Observation Case Studies

Austria
Introduction

With the participation of 15 partners, the two-year Living Schools Lab project promoted a whole school approach to ICT use, scaling up best practices in the use of ICT between schools with varying levels of technological proficiency. Visits to the project’s Advanced Schools in 12 countries were carried out to observe school’s best practices leading to a report and recommendations on developing and mainstreaming of whole school approaches to ICT.

In addition to this, twelve case studies present the evidence gathered as part of the school observation visits to two Advanced Schools in each of the 12 countries: Austria, Belgium, Cyprus, Czech Republic, Finland, France, Ireland, Italy, Lithuania, Norway, Portugal, and the United Kingdom. Alongside the case studies, each Link Observation Visit was detailed in a blog post, along with useful links and practical ideas to try in the classroom: [http://lsl.eun.org/observation-visits](http://lsl.eun.org/observation-visits).

A framework of eight main questions was used to develop the case studies:

1. What types of technologies and resources are available in the Advanced Schools?
2. Are there recent national initiatives that have had an impact upon whole school development of ICT?
3. Who leads the decisions about the development of ICT?
4. What types of training and professional development are available to teachers?
5. How is ICT being used in different subjects?
6. What kinds of research and development are the teachers engaged with?
7. Are the Advanced Schools engaged in any partnerships or networks?
8. Are there particular areas that could be mainstreamed or replicated?

All case studies contain information that has been reviewed by National Co-ordinators. The studies outline evidence gathered as part of the Link Observation Visits and throughout the Living Schools Lab project. Further information is available on each school website about the individual school, although this may be in the home language.

All of the school visits were undertaken by Diana Bannister MBE, University of Wolverhampton. These case studies should be read in conjunction with the project’s Link Observation Visits final report available at [http://fcl.eun.org/lsl](http://fcl.eun.org/lsl).
**Observation Case Studies: Austria**

January 2014

### Volksschule Gutenberg an der Raabklaam | Austria

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<td>Number of students</td>
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<td>Age group of students</td>
<td>6-11 years</td>
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<tr>
<td>Name of principal</td>
<td>Manfred Fleck</td>
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<tr>
<td>LSL project Lead Teacher</td>
<td>Katharina Fasching-Suzzi</td>
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### Salzburg Tourismusschulen | Austria

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<tr>
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<tr>
<td>Age group of students</td>
<td>14-19 years</td>
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<td>Name of principal</td>
<td>Maria Weisinger</td>
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<td>LSL project Lead Teacher</td>
<td>Silvia Listberger</td>
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1. What types of technologies and resources are available in the Advanced Schools?

The primary school is a small school with only five teachers. All teachers have access to a personal laptop to prepare and conduct their lessons; they can use the laptop at home as well. The school has a WiFi connection in all classrooms and the staffroom available for everyone. There are six to eight computers in each classroom. All computers have an Internet connection and are connected to the school network. On the network there are files for the teachers and students to share. Three classrooms have access to interactive whiteboards. In the other classrooms, there is a computer with a data projector. In addition there are ten iPads available across the school for teachers to reserve and use with the students. The school uses a Moodle platform for staff and students. In the primary curriculum, IT is not a separate subject, but schools are expected to use technologies across all areas of the curriculum. Each student is equipped with a USB stick to store and transport files between home and school.

The secondary school has developed a standard classroom provision to ensure that all teachers know what is available within each teaching room. Most classrooms have interactive whiteboards, or at least the provision of PC and data projector. At the side of each interactive whiteboard is a dry wipeboard. The school has a wireless network throughout. The school has also been operating with notebook classes for more than ten years. Students are allowed to bring their own device into lessons for learning including mobile phones and tablets.

The learning management system that has been adopted by the secondary school is lms.at; this has been developed by the regional education authority in Burgenland and is in use in Lower Austria. It has been implemented in this school over the last two years. The lms.at platform provides a communication system for the school to enable the teacher to discuss learning with the student beyond the formal lesson time. The electronic register is directly linked with the calendar and the different levels of detail enable the teacher to be able to ascertain where a particular student should be. The school believes that this means teachers can save resources consistently and the students know where to find materials. Students can access course materials away from the school, and this is particularly important because a number of students spend time away from the school site as part of their course. Some teachers have started to develop their own e-books within the system. Whilst lms.at is targeted at secondary schools, there is a similar system called SKOOLY² for the primary schools.

2. Are there national initiatives that have had an impact upon whole school development of ICT?

The Austrian Federal Ministry of Education and Women’s Affairs (Bundesministerium für Bildung und Frauen – BMBF) has eFi2¹ as a national initiative, which covers all areas integrating ICT as tool into education, culture and arts. There are also other initiatives such as EDUGroup⁴ and TiBS.¹ In addition school clusters have been established like eLSA⁶ (mostly the secondary one grades), eLearning Cluster⁷ (mostly vocational education) and ENIS Austria⁸ which covers all grades and type of schools.

Another initiative, which includes primary schools into mobile media is “mobile Lernbegleiter” (mobile learning tutors), a one-to-one project with primary school pupils and mentoring by higher grade students (secondary one). Both Advanced Schools in the LSL project belong to the European Network of Innovative Schools⁹ (ENIS) in Austria. This is a growing national network of schools that have achieved a particular status at a national level in Austria for their provision and use of ICT. The schools have to provide evidence
of the provision of appropriate equipment in school by meeting a defined list of criteria.

Austria is made up of nine federal states which differ greatly. The lead teacher said that “Schools are supported locally and there is an expectation of 15 hours of Continuing Professional Development (CPD) offered by teacher training institutes. There is an expectation for all schools to use modern multimedia.”

The learning management system lms.at provides a common platform for schools. It makes information highly visible across the school and the headteacher believes that it becomes easier to maintain the profiles and evidence of student achievement.

There is an Austrian wide initiative called COOL (Cooperative Open Learning): a specific number of teachers attend the course for the school to be certified as a COOL school. There is a similar scheme that looks directly at digital competencies called e-COOL; this is largely focussed on encouraging digital assignment of work, electronic feedback and collating evidence within eportfolios for all students.

Within the next years the ICT infrastructure should be enhanced to offer better Internet access. Next year 16% of all government owned schools should get an enhanced WLAN network in their schools in order to offer better Internet access to teachers and students. An education cloud will be offered as an additional service (tests are running in a few schools to test the access abilities).

3. Who leads the decisions about the development of ICT?

The federal Ministry of Education has an ICT department that provides advice and support to schools. School development is divided into two sectors:

- Government owned schools (gymnasiums and vocational education schools)
- Regional owned schools – on regional basis by county, but funded on municipal level (primary and secondary one schools primarily)

School development is therefore dependent on the funding of ICT infrastructure (the Ministry is only responsible for the government owned schools)

Schools are encouraged to belong to the ENIS network to show that they are committed to developing the use of technology for staff and students.

4. What types of training and professional development are available to teachers?

The lead teacher in Austria described training courses as well organised and of good quality. Teachers are expected to demonstrate 15 hours of CPD per year across all subjects. However, the headteacher believes that there is less funding available; some of the ICT courses are technical and do not cover the pedagogical aspects. Teachers want courses that are much more practical: “Teachers want things for now and the next two days,” he commented. Sometimes the courses are in free time and on Saturdays and this can be a barrier to enabling some teachers to attend.

As a lead school, one of the best kinds of training that the head benefits from is the opportunity to work with other colleagues. In Austria there is a professional learning network called ENIS which is primarily for secondary schools, but includes some primary schools. The headteacher says “Colleagues begin to understand how to broaden their horizons by having the opportunity to network with other schools.”

Within the school there are workshops on different ICT topics. Teachers take part in different seminars

10 www.cooltrainers.at
at the Teachers’ University. In recent years, there have been a lot of courses for all teachers and everyone has been encouraged to participate. The headteacher has delivered training in the use of ICT at the University for trainee teachers.

The learning management system lms.at was implemented and the training was paid for by the pedagogical high school and delivered to all staff. The headteacher tries to ensure that all staff have access to appropriate training as a whole team.

The headteacher directs teachers to go on specific courses, but equally, there are staff who make requests to attend courses. The school has access to three pedagogical experts to provide ICT training.

The teacher training institutes offer ICT related training to all teachers, in some cases (dependent on funding) international training is available for teachers.

Online Campus-Virtuelle PH2 supports teacher training with eLectures for all teachers in Austria.

5. How is ICT being used in different subjects?

According to the Austrian curricula regulations ICT has to be integrated in all grades and subjects; there are descriptions in the curriculum for the different grades.

The lead teacher from the primary school in Austria says that students are able be self-paced within their learning at least one day a week. Each classroom has ten or twelve different “stations” which operate freely with different learning activities. The student is able to work through them at his or her own pace. When the school put this system into operation, some students automatically chose to use the computer first; however, the children realised that they have to do all of the activities and only use the technology when it is appropriate.

Teachers have created a significant number of files for the interactive whiteboard. The teacher uses these with the whole class, but small groups work on the IWB during the self-paced activities. All staff have been trained to use programs such as MS Photo Story and Audacity as these can be used for different subjects.

In the secondary school, the students bring their own device to all lessons. Students use a range of devices including tablets, notebooks or laptops. The students have a “student plan” online and this gives details of their timetable. Students are taught about safe use of the Internet.

Technology is used for all communication across the school and teachers are encouraged to use resources online with less dependence on textbooks. There are examples of teachers creating interactive ebooks and these can be embedded within the learning management system. The teachers recognise that whilst it can take a considerable amount of time to create such resources, they can be changed and adapted for individual students. It means that the teacher can edit or update resources easily. At present, resources are created by teachers individually and the school has begun to identify how they could work together to produce digital content.

There is a class chat system within lms.at and the teacher can send messages to each student and the students can communicate with each other.

The use of the learning management system means that teachers can assign tasks to individual students for all different subjects. The teacher can create a library of resources for each course; this serves as a guide to the students.

In the secondary school, the staff and students are using technology across all areas of curriculum and administration.

The school is using Sprongo3 as a video platform; this enables the students to upload video materials to review their performance and reflect on their progress. This is particularly helpful for sports activities.
6. **What kinds of research and development are the teachers engaged with?**

At a national level, the Austrian headteacher raised the importance of being engaged with research in the ENIS network. The leading teacher confirmed that the school is involved with Comenius projects involving contact with teachers from 6-7 countries and school visits from other countries.

As the LSL project has developed, the Ministry of Education has actively encouraged teachers to be involved in “synergy meetings” where teachers share best practice and findings from within different ICT projects across the schools. This allows for discussion across the schools, and enables a continuous dialogue about real practice between the schools and the Ministry. Workshops are open for all grades and different types.

Teachers are engaged in evaluation and research in different national (e.g. Danube University research) and international projects (e.g. iTEC4).

7. **Are the Advanced Schools engaged in any or networks?**

The primary school headteacher has worked hard to develop partnerships with the secondary schools. The secondary school has invited the primary school to attend training because there are only a small number of additional staff. The school has been able to work with other schools to develop partnerships and has been successful with Comenius projects. The headteacher believes that it is not common practice in Austria for primary schools to work with commercial partners. This is because the schools work with local distributors or suppliers of equipment.

The secondary school is a private school and is one of four schools in Salzburg owned by the Chamber of Commerce. The Chamber of Commerce are responsible for the provision of technology within the school. The teachers are employed by the Ministry of Education. All business partnerships are therefore developed through the school board of management. The school benefits from belonging to an international network of tourism schools; this gives opportunities for the leaders to work together and share examples of best practice.
8. Are there particular areas that could be mainstreamed or replicated?

- The use of a learning management system enables the school to be consistent and transparent with the access to learning resources for all staff and students. This has potential to be extended further to encourage staff to share resources and materials both within and beyond the school.

- The secondary school works with a local business to provide work experience for the students. The mentor/co-ordinator is able to update a work experience profile and submit records online.

- The weekly plan allows the primary school students to make decisions about their learning and work at their own pace. This should be a digital resource and connected to the student portfolio.

- The primary school has distributed equipment throughout the school to ensure that each teaching room has access to a range of technologies.
Observation Case Studies

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Author  Diana Bannister MBE
University of Wolverhampton
reviewed by National Co-ordinators for the LSL project

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1040 Brussels
Belgium

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http://fcl.eun.org/lsl