Austria

BRG/BORG Landeck

This academic secondary school (students aged 10-18) participates in several projects to pilot ICT use in the classroom. The school uses electronic portfolios and a learning platform for open learning, which provides students with training materials to work at home, and allows communication and coordination during cross-curricular and inter-institutional projects. Students regularly participate in a variety of contests. Extra-curricular activities include the production of short films and cartoons in the school's own studio.

Main Focus of Innovation: RESOURCES, CONTENT, ORGANISATION

Other Keywords: technology-rich

General Information

Name of the ILE: BRG/BORG Landeck

Location/Address: Römerstrasse 14

Website: www.brg-landeck.tsn.at

ILE submitted by: Province School Board for Tirol

Rationale

Why do you suggest that it should be included in the project? How does it respond to 21st century learning challenges?

Modern teaching programme

In their very first year, students receive a first grounding on using the computer, emails and our learning platform. In the lower cycle, IT is taught 2–5 hours per week as a compulsory subject under school autonomy provisions, depending on the selected focus. In the lower cycle, we run a focus on ICT, which is selected by approx. two thirds of all students, as well as a focus on music/creativity, which is selected by approx. one third of all students. Under the ICT focus, students attain the ECDL level already in the lower cycle. In the music/creativity branch, students are required to develop the music projects they are working on to performance-level maturity and then actually perform these at internal and public events.

In recent years, a large number of students (up to 100) have enrolled for the drama group and carried out large-scale projects. They have been able to convince and impress their audiences by their self-confident presentation and acting skills in spectacular and professional public theatre performances, which our media group produced as a film.

In the school's own studio, the media team produces short films, documentaries and interviews which are made available to the local TV station. Even live events have been broadcast over the internet, such as e.g. the 50-year anniversary events of the Tyrolese eLSA day 2007 held at the school in Landeck.

In an interdisciplinary cooperation with music, the cartoon group produced a number of award-winning cartoons and animated films in their cartoon film studio, all of which can be admired on our homepage and have even been broadcast on Japanese and Bavarian TV.

Since the school year 2008/09, a separate group has been devoting itself to robotics and is preparing for the Robocup 2009. Our chess group has won several regional and national awards.

Modern facilities

Every classroom has access to the internet and to the school's intranet. In addition to traditional teaching aids, every room has a stationary PC, a video projector and a large projection screen. The school has a modern server structure (Windows 2008 and Linux Ubuntu Hardy Heron Server). The website won the second prize at the Cyberschool award and is the heart of our media strategy as the school's window to the world and communication medium, linked to our Moodle learning platform, to the Web 2.0 Mahary platform with blog and e-portfolio. The school has three computer rooms with a total of 70 workstations that are available for teachers and students all day. Another computer room with 25 workstations is reserved exclusively for subjects in which school tests are written on the computer. As of the school year 2009/10, additional hotspots will be installed for the new laptop classes that will start in the next school year.

Participation in projects

Our school is one of four Austrian schools which have participated in the eLSA project since its launch in the school year 2002/03. It is among the first two schools in Austria to be certified as an eLSA school.

http://www.brg-landeck.tsn.at/schule/elsa1.php

Since the school year 2007/08 our school has also been taking part in the ELC project (eCluster), and in the school year 2008/09 we are taking part in the INSPIRE project of the Austrian Federal Ministry of Education. This project is to test digital learning aids in science teaching. http://de.inspire.eun.org/index.php/Hauptseite

The BRG Landeck has participated in Comenius projects a number of times, and will be filing a project application for a new Comenius project next school year.

Participation in contests: some examples (documented on the school website)

http://www.brg-landeck.tsn.at/projekte/index.php?pg=1

Our students have successfully taken part in several competitions in the field of new media.

In the recent national "Show it" competitions on the use of computers in arts education, students of the school won with flying colours: the music video of form 3c "The rap-hen" won the first prize in the school year 2007/08 as well as the prize for the highest jury rating. In the category animation (upper cycle), Stefan Prantauer (form 6a) and his team won the 3rd prize with a Lego film called "Treasure Island".

At the international festival for student film groups in Oberstorf from 20-22 Nov 2008, the animated cartoon "The Legend of Osiris and Isis" that was produced last school year in professor Gerd Pircher's arts classes of form 6B 2007/2008 won an award and was even broadcast on Bavarian TV on 20 Nov 2008.

20 Austrian schools from 7 provinces with a total of 1113 students took part in the "Computer beaver" project trying to solve tricky questions from the areas of algorithmic thinking, information mapping, use of computer systems, structures, patterns, sets, riddles, information technology and society. In the "Benjamin" group (grade 5-8), Christina Reinalter of form 4C won the first place in Austria, scoring 53.3 out of 60 points. In the "senior" group (grade 11-13), Simon Albertini of form 8A came fourth, scoring 46.7 points.

In early 2006, the flash film Comic Life was submitted for "U19 Freestyle Computing", Austria's leading computer contest for adolescents within the framework of the international Prix Ars Electronica. Form 3C ("the ThreeCees") won one out of ten special mentions. Comic Life was selected as one of the best fifteen projects out of a total of 700 submitted contributions and even made it to Japanese TV.

Stefan Ostermann received an award by the Austrian Physics Society for his specialised pre-examination research paper "Applied mechanics – the example of different sports".

Martin Krautschneider documented nanotechnology experiments in his chemistry research paper for which he won the first prize of the Federal Ministry of Education, Arts and Culture on 24 May 2007 for his 40-page paper which was qualified as the best Austrian research paper in chemistry. This paper was one of the results of the nano-kit. This nano-kit was developed as part of the IMST^3 project at our school and is now being used all over Austria and abroad.

School-specific focuses

http://www.brg-landeck.tsn.at/schule/schulformen.php

We offer a focus on ICT in the lower cycle (5 hours from year 6 to year 8, and a focus on music/creativity (also with 2 hours of IT in year 7 and 8).

In the upper cycle of the Realgymnasium, students may choose between a science focus with laboratory classes in chemistry, biology, physics and mathematics, and IT as a mandatory subject from year 9-12, and a language focus with an additional foreign language (Italian or Spanish).These focuses are practice-driven, with several excursions and projects on the agenda.

See also the project diary of a science excursion to France http://www.brg-landeck.tsn.at/news/2008/Tagebuch_Frankreich.pdf or the outcome of a trip to Rome http://www.brg-landeck.tsn.at/projekte/2008/rom/layout/startseite.html.

School events

One example is the eLSA Day Tirol 2007 that was organised by the school and broadcast live on the internet. This event also served as a model event for the Future Learning Day of the Tirol University College of Teacher Education held on 12/03/2009 in Innsbruck.

http://www.brg-landeck.tsn.at/elsa/elsday2007/index.html

htt://kb.brg-landeck.tsn.at/gallery2/main.php?g2_itemld=24&g2_page =2

Evidence

Is there any evidence or indications showing that this initiative achieves the outcomes that it is aiming at?

External evaluation within the framework of the eLSA project by the University of Innsbruck:

The first four eLSA project schools were evaluated by Dr. Michael Schratz and Dr. Bernhard Weiser from the University of Innsbruck. See also the documentation on the eLSA website.

http://elsa20.schule-at/qualitaetssicherung/evaluierungen.html

External evaluation 2007 to obtain the eLSA certificate

An external evaluation was carried out in December 2005 by Birgitta Loucky-Reisner within the framework of School Portraits Austria. It includes a description of the school's development up to the year 2005.
http://www.brg-landeck.tsn.at/elsa/schoolportraits.pdf

Internal evaluation

In this school year, internal evaluation according to the Q.I.S. standard was the topic of the teacher conference.

Learning Aims / Intended Learning Outcomes of the ILE

What are the core learning aims and which knowledge, skills or attitudes are to be acquired? (These may include outcomes related to learners' social, interpersonal, or meta-cognitive development)

Computer and internet have become standard tools in all walks of life and their use should become second nature to all teachers and students. Our website offers a wide range of applications, from learning platform, email, ePortfolio and teaching management with room planning to substitution planning and always up-to-date information. Since we have a computer room with enough space and facilities for an entire class, training courses and internet research or school tests written on the computer can be held without problem.

- Participation in the BIFIE test in mathematics
- Participation in the school experiment on the standardised matriculation exam in English (four skills matriculation exam)
- Participation in the Salzburg Reading Screening in the lower cycle forms in German to improve reading skills and encourage student motivation to read.

Learners

Which group(s) of learners is it aiming at? Who is eligible to take part? How many learners are there? What are their ages?

The school caters to learners aged 10-18 who were assessed "very good" or "good" at primary school. In the lower cycle, these pupils benefit from the learning platform and modern, state-of-the art teaching in the eLSA project, regardless of which branch they have opted for (ICT or music/creativity).

For every primary school pupil in the surroundings, we organise a school rally each year where they can find out about our school in a playful manner.

In the upper cycle of the *Realgymnasium*, we run a science focus and a language focus for students, in which the eLSA concept is followed up on in the eCluster. In addition, we will be offering laptop classes as of grade nine, starting in the school year 2009/10.

In the upper cycle of the *Realgymnasium*, we run a separate focus for general secondary school leavers in our district which includes project-oriented work as a subject. Here, students get a first grounding in computer literacy, new and traditional media, photography and film, so that they can build on these skills in the following years to develop and present projects from various disciplines. This training route also offers practical socio-economic training that includes i.a. a comprehensive first-aid course.

We inform general secondary school graduates on special visits to their schools, where we present the advantages of our modern school, and on an open day, where we give an insight into our rich school life to interested visitors (students and parents).

Our innovative learning environment is open to all students, including the website, the learning platform and the ePortfolio.

Facilitators

Who are the teachers/facilitators? Who are the leaders? What are their professional backgrounds? What are their roles?

Many teachers have acquired the required knowledge in ECDL and INTEL courses. Many have been and are learning how to use the computer and the new media in a number of school-specific INSET events and through the eBuddys system (Hot Potatoes, exelearning, Moodle, Audacity...)

Not only the eLSA coordinator of Tirol, but also the head of the IT working group comes from our school. In ICT and e-learning, we are certainly a ground-breaking pioneer in Tirol.

Organization of the ILE

How is learning organised? How do learners and facilitators interact? What kind of pedagogy do they follow? What curriculum is used?

Some teachers facilitate the learning process on the learning platform. The learning platform offers training material for students to practice at home. The learning platform also helps to implement or expand open-learning elements. Students who do not have internet or PC access at home (their number is very small) are allowed to access our computer rooms outside of teaching hours.
The benefit of the learning platform becomes most obvious in cross-curricular and inter-institutional projects. One good example is the disaster project of the Tyrolese eLSA schools that was run on the Moodle platform.

http://www.brg-landeck.tsn.at/projekte/websites/2006/katastrophen

Another example is a current interdisciplinary project in Biology and English on the "Forest" that is being carried out in cooperation with the higher-level academic secondary school *Schopenhauserstrasse* in Vienna. In this project, virtually all communication, coordination and presentations are run on Moodle.
The learning platform has also proven its usefulness in a number of Comenius projects.

Learning Context

In which context does learning take place? What does the physical learning environment look like? Are community resources used to facilitate learning and how?

All of the school's students benefit from a modern physical learning environment. Every classroom is equipped with a PC with internet access and video projector. Moreover, there are separate computer rooms, at least one of which is always unoccupied and can be reserved by teachers via the room occupancy system on the website. Students may spend free periods in common rooms they have designed themselves, where they can rest or do their homework.

The school offers many optional exercises as recreation, such as sports activities (judo, volley ball, football) in our modern gymnasiums, sports fields and beach volley ball pitch, which won us – this year again – the Tyrolean Sports Quality Award in silver. Other extracurricular activities include: robotics, drama, media studies (film), cartoon and animated films, the buddy team or our chess group, which carried off several prizes in recent years at regional and national contests. For these optional exercises, students and teachers may use an animation and cartoon film studio, a film editing shop for the media group, a photo lab, and a chess room equipped with PCs.

History of ILE

Who initiated it? For what reasons was it started and with what purpose? Have these changed since?

ICT has had a long tradition at our school and started with the introduction of mandatory ICT classes in the lower cycle. However, we still offer a choice of two focuses in the lower cycle. As of the school year 2002/03, ICT was expanded to almost all subjects in the wake of our participation in the eLSA project. As a logical consequence, we involved ourselves in the eCluster in the school year 2007/08. This is a highly dynamic process in which the school is continuously developing and exploring new opportunities and chances. As a next step we have planned to set up laptop classes with the beginning of the next school year.

Funding of the ILE

How is it funded?

Our school is a public academic secondary school and does not receive any special financial support. Participation in different projects (eLSA, eCluster, INSPIRE etc.) makes us eligible for special funding. One of the major tasks of the school head is to raise additional funds.

Learning Outcomes

What are the learning outcomes achieved by the ILE, including academic, social, interpersonal and meta-cognitive outcomes? How is learning assessed?

- Participation in BIFIE standard surveys (mathematics)
- Salzburg Reading Screening
- Pilot project on the standardised matriculation exam in English (four skills)

Documentation describing or evaluating the ILE

Is there documentation on this learning environment? Is there a website? Films? Research reports or evaluations? Other forms of documentation? (please supply references or links)

Our website is the school's main documentation platform. It contains all relevant links, project reports and information. In addition, we generally publish a written annual report and various folders and brochures on the focus areas and school types offered.