## Multimedia in preschool: an additional opportunity towards equal chances in education

The objectives of this practice-based project are fourfold. Firstly, it investigates how multimedia literacy of preschool children (3 years and older) can be stimulated. Secondly, it aims at understanding the influence of multimedia literacy on their world exploration. Thirdly, the potential of multimedia to support the children's personal development is assessed, with particular emphasis on young children with extra needs. Finally, the project aims at reducing the technological fear experienced by preschool teachers, students and lecturers by increasing their understanding of multimedia literacy.

Today's world is very different from the one in which educators have grown up. For the present generation of children (digital natives) electronic means are evident. The dominance of language literacy has disappeared; society becomes ever more multimediarich (Bottelberghs, 2005). Education needs to adapt to this changing environment (Goegebuer, 2004; Vandenbroucke, 2005). In accordance to Bottelberghs (2010), the project doesn't focus on the technology of audiovisual materials, but rather on the creative processes and the development of talents achievable by using a multimedia setting. While using different media (including audiovisual means) throughout their education, young children discover and develop their communication skills.

During an initial test phase of several weeks, more multimedia rich activities were offered to a group of children with different needs. Although this phase indicated positive evolutions, the question arose whether this was caused by the presence of an extra teacher in the classroom, by the offer of audiovisual materials, or by a combination of both. In a second phase, 4 different conditions were created: with or without extra teacher – with or without audiovisual input. The standardized Teacher Report Form and Child Behavior Check List were used to select children with similar profiles in the different classes. In each classroom, a pre-measurement, a post-measurement and a long-run measurement have been performed. Both the qualitative video-observations throughout the duration of the condition and the measurements are interpreted using the observation framework of Laevers (2005) and Buyse (2009) (Experience-based preschool education).

Finally, the results of a survey show the means and ideas of preschool teachers with respect to multimedia literacy.

A set of good class practices for 3 till 5 years-olds using more audiovisual means to explore the world is presented. Even though the children are quite young, they are very handy and careful with these materials. Some children with extra needs do well in exploring these materials. Some children exhibit a high level of wellbeing, involvement, initiative, creativity, language skills and artistic expressivity. The analysis of the video-observations together with these good practices will be used to formulate an answer on the first and second research goal.

Subsequently, intended strategies to answer the third and fourth research objectives are presented briefly.

This research illustrates the necessity for different means in the classroom in order to offer each child a proper way to express himself. Moreover, this research indicates how (future) preschool teachers can use multimedia in the classroom in a pedagogical way.

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