Advanced learning and ICT: new teaching experiences in university setting

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Abstract: The digital board is thought of as a tool that has limited use, primary or secondary school or in a situation of learning for the handicapped.

This case study aims to show how these new tools can be used in for higher learning, in scientific and technical universities. The current software available on the market and its use with these tools foresees originality in the approach to teaching in the future.

The article explores the use of advanced innovative technology in the lecture hall for effective teaching and learning. The digital whiteboard tool is a flexible and powerful didactic instrument that can greatly enrich the experience of both the learner and the lecturer. This article will explore a completed case study, a case study still in progress and future possibilities.

Keywords: digital whiteboard advanced teaching tools; repository; disability.

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Biographical notes: Fabio Bertarelli received his Magistral Laurea in Electronic Engineering from the University of Bologna in 1998, about control of stiffness simulation in flight simulations environments. For several years, he worked as a Project Manager in different factories in Italy. In 2005, he concluded his industrial experience to become a High School Confirmed ICT Teacher, since he began to teach using advanced training tools for learning for people with special needs. At present, he is a XXIII Cycle PhD student at DII; his research field is related to wireless sensor networks (WSNs) and special ICT tools in education.

Matteo Corradini works as an Engineer at the Department of Biomedical Science in the research group of Prof. Sergio Fonda. His main research interest has been the development of advanced technologies for the improvement of life conditions for people with different degrees of physical and mental disability. He is the co-author of two international patents for systems for functional substitution. In the last ten years, he has been collaborating with the