the singing behaviour of very young deaf children as a holistic, communicative experience and part of their general music-making that develops in time and in the company of others, rather than focus on the children's difficulties with song language and pitch reproduction, problems often associated with deafness.

Children were met on a weekly basis in three naturalistic settings of education and care. The researcher was involved with the children and adults as participant observer, creating a musical environment that promoted free play on musical instruments and encouraged singing activity.

Sessions were videotaped and analysed using running records and microanalysis of selected extracts. Data were supported by interviews with the children's parents regarding the musical activity of their children at home.

Findings suggest that deaf children are active participants and receptors of song rituals in their everyday lives. Similarly to hearing children they absorb song material of the prevailing culture through commercial musical material and the media, demonstrating strong preferences for songs they often reproduce during solitary singing instances. In their attempts to sing deaf children first reproduce aspects of rhythm and movement, followed by the rhythmical reproduction of prominent vowels and later, prominent words of the text of songs. In accordance with previous studies, song promotes joint attention, collaboration and autonomy.

Despite the difficulties with song text, deaf children are involved in song kinaesthetically and emotionally. Finally, contact with peers and significant others, repetition of the singing experience and the use of visual stimuli promote the singing openings.

Topics Area: singing, music education for children with special education needs, musical development

Keywords: singing, deaf children, cochlear implants

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## 050. Learning processes in the study of the singing voice

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### Background

My research is situated at the interface of perception, learning and mastery of the epistemological processes developed *on the basis of*, and *across*, the human voice. Here, I will concentrate especially on those processes linked to the phenomena of embodied vocal inter-corporality in the study of the singing human voice.

### Aims

On the one hand, I propose to explore the specificity of the *instrument-voix*. By *instrument-voix*, I understand the voice when, in all its polyvalence and multi-functionality, it is studied and employed with *the value* of a musical instrument (Vitale 2007b). On the other hand, I propose to investigate the cognitive dynamics specific to this "instrument", that is, the dynamics underlying the study of singing. How is the learning of the only instrument incorporated into the body of its exponent structured and organized?

The *instrument-voix* can neither be touched nor seen. So how is tactile and visual memory, so important in the learning of other instruments, replaced in the learning of the "non-visible" transparent instrument incorporated into the body of its exponent? Over the course of their life-time, each individual develops their vocal skills (a know-how), as much in speaking as in singing.

In fact, the practice of singing is built into everyday life. Why does the intervention of someone 'other than myself' become necessary at a certain point? And how does this *other than myself* develop *my* capacities? How does this other than I intervene to do this for me?

### Method

This analytical investigation relies heavily on observations conducted in the field over many years in France and, more specifically, in different institutions (local and national musical academies, the Paris Conservatoire), on the basis of a longitudinal-transversal methodology that consists in being present regularly in several classes and following each student individually over a long period of time.

### Results

The study marked out the "commonalities" underlying the dynamics of all sorts of singing lessons, beyond the differences linked to the variables of musical style, of age, of sex, of level.

**Conclusions**

The absence of any comprehensive bibliography in this field of voice training prompted me to construct hypotheses on the basis of interconnected methodologies, both to identify the “commonalities” between learning to sing and the learning of other types musical instrument and to set out their differences, on which my study sheds some new light.

Topics Area: pedagogical theories, singing, teaching/learning performance, music and education

Keywords: vocal mnemonic processes, *instrument-voix*, vocal training

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## **Session 12**

### **Technologies and music education**

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#### **07. The digital world of children: Integrating music and maths in pre-school education**

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There is an inner relationship between music and maths since ancient times, with numbers being a fundamental concept for the development of rhythm and Pythagoras’s monochord the basis of musical harmony.

In current school curricula the integration of music and maths is encouraged through the development of common activities both in pre-school and primary education. The present paper reports on a cross-boundary project, which involved three universities from different areas of Greece and Cyprus: the University of the Aegean, the University of Crete and the University of Cyprus.

The project aimed to develop a web portal that would suggest integrative game-based activities for the professional development of nursery teachers (for children aged 4-6) in the areas of language, physical sciences and maths.

The design of the activities that would integrate music and maths focused on how to teach the concept of probabilities, and was based on findings related to the cognitive development of nursery school children in the areas of maths and music (e.g., Fischbein & Gazit, 1984; Flohr, 1985; Swanwick & Tillman, 1986; Kratus, 1989; Shaughnessy, 1992; Brophy, 2002). The project led to twenty-two different activities in maths, four of which were based on the integration of music and maths.

The activities are adult-led, but game-like at the same time, and involve both individual and group work. They cover a variety of music objectives, such as understanding of rhythm and different rhythmic values, getting familiar with simple percussion instruments, and developing listening and creative movement skills.



The portal provides all essential materials (e.g., pictures, music examples, dice and spinning wheel samples) for each activity.

After the completion of the project, a series of informative sessions followed with a number of nursery teachers, whereas the portal provides the opportunity for the development of forums and blogs amongst users.

This paper will give an outline of the portal as offered to the teachers-users.

It will also present the four activities that integrate music and maths in detail and will suggest possible ways of expanding the existing materials and ideas.

Topics Area: technologies and music education

Keywords: integration, maths, music, professional development

## **042. The effect of computer games on music education in primary school music lessons: A private school sample in Turkey**

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In this study, the effect of computer games on the success in Music lessons of Year 3 in the Primary Schools of Turkey and the levels of differentiation of the results according to the variables of students' gender, parents' education and occupation are studied. The effect of computer games on the success of classroom music education throughout the class' music lessons is also studied and again, the levels of differentiation of the results according to the variables of students' gender, parents' education and occupation are observed.

During the research, experimental methods of "Control Grouped Preliminary Testing and Post Testing" are made use of.

The following are tested during the research:

- students' time-related conceptions of semibreve, semibreves, crotchet, quaver, semi-quaver notes and rest along with rhythm patterns that are composed of various divisions;
- students' sensibility for the tones between do-si interval, and their ability to identify the notes on the stave;
- their skills in acquiring the fundamental music knowledge;

number of students in both experimental and control groups are the same and totally are 22.

As of data acquisition means, the following are used:

- personal information form prepared to acquire the students' personal information,

- a knowledge measuring knowledge test, developed by the researchers to be used at the beginning and end of the study, and
- observation form prepared separately for each student to be filled during the activities carried out in the experimental and control groups.

The computer games used during the research are limited to those including subjects of "Listening/Singing/Playing" and "Musical Perception and Information" as necessitated by Year 3, Music Lesson Curriculum.

Since the results of the research introduced that computer games can easily be used by primary school students for classroom music education, it is anticipated that use of computer technology in music education will develop and become more widespread. Besides, the fact that computer games will improve interest, liking and enthusiasm towards music lessons is considered as a significant advance with regard to both music lessons and music teachers.

Topics Area: music education

Keywords: classroom music education, musical games, computer games

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## **055. An interactive sound recognition game for primary school children**

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### **Background**

Sound recognition is an important element in musical development.

Young children can easily recognize concrete sounds of which the sound source is easily identifiable, but the discrimination of more abstract musical signals develops only slowly. However, research in this area is underdeveloped.

To study the growth of abstract sound recognition and identification, an interactive game was developed, which allows to study this topic in an ecologically valid and fun way.

### **Aims**

Investigating the development of sound discrimination and identification in primary school children in the framework of an interactive sound recognition game.

### **Method**

All six classes of a primary school in Flanders participated in the game/experiment. Classes were divided in groups of four, resulting in 43 groups with an average of seven groups per class. To each of the children in a group, a specific sound was assigned which could be triggered by jumping, through a Wii Remote attached to the waist.

The game then consisted of imitating sound series, increasing in length, by jumping in the correct order. The game consisted of 2x3 levels (level 1–2: concrete and abstract sounds; level 3-4: timbre recognition of known and unknown musical instruments; level 5-6: melody recognition of tonal and atonal melodies). After playing the game, children were asked to identify the sounds heard during the game.

### **Results**

Results show that there is a significant impact of age on sound recognition and sound identification. We also found a significant correlation between the recognition of the sounds in the post-questionnaire and the ability to recognize these sounds during the game. A significant impact of level shows that the children had less difficulty with the concrete sounds and the musical instruments (both known and unknown) than with the abstract sounds and the melody recognition.

### **Conclusion**

An interactive sound recognition game was developed to investigate children's auditory development. Both children and teachers responded very positively. Results show that sound recognition in the game is age-related and positively correlated with the ability to identify the sounds. This game can be further developed towards an age-specific application for studying and developing musical skills in an educational context.

Topics Area: music development, technologies and music education

Keywords: sound recognition, music education, interactive game

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## **060. E-Lab, a new learning environment for development children's music creativity**

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Today, 10 years after the ICT spreading, informatics laboratories support most educational activities in Italian primary and secondary schools; nevertheless, music education is still based on traditional formats, since experimental and innovative practices are often abandoned.

The author analyses the problem and highlights a deep break between traditional music educational activities and digital-tools based practices, due to different music categories, educational methods, social behaviours in classroom, technical constraints.

The main issue is the lack of a new concept of learning environment, suitable to digital tools, present music composition practices, sharing social behaviours, and, at the same time, school educational goals.

Starting from analysis, main learning environment design guidelines are suggested (*E\_Lab*), in order to allow teachers to realize successful music creation experiences for children at school, supported by digital technologies.

A *conceptual frame* is proposed, centred on relation (Bruner 1996), reawakening creativity (Delalande 1976), individual expression (Papert 1980); a new *format* is outlined, including all music creation steps, starting on sound object exploration and ending on live orchestra conduction; a proper *setting* is designed, allowing dynamic grouping, based on mobile laptops and fixed group work stations; new software tools are developed, suitable for children, fitting educational goals and cognitive constraints.

Finally, a children music creation experience based on design guidelines is described: Gamelan\_01, the acoustic-electronic children orchestra.

The activity involved about 100 children of 9 years old, at the "Kassel" primary school in Florence, during 13 laboratories (1 hour each), addressed to groups of about 20 children (November 2006 march 2007)

The project aims at developing music creativity (improving sensitivity to sound, knowledge of morphological characters, ability to explore musical form), developing social skills and individual sense of responsibility for the musical product.

It is possible to conclude that this kind of activity is advantageous, since it develop a relevant "sense of sound" and "sense of group": children seems to understand that music can be an opportunity to express themselves and to share experience with other children, friends, community.

In the future we hope to form an interdisciplinary staff in order to design, experiment and evaluate new learning environments.

Topics Area: technologies and music education, music and creativity, music and education

Keywords: learning environment design

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## **Plenary Session**

### **European Exchanges and Research on Music and Childhood**

Presenters

**Barbara Kaminska**

Fryderyk Chopin University of Music, Warsaw, Poland

**Wilfried Gruhn**

University of Music and Gordon-Institute, Freiburg, Germany

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