

Teaching the Digital Natives: Austrian Best Practice Projects

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Abstract:

The following three projects promote e-Learning in Austrian schools and stimulate the change to student centred and collaborative learning and teaching. These projects bring teachers closer to learning habits of the "digital natives" and prepare our students for live long learning.

1 eLSA – eLearning in daily school business

The project was designed as a pilot project for schools for the age between 10-14 years in all nine Austrian provinces. In the beginning the project was only planned for grammar schools, later secondary schools followed. Teachers in grammar schools automatically implemented the ideas of eLearning in their classes for elder students as well. (<http://elsa.schule.at>)

Teachers try to implement E-teaching and E-learning in the everyday teaching situation by offering the students E-learning sequences in very different and creative variations.

As a common communication and working platform we started with "blackboard ®", now we use "„moodle®" and other eLearning-platforms and Social Software Products, commonly referred to as web 2.0.

There has been a evaluation (University of Innsbruck) to see the progress of the projects and there were several case studies in addition. (<http://elsa.schule.at/evaluation-ergebnisse/schratz-kurzbericht.htm>)

Today about 65 Austrian Schools (secondary and grammar schools) are participating the eLSA Project, even if there is no more financial stimulation as it has been in the beginning. The number of schools is still increasing.

In the following we want to show you results from our experiences, found after the beginning years of implementation. We want to show, how students and teachers could benefit and what we learned from these experiences.

1.1 Benefits for students

In the beginning, it was necessary to train students' IT skills in order to make them able to participate successfully in the eLSA programme.

Today we see that students up to 15 years of age can be considered as being "digital natives", IT courses are today only necessary to assure same level of skills within the class and to compensate social differences in the sense of e-Exclusion.

In urban areas we see students that have Internet access at home at a large percentage, therefore IT infrastructure at school is not the key factor for successful eLearning initiatives. In the future, students will bring their own infrastructure (Laptops and PDAs), schools only have to guarantee stable internet access via wireless LANs.

For eLSA students it has become normal to be able to have access to their learning space regardless time or space. Nevertheless, students did not become repleted by the still growing number of eLearning sequences. Reason for that is the increasing quality of teaching and learning, the variation of didactical sequences and variation in style and scenarios. This assures that different learning types get offers on an individual level.

The better teachers are getting trained, the more they are able to develop their students as well on an individual bases.

Students furthermore like the idea of opening up their classrooms to a virtual world and interact with others in other countries or cities.

1.2 Benefits for teachers

One of the goals still being followed is to train teachers on a technological and didactical level. Those trainings are accepted more or less intensively (see ebuddy project).

eLearning as implemented in eLSA is fostering the schools organizational development. New organizational arrangements can be implemented and those work for the school as whole – not only for eLearning activities.

Traditional educational system is only very slowly changing; new didactical approaches only very slowly are getting implemented. eLearning is a possibility to change not only “homework” – phases, but also traditional face-2-face education.

Schools active in the eLSA programme undertake the goal to let all their teachers get in contact with eLearning in the first three years. In the beginning this goal was seen as an impossible target, but after the first two years it has become visible that it will be possible to reach this goal! Teachers get more and more “infected by the virus eLearning” and this infections spreads throughout the whole school. As well as pressure by parents and students themselves help to implement this goal.

More and more eLearning is getting implemented in teachers training programmes. This includes the basis training at university, as well as vocational trainings.

1.3 Next steps in eLSA

For an eLSA School, the project is not necessarily finished after three years. Some Austrian schools are now in their 5th year of implementation. Those schools are now able to acquire a seal of approval, as long as they are continuously progressing in their work. This includes new software tools (e.g web 2.0), international cooperation's or coaching a partner-school. Those schools are called “eLSA-advanced”.

ELSA is setting each year new goals that should be achieved:

- Increasing number of eLSA schools
- Increasing number of secondary schools

- Networking with other schools and universities (grammar schools, A-level classes, universities)
- Professional eLearning skills for teachers (e.g being able to work with different software solutions, being able to adapt own didactical approach to new technological possibilities)
- Introduction of new skills and methods, new tools or higher variations of tools (ePortfolio, Podcasts, Blogs, Video)

2 eBuddy – a new form of training teachers

2.1 What do we mean by “eBuddy”?

Austrian schools use a trainings system, called eBuddy or eCoaching, that meets the following goals:

- Teachers, who are not yet very experienced in using new technologies, such as computers, internet, video, audio... are getting trained on-the-job by more experienced colleagues
- Teachers get more confident in using new technologies or new technological tools
- Increase the quality of teaching

The idea for e-buddy was created at the ministry for education and is driven by the lack of technological skills among Austrian teachers a few years ago. (<http://ecoaching.schule.at/>)

Different forms are being offered:

1:1 support or eBuddy: one experienced teacher is supporting one less experienced colleague. The less experienced teacher defines the topics of this support; whereas the technique of support is defined by the more experienced one. This might include visits to the classrooms or web-communication; it might include software training, or just some new ideas for teaching.

This form of training is well accepted, since less experienced teachers get easy support and those giving the support get paid on a small scale for giving this support. One of the results is quite often; that those teachers start new projects together, some of those interdisciplinary.

At the moment technological support is mainly given, didactical support is yet not very often asked. This will definitely change, when more teachers have better technological skills.

eTutor and eTrainer work with larger groups of colleagues. etutors work with a group of 5 over 16 hours minimum, etrainers work with 16 and focus on interdisciplinary teaching.

All training teachers work at their home school. Therefore this programme develops the school as a whole and works towards the goal of becoming a “learning organization”.

2.2. Lessons learned

Mainly elderly teachers need and accept this kind of support.

eLearning can only change teaching at a school, if the elder staff is getting to know its potential and possibilities.

Normal classroom teaching is usually also being affected, when a teacher is getting involved with new didactical aspects of teaching. In other words – what they learn for teaching eLearning affects traditional classroom teaching without further input.

The ministry sees that the costs of € 900.000 for this training programme for two years as very well invested money.

The demand for this training programme is still very high, although it is not yet guaranteed that the programme can be continued due to financial reasons.

3 Edumoodle – a central service for schools

3.1 A Learning Platform Service for Austrian Schools and Training Institutions

The Austrian ministry for education is following with the edumoodle-project not only an Austrian strategy (e-fit), but also a European recommendation for developing new services in educational system. It is being financed by an extra budget in order to bring innovation into the educational system and is developed on different levels. (

<http://edumoodle.schule.at/moodle/>)

Edumoodle is offering a possibility to use a „moodle®” -LMS system for schools or training institution with some specialities:

- Schools or training institution can get a free access to „moodle®” , the institution can get their own “instance”, where they act as if it was an individual server. Only their students and teachers have access to this “instance”. This offers a feeling of cosiness and overview.
- 24h support (as well as during vacations and weekends), which has been a big problem for school based „moodle®” servers at schools in the past. Latest releases are being installed automatically.
- Various training activities and support are offered by partner institutions, such as pedagogical institutes
- New tools are being developed for edumoodle
- Networking with other organizations and public relations

The project was outlined for 40 instances, at the moment 400 instances are being registered.

3.2 Lessons learned

- Main cost savings from a national economic point of views can be found in the downsizing the administrative staff to a central staff.
- eLearning teachers get less dependant on their IT-Teachers and IT-staff, they can organize an “instance” just by themselves.
- International and national projects can be realized more easily, since no licences costs has to be paid, which were difficult on an international level in the past
- The quality of service has been dramatically increased

The project is ending 2007, but a durable solution is being developed. It is to be expected that edumoodle can be used in the future.

4 Conclusions

It has been an Austrian strategy to strengthen eLearning in the beginning by using money as a motivation and offer personalized training possibilities, as well as a well serviced „moodle®” platform for every school. This strategy can be seen as been very successful. eLearning has become more and more “usual business”, not only for a small number of schools, but a large number of different players. We will succeed this way also in the future.

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