

e-learning Portal@Austria:

The innovative platform for education, science and culture in the Knowledge Society

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Abstract: With the action plan 'e-Europe 2002', approved at the EU Summit in Feira Portugal in the year 2000, the EU wishes to equip all citizens for life in the age of knowledge societies. Austria is translating the objectives of the EU action plan into practical actions through its e-Fit Austria programme. e-Fit Austria is seen as a platform for numerous initiatives and projects dealing with future-oriented topics in education, science and culture.

One important focus of e-Fit Austria is the realisation of an Austrian e-learning Portal. This e-learning Portal@Austria has been designed as a platform for IT initiatives and IT projects dealing with new possibilities for teaching, learning and the conveyance of knowledge in the areas of education, science and culture. It unites all educational institutions in Austria and has started to offer quality learning contents and multimedia education services.

Key words: e-learning Portal, portal authentication with chipcards, learning management system, community building, e-teaching

1. INTRODUCTION

The European Community aims to prepare all citizens for life and work in the information and knowledge society – through the Concept of 'eEurope 2002'. In Austria, these educational aims are pursued through the programme e-Fit Austria.

e-Fit Austria is a programme platform of the Ministry of Education for the expansion of future orientated IT projects in Austria. With funds from the 'computer billion', e-Fit Austria encourages and supports projects in the areas of e-Education, e-Science and e-Culture.

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Through basic and further training e-Fit Austria wants to provide all people with the skills required to use the new information and communication technologies for their personal lives for common well-being in an optimum and responsible manner.

Internet and multimedia technologies should support the classical basic skills of reading, writing and numeracy. Successful use of the new and web-based media in education requires adequate support conditions as well as a modern and efficient infrastructure. To reach these objectives the major goals in this area are the improvement of the ICT infrastructure in schools, the expansion of the Austrian educational network, and at the highest priority, to set-up an Austrian e-learning Portal.

2. E-LEARNING PORTAL

'Life-long Learning' is a basis for success in the information and knowledge society. Learning for the future focuses on the requirements of learner-centred education and an individual learning situation. The Austrian e-learning Portal (Available at www.bildung.at) is a modern system for learning, education and orientation. It represents the Austrian-wide education network and supports many e-learning communities. It is also a frame portal for all important and relevant educational websites and subportals (for example, www.schule.at). The e-learning Portal comprises:

- all education services in Austria.
- certified educational programmes for all fields of education.
- a platform for all educational initiatives.
- a development forum for e-learning programmes.
- the integrated use of learning management platforms.
- multiple education programmes.
- a focus on European and international standards.
- personalised access to education services and programmes.
- access for all Austrian users.

The e-learning Portal was placed on-line in November 2001 in a first version. The technical completion of the portal is expected in 2003. This portal will be a virtual platform for all initiatives concerned with learning and teaching – including everything that makes e-learning innovative, thrilling and dynamic.

3. PORTAL ARCHITECTURE AND COMPONENTS

The underlying architecture of the Austrian e-learning Portal is component-based, and is designed as a frame portal for all existing and newly developed educational sub-portals in Austria. The core components of this portal architecture are a community environment, a security and authentication layer and some learning management systems to support the different educational levels.

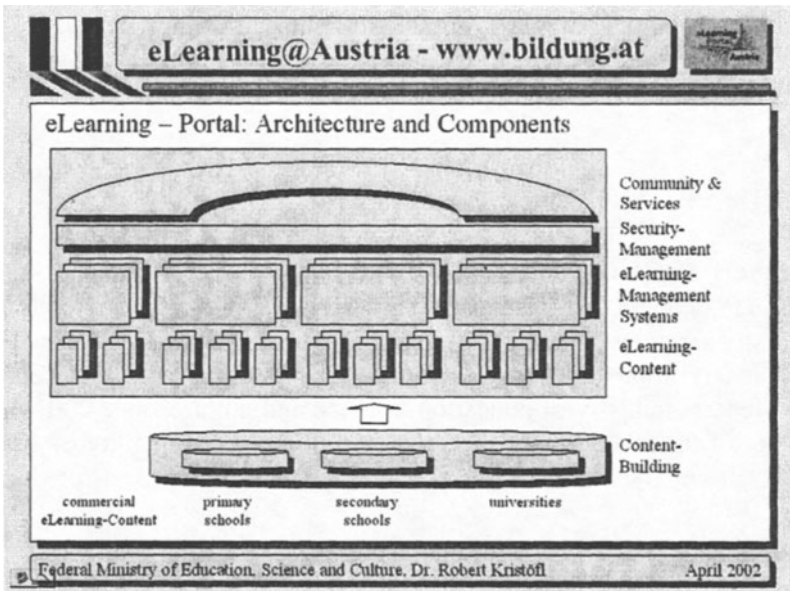


Figure 1. Portal architecture and components

Last year 140 learning platforms were evaluated worldwide. Different technological and didactical criteria supported an objective and public selection procedure (see www.virtual-learning.at). This year the 16 selected e-learning platforms will be tested by different e-learning projects. These projects will be developed in schools, universities and in some life-long learning institutions.

An important pre-requisite during the content implementation process is the use of standards and modelling technologies to retain the realised content module platform as independent and reusable by other learning platforms. Detailed development documentation should also be available as guidance for further e-learning projects. An important goal of this usability test is, after the selection of three to five learning management systems, their integration into the e-learning Portal.

One of the most important aspects of this portal design is to offer freely accessible e-learning contents in a bundle and in web-based form from one single address which can be registered. The personalised and secure access to this e-learning content will be realised by chipcards with an electronic signature for schools and universities. An Austrian-wide meta-directory will keep all the necessary information about access-rights and privileges for every supported target group.

Finally, a content building environment will support efficient and qualitative content creation. To reach this goal some national e-Teaching competence centres have been established. Such a complementary initiative is an absolute pre-requisite to be able to use at an optimum all the possible didactical potential in this dynamically developing area of e-learning.

BIOGRAPHY

Robert Kristöfl, Dipl.-Ing., Dr.techn. was born in Villach Austria in 1957. He studied information technology from 1975 to 1981, was a university assistant from 1982 to 1988, the head of application development in the federal ministry of science and research, head of the ICT department in the federal ministry of education, science and culture since 2001, and is a member of the task group e-Fit Austria with the responsibility of setting up the Austrian e-learning Portal and content development environment.