

**MIROR** Project





## MIROR SUMMER SCHOOL

### PROGRAMME

The MIROR Summer School will be realized in collaboration with the European Network of Music Education Researchers and Educators of Young children – MERYC - and in July 2013 at the University of the Applied Sciences in The Hague, The Netherlands.

**Scientific Committee:** Anna Rita and Laura Ferrari (UNIBO), Susan Young (UNEXE), Michel Hogenes (member of the Advisory Liaison Board and chair of the MERYC2013, University of The Hague – Applied Sciences, The Netherlands), Luc Nijs (member of the Advisory Liaison Board, IPEM, University of Ghent, Belgium), Eleonora Medeot (Project Management, UNIBO).

The **programme** of the Summer School foresaw an introduction to the MIROR project, a demonstration, a workshop, an oral talk and a debriefing. <u>All the activities of the Summer School</u> <u>have been open access, excluding the workshop.</u> The abstract of the demonstration, the workshop, the debriefing and the paper (describing the oral talk) have been published in the Proceedings of the MERYC2013 Conference, edited by Jessica Pitt and José Retra (pp.355-371).

### 1) INTRODUCTION to the MIROR Project by A. R. Addessi

### 2) DEMONSTRATION "The MIROR Project: An introduction to an interactive reflexive

technology for music education" by S. Young, V. Rowe & S. Moody

#### Abstract

The MIROR project is a three-year EU funded project under the seventh Framework programme (Technology-enhanced learning). The MIROR project has been developing an innovative system for music learning and teaching in early childhood music education based on reflexive interaction. Reflexive interaction is based on the idea of allowing children to manipulate virtual copies of their own inputs through specifically designed technology-learning software referred to as 'interactive reflexive musical systems' (IRMS). The partners in the project are affiliated to the Universities of



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Exeter, Bologna, Gothenburg, Genoa and Athens, Sony Research, Paris and Compedia, Tel Aviv. The aim of the demonstration is to introduce conference participants to two components of the MIROR technology which are designed to enable and enhance young children's improvisation and composition. The demonstration will consist of a brief introduction to the project, an explanation and demonstration of the technology accompanied by video clips illustrate the technology in use with children in education contexts. Participants in the demonstration will have an opportunity to try out the technology. Interactive reflexive musical systems have educational and therapeutic potential. They provide a medium for children to improvise and compose music based on their own musical ideas and provide a means by which they can develop musical skills of aural perception and understanding of musical elements and structure. Early childhood music education is traditionally 'low technology' and the reasons for this lie within the conventions of early childhood music education. The demonstration will also provide an opportunity for participants to consider and discuss these issues.

# **3) WORKSHOP "MIROR Workshop: A practical experience on improvisation and composition with the MIROR Impro and Compo**" by L. Ferrari & L. Nijs

### Abstract

The MIROR workshop provides participants with the opportunity to have a practical experience to improvising and composing with the MIROR Impro and Compo. Based on activities that were designed for children (8-10yrs old), participants are invited to explore the didactic possibilities of two components of the MIROR platform, namely MIROR Impro and Compo. In order to do so, they are asked to take on different roles, namely the role of the teacher and the role of the child. When 'acting as child', participants interact with the system based on free exploration and guided activities. To stimulate dialogue, participants worked in pairs when engaging with the system. When 'acting as teacher', participants observe and reflect on the musical aspects of the improvisation and composition, on strategies and on the characteristics of the collaborative playing.

# 4) ORAL TALK "Early exploration of digital sound: Two-three year old children interacting with the MIROR Impro", by L. Ferrari & A. R. Addessi

### Abstract

How could the introduction and use of new technologies be described in the nursery school? In 2003, Lanskhear & Knobel mapped a review of research on the use of new technologies with the 0-8 years age group. During the 2000s, researchers investigated the relationship between new



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technologies and music education with preschool and primary age school children. There is still little research about the interaction between toddlers and new technologies. The aim of this exploratory study was to observe two children aged three interacting with the MIROR Impro in a nursery school. As part of the MIROR project, the MIROR Impro has been tested with 4 and 8 year old children by Addessi, Ferrari & Carugati (2012). Their results found a particular presence of Flow during the children/machine interaction. The MIROR project is a collaborative project cofounded by the European Union and it deals with the development of an adaptive system for music learning and teaching based on the reflexive interaction paradigm: the MIROR Platform. The exploratory study was carried out in Bologna (Italy) and involved seven children aged 2-3 years old and practitioners. The operator invited the children (individually, in pairs or with the presence of the practitioner) to play freely with the MIROR Impro. The children took part at a preliminary meeting to meet the operators and see the equipment. Every session was video recorded. The observations underline the presence of particular conducts in children when they interacted with the system. During the exploration of the equipment, we observed children participating in musical exploration, listening and turn taking. There were some didactic strategies activated by the practitioners, which involved imitation, listening to the musical input of the children, modelling and supporting children. This study enabled us to explore not only the use of technological equipment with young children but also the environment; we were able to explore the use of space to create areas that were most beneficial for musical activities to take place.

### 5) DEBRIEFING-FOCUS GROUP by L. Nijs & L. Ferrari