

ABSTRACT

THE NODES - E-LEARNING NETWORK ARCHITECTURE

Miklós Herdon¹, herdon@agr.unideb.hu

László Várallyai¹, varal@agr.unideb.hu

Charles Burriel², charles.burriel@educagri.fr

¹University of Debrecen Department of Business- and Agricultural Informatics

²National school of higher agronomy studies, Dijon, France

The SOCRATES GRUNDTVIG NODES project aims at facilitating, for adult training / lifelong training, the use of multimedia knowledge to improve competitiveness employability and mobility of handicapped adults (physical and sensorial) and of adults victims of the digital divide or of some of its components such as distance, initial level of knowledge, language, use of complex technologies. The project will provide an open platform for content providers (teachers, trainers, researchers and academics but also workers, farmers, entrepreneurs, ..) who are willing to disseminate their knowledge. NODES will provide local support and will enable consortia of educational partners to develop the contents required for a broader audience or use this knowledge to build educational and training curricula, even individual (self education for instance). This process of knowledge dissemination will encourage linking and partnerships between educational, cultural organizations, NGO's and companies in both the public and private sectors. There are 3 levels of target groups : content producers; intermediary structures (between content producers and final users), ie training centers and trainers; final users : learners. Technologies / media have increasingly found their way into the adult educational and training process in the last few years but educational concepts of how these technologies could be used constructively need further attention. The consortium developed the books of specifications which based on the the developed e-learning network system architectures. The books of specification describe the adult needs, the needs of the trainer(s), tutor(s), monitor(s), the needs of the administration of the educational, the needs of the Educational Content providers in a broad sense ; Content (Knowledge) databank the needs of the Content Manager of the technical system (System to manage Content, Access and Services). The technical architecture is part of the books of specification from the bottom to top of the system. This architecture define the following parts: 1) The trainee / learner workstation, 2) The Teacher / Trainer / Tutor Workstation, 3) The local network infrastructure (training centre), 4) The personal Internet connexion (at home, at the farm, ...), 5) The Internet connexion for the training centre, 6) The NODES point of access and services (logical architecture), 7) NODE point : Physical implementation and network infrastructures, 8) The NODES central services and infrastructure, 9) The services of the NODES project management as collaborative working environment: the Marratech system, IP videoconference, infrastructure for support and exchange information.