# Innovative Learning Environments (ILE)

### INVENTORY CASE STUDY

# **New Secondary School Europaschule Linz**

# Austria

This secondary school is a pilot school affiliated with a university college of teacher education, and functions both as a centre for practical in-school training of teacher-students and as a school with the objective to offer (and empirically investigate) ideal learning conditions. The school has an emphasis on language learning and international contacts, but students can also choose a science, artistic or media focus. Students learn in flexible heterogeneous groupings, some of which are integrative. Teaching activities aim at ability differentiation and include open teaching during which students work with weekly work schedules. Individual feedback on performance and student behaviour is given in the form of portfolios which include teacher reports and student self-assessments. Based on the feedback, students can prepare a remedial instruction and resources plan with the objective that learning becomes self-managed and intrinsically motivated.

This Innovative Learning Environment case study has been prepared specifically for the OECD/ILE project. Research has been undertaken by Ilse Schrittesser and Sabine Gerhartz from the University of Innsbruck under the supervision of Josef Neumueller from the Federal Ministry for Education, the Arts and Culture of Austria, following the research guidelines of the ILE project.

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# **New Secondary School Europaschule Linz**

Univ.-Prof. Mag. Dr. Ilse Schrittesser & MMag. Sabine Gerhartz

University of Innsbruck Faculty of Education Innrain 52b 6020 Innsbruck Austria

### Abstract

As part of the OECD/CERI project Innovative Learning Environments (ILE), an Austrian research team analysed and evaluated a secondary school for 10- to 14-year-olds in Upper Austria in order to find out whether or not Europaschule Linz offers an innovative and effective approach to learning within the Austrian school system. Document analysis, videography, classroom observation, stimulated recall as well as individual and group interviews were used for data collection. For analysis the team uses a multi-method approach such as thick description, grounded theory and content analysis in order to gain insight into the effects of the learning environment from various perspectives. Europaschule Linz is considered innovative in terms of its customized approach to learning, its gradefree, detailed formative feedback system, its use of a high degree of learner responsibility and collaborative group learning as well as its appreciative and instrumental approach to learner heterogeneity. These innovations are considered to have a potential of transferability to other schools within the Austrian and other school systems.

### Introduction

The case study described in this article forms part of the Austrian approach to the OECD "Innovative Learning Environments" (ILE) project. It refers to a school that is considered innovative within the Austrian school system as its approach to learning is highly individualized. As a consequence it also uses individualized forms of assessment and detailed feedback aiming at deeper understanding of one's progress in learning without making use of grades and therefore allowing students to take over a lot of responsibility for their own and their schoolmates' learning processes. Last but not least students' heterogeneity is seen as a source of learning rather than a reason for tensions in classroom interaction. This is why according to the Austrian research team Europaschule Linz meets most, if not all, of the criteria used to define an ILE in this project.

Dumont and Istance (2010, p.29) conceptualize a learning environment as follows:

"A 'learning environment' [...] is crucially focused on the dynamics and interactions between four dimensions – the **learning** (who?), **teachers and other learning professionals** (with whom?), **content** (learning what?) and **facilities and technologies** (where? with what?). Such dynamics and interactions include the different pedagogical approaches and learning activities in the learning week or term or year."

Accordingly, the present case study focuses on describing how the factors mentioned above influence *the nature and quality of learning* within this ILE.

The Austrian team focused its research interest on studying formal institutionalized learning settings to determine how mainstream schools deal with the challenges they face. The introduction of innovative practices in such institutionalized settings can prove especially challenging to a school and its teachers and is therefore a specifically valuable setting to learn from. In the course of the research project, the Austrian researchers have, however, come to the conclusion that the above quoted concept of the learning environment underestimates the role of the teacher as *the* professional being in charge of designing the learning environment. In the concept of the learning environment as presented by Dumont and Istance all the factors mentioned – teachers, learners, content, resources and technologies - seem to be equally important. The professional responsibility of the teacher becomes thus less central than it is conceived by professionalism research. Therefore, one special focus of the Austrian research interest was laid on how the teacher and also the head teacher conceptualize learning and consequently cultivate the innovative designs of learning environments.

While the standard model of schooling in Austria has a long tradition of stability and relatively limited change, innovative learning environments have to be understood as more flexible environments that redesign the standard model and adapt it to the needs of learners who are born into the rapidly changing societies of the 21<sup>st</sup> century. Innovations in this sense change traditional settings to make learning more meaningful, more rewarding and more effective for the learner.

According to Sawyer (2008, pp. 58f.), effective learning environments share the following characteristics:

"Customised learning. Each child receives a customised learning experience."

Availability of diverse knowledge sources. Learners can acquire knowledge whenever they need it from a variety of sources: books, web sites, and experts around the globe.

Collaborative group learning. Students learn together as they work collaboratively on authentic, inquiry-oriented projects.

Assessment for deeper understanding. Tests should evaluate the students' deeper conceptual understanding, the extent to which their knowledge is integrated, coherent, and contextualised."

Based on Sawyer's criteria mentioned above and against the background of keeping the central role of the teacher in mind, the Austrian research team focused on answering the following questions:

- How is learning organized and which learning opportunities are provided?
- Which aspects can be identified as innovative?
- What can be learned from the history of the ILE?
- What role do collaborative forms of learning play and are they used effectively?
- How is assessment carried out?
- Which aspects in general encourage (or inhibit) learning at both the micro and the school levels?

### Methodological approach

The methodology applied aimed at providing a "thick description" (cf. Geertz 1973, pp. 3-30) of the selected case study. It can be described as the use of mixed methods based on a qualitative approach and encompassing three specific strands: (1) document analysis, (2) interviews with the school principals and teachers, (3) stimulated-recall with teachers, and (4) classroom observation (videotaping of lessons in which researchers sat in and made additional notes).

### A. The aims, nature and history of the learning environment

### **Overview**

The Europaschule Linz is a state secondary school for all children from 5<sup>th</sup> to 8<sup>th</sup> grade and has a total of 430 pupils and 64 teachers. In the 2009/2010 academic year, it had five New Secondary School classes<sup>2</sup>, three of which were integration classes<sup>3</sup>. Europaschule Linz is the only New Secondary School in Upper Austria and, as a result, views itself as a "project school" in terms of heterogeneity and internal differentiation. The school cooperates closely with a nearby teacher training college, which leads to a high level of participation in research projects. Guidelines for modern education are based on the latest research results with regard to methodology and didactics, as well as learner skills, aptitudes and needs.

<sup>&</sup>lt;sup>1</sup> Stimulated-recall was used to access the in-class thinking of the teacher by means of a post-lesson interview. Cf. O'Brien (1993, p. 215.

<sup>&</sup>lt;sup>2</sup> "The objective to be achieved with the New Secondary School model test is a new comprehensive school for all 10 to 14-year-olds, which is open to all pupils who have completed the 4th grade of elementary school. Pupils will be given ample time to discover and to develop their interests and talents preparatory to a well considered continued educational and/or occupational career." (Federal Ministry for Education, Arts and Culture, Austrian Education News 60, Dec. 2009, p. 1).

<sup>&</sup>lt;sup>3</sup> In integration classes, pupils with and without special educational needs learn together.

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Innovation and development have long been considered basic principles at the school. This philosophy led to the previous school board initiating a process in 1991 that abandoned the grouping of students according to ability and introduced a system by which all students are taught all subjects in heterogeneous groups. This process of development and innovation is considered to be an on-going, dynamic process that will result in continuous change. Europaschule Linz views itself as a "role model", i.e. as a school which influences other schools in terms of promoting reform within the school system.

Europaschule Linz takes a combined individualized and holistic approach to education. This results in a focus on individualized teaching and learning methods, as well as an alternative assessment and feedback system – two defining characteristics of an innovative learning environment.

The school's so-called "VIP principle" sums up its comprehensive learning goals for pupils. VIP is an acronym which stands for "Verantwortung" (responsibility), "Intelligenz" (intelligence) and "Persönlichkeit" (personality). Pupils are encouraged to take responsibility for themselves, their own learning process and results, their class and community, as well as the learning environment and habitat as a whole. The school aims to develop their intelligence by considering multiple intelligences, embracing individuality and using innovative means of instruction. Another key aim for all pupils at the Europaschule is the development of a positive perception of the learning process that will in turn be transferred into a positive attitude to lifelong learning. In this context, great importance is given to teaching pupils how to also tolerate frustration and how to deal with failure and disappointment.

The staff of Europaschule Linz also intends to help pupils to develop their personalities by fostering self-competence, social competence and expertise, by enhancing strengths, overcoming weaknesses and encouraging tolerance and solidarity. To achieve these aims, the school awards a prize to individual pupils, groups of pupils or whole classes for special social commitment during a school year.

# Social Context and Development of the Learning Environment

At Europaschule Linz, strong emphasis is placed on establishing the basic requirements which need to be fulfilled to allow meaningful learning to take place. The school considers heterogeneity to be one main factor in this process and therefore focuses on recognizing pupils' individual personalities, learning biographies, preconditions for learning and ways of acquiring knowledge. As a result, the school began its innovation process in 1991 by dispensing with the common practice in Austrian secondary schools of streaming pupils (learners) according to ability. Additionally, the current headteacher made an attempt to introduce even more heterogeneous learner groups in so called integration classes.

However, not everybody appreciated this change from the beginning: Many teachers opposed the idea of integrating pupils with special educational needs as they perceived that this would mean getting "mentally handicapped" in addition to the "many bad pupils" they already had. Consequently, some teachers even asked the current head teacher to leave the school as he seemed to throw the whole system into confusion. Nevertheless, two years later the first integration class was opened. After two more years, the perception of this class had completely changed as integration had turned out to be successful in terms of promoting learning and social competences. In addition, teachers considered their work in and with integration classes as especially rewarding. As a result, additional integration classes were introduced. Today, the common perception in the school team is that the integration classes with their pupils with special educational needs are considered "enriching" for all. The teachers stress the dynamic character of Europaschule Linz and describe the constant development which leads to ongoing improvement. One teacher explains that while people do not necessarily think that everything at the school is alright as it is, they do put a lot of thought into identifying areas for improvement. The teachers perceive their school to be an innovative learning environment that is not hampered by the structures that prevent the implementation of new ideas commonly found in other schools. As one teacher explains: "There is always someone here who will say fine, let's try it that way...".

However, despite the progressive atmosphere, the head teacher mentions the problem of reverting to old habits and perceptions especially in difficult or critical situations as the new approaches have not yet been internalized completely. Therefore, every member of the school team has to "fight a permanent inner fight".

The current issue of school development is the school administration's aim of creating a new structure of time and space in order to establish an all-day school. But the implementation is difficult – the majority of the parents support the idea but most teachers disapprove of the introduction of a totally new system. Again, innovation and development represent a challenge.

Teachers describe the head teacher and the ongoing cooperation with the nearby teacher training college (which brings a constant influx of new teachers) as two of the main reasons for the good working atmosphere and the continuous development of the school. The cooperation with the teacher training college is viewed as having been especially gratifying since the 1990s when the number of its students increased: "It began in the 1990s when a lot of students attended the teacher training college... At that time, I think, it really started together with the change of our administration." Teachers are encouraged to contribute and implement their own ideas. Staff members do not have to fear any consequences of expressing opinions that might differ from those of the school board or the majority. One teacher mentions the importance of people who express their disapproval: "I think it is important that there are people who say let's have a closer look at that, we are not finished with this last issue yet." As a result, a culture of open discussion is the norm: "We do not agree all the time. [...] Quite the contrary, there are open debates."

The head teacher's confidence in the teachers gives them greater scope of action within the legal framework, and several teachers mention this autonomy and independence as positive factors. Indeed, one teacher explains that she has never felt restricted in her scope of action at this school, a fact, which in itself leads to a sense of self-fulfilment and a high level of personal and professional satisfaction. Participation in projects is generally voluntary.

Another factor which contributes to the positive atmosphere. Moreover, the school board often assumes responsibility for the bureaucratic aspects of such projects, thus relieving the teachers of additional administrative tasks.

A strong emphasis is placed on communication, as it provides teachers and staff with a means of joint reflection. Teachers talk about their lessons and discuss what went well, what went wrong, what the possible reasons for failure might have been and what they could do differently. They can also draw on another information source in their efforts to improve their teaching: a feedback sheet for teachers who would like to receive feedback on their teaching from their pupils.<sup>4</sup> This sheet covers aspects like personal impressions, lesson design, classroom atmosphere and feedback from the teacher.

### B. Structures and characteristics of the learning environment

# Assessment and feedback system<sup>5</sup>

A key area of innovation at the Europaschule Linz is its alternative assessment and feedback system, which dispenses with the use of grades (except in the 8<sup>th</sup> grade, the final grade at this school). Instead, each pupil receives a written feedback portfolio each term: "Documentation of learning, achievement and social development". This portfolio includes an assessment sheet for each subject studied<sup>6</sup>. These sheets all use the same format and include general information on the pupil's social behaviour and work habits, as well as details of their level of achievement with regard to the particular subject's specific learning goals. The portfolio also includes a pupil self-assessment. The assessment provides far more detailed feedback than a grading system, as it shows not only the subject(s), but also the specific topics a pupil needs to focus on.

Oral feedback meetings are held with pupils and parents, and there is a presentation of pupils' work at the end of each academic year, when pupils can obtain further in-depth feedback on their achievements.

<sup>&</sup>lt;sup>4</sup> see Appendix

<sup>&</sup>lt;sup>5</sup> Application for the ILE Project. "Projekt Innovative Learning Environments (ILE) – OECD/CERI/BMUKK"; Europaschule Linz. "PHS – Schule ohne Noten. <a href="http://www.europaschule-linz.at/joomla/index.php/">http://www.europaschule-linz.at/joomla/index.php/</a> allgemeines/schule/beurteilung/20-beurteilung-hs> (28.12.2011)

<sup>6</sup> see Appendix

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This alternative feedback system allows for greater differentiation and "has led to an improvement in the quality of the education provided", as the head teacher explains. The pupils receive detailed feedback on their progress and on whether they have reached their individual learning goals or not. This helps them (and their parents) to identify the areas they still need to work on. According to the head teacher "learners approve of this kind of feedback because they know exactly what their shortcomings are and can study and practise systematically."

The teachers support the school's feedback and open assessment system, as they perceive it to be fair and precise. "I give him feedback that I am not satisfied with some of his work but always very precise and to the point", says one teacher. According to another teacher, the main advantage of this system is that it gives all pupils the chance to find their own way in every subject.

Pupils have the option of preparing their own resource and special needs plans in cooperation with their teachers and linking this to a recurring phase of self-organized, autonomous learning with intrinsically motivated learning goals.

In addition to subject-specific assessment, the school has also developed an alternative method of providing feedback on pupils' social competences. Each term, pupils are given feedback based on seven criteria: "respects the other's personality and work", "is able to cooperate", "is able to communicate", "shows reliability and sense of responsibility", "is able to deal with criticism", "abides by rules agreed on", "handles his/her own and the other's property carefully".

They also carry out a self-assessment. Discrepancies in these assessments are reviewed and potential solutions discussed in person with the pupil, thus helping them to learn about the differences between the way they view themselves and the way they are perceived by others.

#### Structures

Europaschule Linz uses a combination of student-initiated and traditional forms of learning. Open structures are used to foster self-determination and independence. Autonomous, self-determined learning and alternating social modes are seen as a basis for differentiation and individualization: They "are indispensable requirements for the necessary differentiation and individual support of all children". The adoption of flexible roles for teachers and pupils and the use of team-based teaching support a more individual approach which embraces differences, e.g. in ability and learner types.

Since learning rhythms do not correspond to neat, hourly intervals, time management is flexible. There is no school bell at Europaschule Linz, which interrupts the students' learning and working process. Teachers start and end their lessons when they consider it appropriate. No acoustic signal tells them when to have a break in between a double lesson but they can have a break when they consider it most useful.

In addition, single lessons are often replaced by interdisciplinary learning projects for mixed age groups, which focus on the acquisition and development of key competences.

# Autonomous curriculum/profile<sup>7</sup>

Individual interests and abilities play a central role at Europaschule Linz, and the school has its own curriculum, timetable, and areas of focus. During the first few months of the 5<sup>th</sup> grade, the focus is on learning, communication, organizational and presentation techniques, as well as on gathering and providing information. In the 5<sup>th</sup> and 6<sup>th</sup> grades, pupils go through a general orientation phase in which multiple intelligences are fostered. In the 7<sup>th</sup> and 8<sup>th</sup> grades, they have five lessons per week in which they specialize in one of four core areas: language and communication (focus on foreign languages, with compulsory lessons in English and French), science and technology, music and creative arts or applied media design (school newspaper, radio, TV and new media). Pupils can also opt in the 7<sup>th</sup> and 8<sup>th</sup> grades to take advanced courses in preparation for their subsequent choice of schooling.

As part of the school's focus on foreign languages, it offers optional French lessons to students who have not chosen the focus on language and communication, but still want to learn one more foreign language. This option is unusual for schools of this type in Austria as most of them offer English as the only foreign language to be learned by ten- two fourteen-year-olds.

# Infrastructure and space 8

The school was built in the 1950s, which according to the head teacher poses a challenge if "...the framework conditions for our pupils learning and our teachers working at this school ... should fulfil our wishes of an innovative pedagogy." Some teachers also mention space as an obstructive aspect: "We would need more space! I think considering the number of students we have, we are over the limit in terms of spatial strains." Nevertheless, teachers try to make the best out of the situation and use any available space: "You can see that they often work in the corridor and everywhere [...] but it works." Currently, students of architecture and architects are working on possibilities of architectonic modification.

<sup>&</sup>lt;sup>7</sup> <a href="http://www.europaschule-linz.at/joomla/images/stories/neuemittelschule/Modellplan.pdf">http://www.europaschule-linz.at/joomla/images/stories/neuemittelschule/Modellplan.pdf</a> (28.1.2011); Europaschule Linz. "Schwerpunkte". <a href="http://www.europaschule-linz.at/joomla/index.php/hs/schwerpunkte">http://www.europaschule-linz.at/joomla/index.php/hs/schwerpunkte</a> (28.1.2011)

Application for the ILE Project. "Projekt Innovative Learning Environments (ILE) – OECD/CERI/BMUKK"; Europaschule Linz. "Modellplan" <a href="http://www.europaschule-linz.at/joomla/images/stories/neuemittelschule/">http://www.europaschule-linz.at/joomla/images/stories/neuemittelschule/</a> Modellplan.pdf> (28.1.2011)

<sup>&</sup>lt;sup>8</sup> Europaschule Linz. "Arbeitsweise" <a href="http://www.europaschule-linz.at/joomla/index.php/allgemeines/schule/">http://www.europaschule-linz.at/joomla/index.php/allgemeines/schule/</a> arbeitsweise> (28.1.2011)

Application for the ILE Project. "Projekt Innovative Learning Environments (ILE) - OECD/CERI/BMUKK";

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In spite of the limitations mentioned and due to a flexible handling of space the school has rooms with special facilities for specific subjects, new rooms designed specifically for group work, as well as a special room for mixed-age learning groups. The traditional school library has been reorganized to include a media centre offering videos, CD-ROMs and DVDs. Computer workstations are available to pupils in so-called "computer islands". A new outdoor area includes a biotope, an outdoor classroom, as well as a multi-purpose courtyard. Open learning and working areas with an extensive supply of learning materials accommodate the school's open, project-oriented approach to education. Breaks can be used for physical activities, and the school's recreation areas feature table tennis, table soccer, volleyball courts and other game equipment.

Pupils are encouraged to participate in designing and arranging their classrooms as inspiring workplaces. Each class can take part in the school's "Innovative Classroom" competition and win a cash prize for their class. This project is meant to encourage pupils to assume responsibility for their own classroom, it helps to strengthen the sense of community within the class and teaches pupils to respect the need for tidiness and order.<sup>9</sup>

### (Team-)Teaching

All teachers at the school are qualified primary, general secondary or special school teachers, while four are qualified academic secondary school teachers. Some also have an additional teaching training (e.g. in the Montessori approach, counselling or coaching) and/or a university degree (e.g. in sociology, psychology, educational science or pedagogy). The teachers emphasize the importance of learner-centeredness and see their main task to lie in guiding, supporting and coaching their pupils. "...we are the guides in the learning process, we are the coaches so to speak, the learners' counselors." The teachers accept and appreciate individual differences and endeavour to foster the learning process of all pupils. They concentrate on qualities and resources rather than on deficits and weaknesses and thereby seek to awaken talents and interests.

One important aspect in the school's individualized approach to education is its use of team-based teaching. Our classroom observation and videotaped lessons clearly demonstrate how the presence of two teachers in the classroom permits them to give a more personal level of attention to individual pupils. In a maths lesson, for example, the maths teacher concentrates on the subject matter and explains tasks, while the special educational needs teacher primarily focuses on social issues, supports group-building processes - "Sebastian, you also have to sit next to a girl, you were in Mr Zauner's group last time, the girls were in my group! Therefore today you have to sit next to a girl" - and attends to pupils who need special support and attention. However, both teachers constantly keep an

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<sup>&</sup>lt;sup>9</sup> Europaschule Linz. "Innovativer Klassenraum" <a href="http://www.europaschule-linz.at/joomla/index.php/hs/projekte/klassenraum">http://www.europaschule-linz.at/joomla/index.php/hs/projekte/klassenraum</a> (28.1.2011)

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eye on learning behaviour, answer questions and attend to pupils with questions or who show signs of insecurity.

Several pupils made positive remarks about the team-based teaching approach. One such pupil even explained how it helped to facilitate a differentiated teaching and learning process: "One teacher is there for advanced students and another for those who need more time."

More teachers also mean more teacher time per student, and pupils have the impression that there is always somebody there to help them. "...you raise your hand, and somebody is there right away."

This level of intensity in individual support is also made possible by the targeted use of all available human resources. Pupils not only assume the role of learners, some of them also take on the role of teachers and help explain the subject matter to classmates who need support. *Teacher: "Julian, Fabian, Sophie and Vanessa are available, they can also help you"!* 

# C. Nature and quality of learning

### Nature and forms of learning

As the teachers explain, the pupils' satisfaction is a key priority at the Europaschule Linz. They consider the fact that pupils (are able to) set their own direction to be an important aspect in the success of a lesson. Pupils at the school are encouraged to work on their own most of the time, so there is no need for a teacher to be constantly telling them to get on with their work. The teachers are convinced that children want to learn and that they like learning when they are given the opportunity to work with topics and materials which suit their abilities: "...I think that children want to know something and like learning. And when they have the environment and the possibility to deal with materials or with topics on a suitable level then, generally speaking, it works."

A lot of time is allocated to student initiated learning – a situation, which the pupils clearly appreciate: "I think it's cool that we have a lot of choice in what goes on. We don't just have to sit at our desks and listen to the teachers, we can also choose to go off and work on something with a friend."

Learning processes and performance/assessment periods are kept strictly separate. Lessons are specifically organized to facilitate individual learning. In open learning periods, everybody can work at their own pace and on their own level, depending on their ability. During a maths lesson, the teacher refers to this different pace and progress as something entirely natural: "I know that you are all at different stages."

### Responsibility

In the maths lessons observed for this case study, the pupils clearly concentrated on their work and focused on the subject matter. The lessons are designed to encourage and allow pupils to assume a high level of responsibility both for their own and for their classmates' learning processes. For example, teaching a class in two groups resulted in a deliberate information gap, which the pupils then had to bridge by explaining the subject matter to each other. They took this task seriously and not only talked about the topic, but really tried to make each other understand. Learning by teaching means not only taking on the role of teacher, but also assuming the latter's responsibility.

Some learners also switch roles during self-guided learning periods: the teacher announces which pupils will be available to "teach" their classmates.

"Julian and Fabian are available as teachers; Sophie and Vanessa can also give you support!"

In another lesson, pupils are asked to check a classmate's answers. The teacher stresses the importance of this task and emphasizes the responsibility the pupils share for their classmate's learning process: "You are responsible for correcting your classmate's work and for doing so correctly and conscientiously."

The level of responsibility pupils (are expected to) assume for their own learning becomes evident in self-guided learning periods in which they are required to check their results using answer sheets. If a pupil is not able to complete this task, the teacher does not check the answers for him/her, but instead repeatedly explains how to go about checking the answers until the pupil is capable of completing the task on his/her own: Teacher: "Let's [...] check the results! ... These are the advanced examples! Look for the number! Look for the number! No, look for the number you did! If you did number nine, you have to check the result of number nine. What is the result?" {Teacher: give-me-five-gesture}

Pupils at Europaschule Linz are not treated as mere learners; teachers also assign them important tasks, thereby demonstrating their confidence in the ability of their pupils to carry out these tasks. As a result, students show their ability to cope with such responsibility. E.g. in a situation in which a student takes over the role of a teacher – as she realizes that her classmate has problems with the basics of drawing a triangle - she does not continue with the explanation of the new subject matter but explains the basics again: "Exactly, just draw this triangle into your book! [...] No, Kevin, do you know how to draw triangles? {points with her finger to her triangle} You have to draw c first. Then you take the angle. Do you have an angle? Look! Erase this!"

There were several situations in the lessons observed for this case study which indicated that pupils really do take their tasks seriously because they themselves are taken seriously by their teachers.

#### Communication

Communication is another important aspect in the school's approach to teaching and learning. Our videotapes and classroom observation notes show how the teachers' use of language influences the learning environment. The way the math teacher talks about the learning materials, for example, makes them seem important and special. In one lesson, he handed out a set of worksheets and described them as worksheets pupils were *allowed* to complete, not as worksheets they *had* to do. This made an important difference in the pupils' attitude to the exercise in question.

The same maths teacher also repeatedly expressed his positive expectations and conveyed his positive attitude towards the pupils and his confidence in their abilities.

This encourages pupils to believe in themselves and develop confidence in their own abilities: "Well done! Now do this! [...] Do you think you can do it? Go on, say I can do it!"

Regular, often lavish praise encourages pupils in their work. The teacher's enthusiasm for a pupil's progress is expressed both in verbal and non-verbal ways (e.g. backslapping, "give-me-five" gestures). The teacher addresses his pupils personally, gives them positive feedback on their performance and celebrates progress as a sign of personal success. The pupils in turn are motivated by the individual and group feedback they receive.

Another interesting use of language occurs when the teacher talks to the whole class. In German, there are two direct personal pronouns for addressing children and people you are on familiar terms with: the singular "du" (for one person) and the plural "ihr" (for more than one person). However, in this case the teacher generally does not use the plural form to address the whole class, but in most cases uses the singular "du". This changes the quality of the communication and adds a much more personal touch to what he is saying: he addresses his pupils – at least in terms of language – as individuals.

### D. The impact and effectiveness of the ILE

# Assessment system

The alternative assessment system used at Europaschule Linz includes a feedback system which the school describes as part of the learning process. In a comparative study, this feedback system is contrasted with the system used in another mainstream secondary school in Linz to determine whether it has an influence on the general development of pupils' performance at school. This study also examines the influence of the feedback system on pupils' choice of school and career after completion of their compulsory education. The study shows that pupils attending Europaschule Linz have a much more positive attitude towards school, which undoubtedly affects their attitude towards learning in general. Moreover, the school's pupils approve of the grade-free assessment system and many of them regard the detailed feedback to be very helpful in recognizing their strengths and weaknesses. In

addition, the pupils' evaluations of their own abilities show a stronger sense of self-efficacy (i.e. their belief about their ability to perform actions that lead to desired ends) at Europaschule than in the other school used for comparison purposes.

Students prefer the monitoring of learning goals used as assessment tools at Europaschule to the regular tests commonly used in other schools. Firstly, they are less afraid of this monitoring, although they do note that the two kinds of assessment are similar. Secondly, the Europaschule system allows them to voluntarily repeat an assessment if they want to do so. This reduces any nerves associated with assessments and helps pupils to achieve better results. Furthermore, since pupils in essence cannot fail a grade at Europaschule, they feel they are under less pressure to succeed and can therefore relax and enjoy their work.

Pupils like the grade-free assessment system because it provides them with more detailed feedback on their performance by evaluating their achievement in the various parts of each subject on a three-point high-medium-low scale. "...not one overall grade, but one for every part...". This system indicates exactly those areas a pupil needs to work on. "...you see, for instance, where you need to improve"; and the pupils point out that this approach helps them to "know how good we are."

This again helps teachers and learners to use the time available more efficiently.

Students are not left alone to improve their skills and knowledge, the teachers are on hand to advise them on what they can do, supply them with additional worksheets, show them which pages in their books they should focus on, etc.

Pupils also recognise that their self-assessment of their achievements is taken seriously as it forms part of the feedback portfolio they receive each semester. "...the teachers take our self-assessments into consideration, and our self-assessments form part of our school report."

Despite the fact that both teachers and learners appreciate Europaschule's assessment system, there is a regular school report at the end of the last grade because "the economy is not yet ready for a goal-based assessment", as one teacher explains. She knows that many companies prefer grades but does not really understand their viewpoint: "If somebody applies for an apprenticeship as a carpenter, I would like to see exactly how good he is at geometric drawing, how good he is at different kinds of drawing or at manual skills. [...] And this would be described in a much more detailed way through learning goals. [...] But I think they are not at that stage yet." That means that the innovative assessment needs to be "converted into grades" because the majority of schools and business companies are not used to assessing a pupil's performance without grades. As graduates of the Europaschule would have difficulties in applying for jobs or for post-secondary schools without a school report, the school addresses these requirements. But not only companies and schools require a regular school report , also some parents do: "Every now and then I realize that parents want some kind of comparison. — Which grade would that be?" teachers are asked. According to the teachers, this

attitude goes back to being used to a grade-system for so many years. "This is much more firmly established in their minds than in a pupil's who has only attended primary school."

### Learning atmosphere

The learning environment is described as very relaxed – pupils are given the time to learn at their own pace. They often mention the lack of pressure and express their appreciation of the fact that their teachers are not overly strict. They also named the team-based approach to learning as a reason for choosing to go to the school: "...because I liked the way they learn together."

Lesson design emphasizes the importance of understanding, and mistakes are accepted as part of the learning process: The positive learning environment created at the school means pupils are not afraid to make mistakes, but know that they can learn from their mistakes. One pupil's statement illustrates this aspect: "When I draw a triangle and e.g. the inner circle is wrong, I know that I still have to practise in order to do the inner circle correctly." It also helps them to accept individual differences as natural, not deviating and encourages them to take on demanding, yet manageable tasks. Social and subject-related learning go hand in hand to make team work a matter of course for pupils at this school.

Our classroom observation notes and videotapes clearly show a high level of motivation. The pupils seem to be aware of their responsibility for their own and for their classmates' learning progress and therefore do not just work when they are being supervised by a teacher, but continue to do so when the teacher leaves the room.

One pupil commented that learning is made easier at this school. There is often an extra teacher to support students who need extra help, and the teachers make sure that every pupil understands the material. At Europaschule Linz, learning and fun are not mutually exclusive. As one pupil explained: "That's the reason why I chose to go to this school. I don't just want to learn, I want to have fun as well."

### Social competences and motivation

The assessment portfolio includes feedback on social competences. These are considered important and form an integral part of the everyday learning process at Europaschule Linz. Pupils frequently help each other. Pupils who have completed all their own tasks go round the classroom and offer their help to others. Two pupils noted that helping does not just mean telling someone the answer, it means encouraging them to think, giving them hints and explaining how to do it properly.

The teachers at Europaschule Linz report that their pupils are not "lone warriors", but that they work together and help each other. The teachers want to help their students to develop individual personalities, social competences and the ability to work in teams, but they also want them to focus on results and achievements. In the focus group interview, teachers mentioned that pupils are able and

willing to complete their tasks even when no teacher is present. Their high motivation levels reduced the need for teacher control. This is why teachers can say that "...without the teacher telling the children continuously to work and to fulfill their tasks... children are active on their own - not in every lesson, but quite frequently."

### **Teachers**

The teachers at this school are clearly a source of motivation and are greatly appreciated by the pupils. Indeed, several pupils name the positive reputation of the teachers as one of their reasons for choosing this school.

The pupils also consider their teachers to be very helpful and supportive: pupils can always go to a teacher with a question or ask them for support. "...they really do help us a lot."

The teachers support pupils in their learning process not only during "official" lessons. One pupil reported that the maths teacher had offered to help him at a set time on another day: "...if there is something you don't understand you can come in the morning and then he explains it to you."

Europaschule Linz took part in a study organized by the Johannes Keppler University Linz, which compared the well-being of teachers in a "traditional" academic secondary school (grammar school) with that of teachers at Europaschule Linz. In terms of stress management, the results showed that Europaschule's teachers have less time pressure, less physical strain and fewer role conflicts. Moreover, teachers from other schools report more often about matters which are considered stressful like new challenges or their students' behaviour. In terms of professional resources, Europaschule's teachers are more satisfied with their working place condition, opportunities for further education and private social support. The social support from the school administration (with the exception of the headmaster) is the only factor which is considered more efficient at other schools. (cf. Gerich 2009)

### Differentiation

Differentiation within heterogeneous learning groups is so common at Europaschule Linz that pupils do not make derogatory remarks about simpler tests or different tasks for learners with special needs (as one pupil noted had been the case at his previous school). Moreover, pupils do not think teachers treat pupils with special needs differently. Flexible time management allows learners to work at their own pace. "*Teachers give us enough time to do our work*."

Many pupils like the fact that they can choose between basic and advanced tasks in line with their ability. Nevertheless, those pupils who usually opt for the basic tasks do not think that they know or learn less than their classmates: "I still know as much as the others in the end."

Teachers not only consider standard abilities in their teaching and lesson design, they also accommodate different styles of learning into their classes and teach pupils how to learn efficiently. Many pupils say that learning is made easier at Europaschule. However, they do not think that they learn less than students who attend "traditional" academic secondary schools (grammar schools): "We learn...the same things they do in grammar school, the only difference is we're not under so much pressure and don't have to study so much."

The pupils' overall level of satisfaction with their school is very high. Indeed, one pupil noted that she would recommend this school because "it is so much fun."

### Conclusion

According to our data and as we tried to show by our analysis above the Europaschule Linz represents one good example of an ILE in almost all areas mentioned at the beginning. All the more so as the Europaschule is part of the school system with its given rules and constraints. Within this regulatory framework the school has found a way to creatively use the given scope and to constantly look for new solutions to upcoming problems and challenges. Therefore, innovative approaches of the Europaschule Linz are certainly transferable to other Austrian schools. Especially its promising way of dealing with the natural heterogeneity of learner groups provides a role model demonstrating how learners' differences in terms of ability, learner type, interest and talents can be perceived as an enrichment for the whole learning environment and can be used to strengthen learners' social competences.

Europaschule Linz's assessment system without grades cannot easily be transferred to other schools as grades are usually mandatory in the Austrian school system. However, the constant, detailed feedback on social competences as well as on subject-specific learning goals could be used in other schools too. It might not replace the semi annual report card but it could be used additionally to provide formative feedback on students' individual learning progress so that they know exactly which areas they still need to improve on and which learning goals they have achieved already.

In Europaschule Linz there are of course also areas that still need development and attention like the current issue of the implementation of an all-day school. However, the main point is not that there is room for improvement but that the school team of the Europaschule considers school development an ongoing process and is willing to constantly look for areas in which they can do better and to work on them.

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