# A SCHOOL FOR THE FUTURE

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Can you imagine a school without classrooms, without timetables, without school bells, without school bags, and without a teacher's desk? If not, you must visit *Futurum* in Sweden, a radically new school that combines creative architecture with modern learning and teaching methods.

Stockholm is built on seven islands. The water separating the islands creates natural boundaries which, at least until the 1950s, meant it was common for the citizens to live separately. They kept to their own neighbourhoods without much contact with people from other parts of town, and it was difficult for parents to send their children to schools situated on another island, somewhere across the sluices towards the town centre. This turned out to be very convenient for educational experts when they began to rebuild schools and to experiment with new kinds of educational systems in the 1950s. The differentiated school systems in the northern parts of Stockholm were kept intact, whereas the school system in the south was restructured into comprehensive schools where the students are taught together until the tenth grade.

When school experts evaluated the experiment they were surprised: students from the north and the south performed equally well when examined. But students who were taught at a comprehensive school received better marks in social conduct and were regarded as less egotistical and more cooperatively minded. When the final study was published in 1963, the Ministry of Education

in Sweden did not have any remaining doubts about the benefits of a comprehensive school system. Since the beginning of the 1970s, most students in Sweden have been taught in undivided comprehensive schools. Students are not examined until the tenth grade and they do not risk having to repeat a year. Within a few years of the Swedish implementation, this system was unilaterally introduced in all Scandinavian countries.

## "The Open School" movement

In the mid-1990s, yet another revolution began in the Swedish school system. This revolution did not occur on the basis of concrete experiments as it had thirty years earlier. Rather, it was due to the realisation that large amounts of pedagogical knowledge had been developed during the last twenty-five years – but without being used. Also, a variety of new demands for what students should be able to know and do obliged decision-makers to try out other kinds of school systems and to introduce modern teaching methods. Naturally, this was only possible because of a simultaneous political consensus in Sweden that aimed to improve education through the strengthening of local autonomy.

The most prominent school in this regard is Futurum, located in the Håbo district, about 50 kilometres northwest of Stockholm. In many respects, Futurum does not even resemble a school. Built as a collection of detached wooden houses at the outer limits of the small town of Bålsta, the architecture reminds you more of art studios or rebuilt laboratories. High ceilings and plenty of light give the impression of visiting a wooden greenhouse built for the evolution of a new human species. Flexible working conditions and modern educational theories are truly reflected in the whole construction of Futurum.

When you enter the front door of Futurum,s the first things you notice are not the usual things. There are no long corridors with shouting children. There are no classrooms with lecterns and desks. There are no school bags. And you don't hear any school bell. What you see is a busy house where students walk around carrying books and equipment. Their minds are occupied with the things they do. They sit in the computer area studying Web sites, they read books about modern art in the corners of the many open study rooms, or they walk and talk about the forthcoming play in the school's theatre.

All rooms are built around a large space that resembles a town square. There is a sculpture and a stage, and the canteen in the middle is arranged invitingly with self-service tables and milk bars. Some of the adjoining rooms are used for woodwork and needlework, others for physics and chemistry experiments. Next door is a fully equipped music studio, from which you can

enter a dressing room overflowing with hundreds of peculiar costumes. There is also a place called Africa with five-metre high palms imported from the Netherlands. Here, the smaller kids normally sit and read picture books. The teachers' room has computers for all and the gym on the ground floor is so big and luxuriously equipped that one automatically asks what it has cost.

# Creating a new learning culture

Even though it was not cheap to create, Bålstå has a school it can be proud of. The physical appearance of Futurum is so different from normal schools that you will have a hard time grasping the implications for the way a school day is organised and the learning methods used. A year ago, when one politician was shown all the outstanding qualities of the rooms, she asked the guide Hans Ahlenius: "That's altogether very nice, but where does the teaching take place?" The answer came promptly: "This *is* teaching!". In complete contrast to

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conventional customs in schools, it is not the teacher who talks and walks around. And it is not the teacher who poses the questions. It is the students who are active. They find the things they need to work with, they help each other, they go to the computer desk, to the library, or

they ask the teachers for advice. You never meet a child who asks "What should I do now?" The teachers function like advisors and stay quiet as long as they are not needed

How can this be achieved? Every morning the students meet the team of teachers in their contact group and decide what to do. Together with the teachers, the student settles on the amount of work to be done. Thus, the students are responsible for the planning and carrying out of their own work. Depending on the needs of the student, working hours and subjects are planned as flexibly as possible. Through all ten years at school, the same group of teachers attends to the student, and this creates a close social adult network. Headmaster Gunnar Lundgren explains that this concept of "the small school within the large school" creates an atmosphere of self-government and responsibility. The "small school" is the working unit for the students and it consists of several rooms built around a large central space. There are six "small schools" with about 160 students of all ages in each. Each unit is named after a colour. Sixteen teachers and other personnel are responsible for keeping the unit functioning for up to twelve hours a day due to the older students' flexible hours of attendance. Bullying is an unknown phenomenon.

Without the "Loggbok" things would probably not work well. This logbook is individual and follows the student throughout the years. It contains the learning objectives for each week. There are no working hours; there are only working weeks. The students are responsible for recording their work in the logbook. At the end of the week, the student, the parent and the contact teacher sign the book in order to seal the week's work. For most of the students, the logbook means a great deal of freedom and independence, because they do not need to obey school bells and timetables any more. Only around seventeen hours a week are spent in some kind of class teaching. The rest of the time, the students decide themselves whether they want to improve their French vocabulary, study Swedish or help some of the younger students in their own unit. In addition to this, a lot of combined-age and cross-disciplinary projects add to the diversity of learning styles at Futurum.

#### Supporting individual learning styles

You might call Futurum an experimental expedition into learning, which has been successful in creating a new school culture. The autonomy given by the state to the local community is here passed on to the teachers and the students. And the result is freedom and responsibility. More importantly, perhaps, the pedagogical principles have been greatly improved. Subjects are not taught as facts. There is no learning by rote. The subjects are always integrated into a

"It might look chaotic. But it is creative chaos." context and students approach them from a problem-oriented perspective. This means that disciplines such as Swedish, physics, and biology are very often interconnected via an overall theme. "When students begin

to work on a project they run all over the place," says the physics teacher, Fredrik von Euler, "It might look chaotic. But it is creative chaos."

When studying electricity, for instance, von Euler's students do not have to follow standard textbooks that slavishly go though the various ways in which light bulbs and batteries can be arranged in an electrical circuit. Instead, they are asked to answer questions based on a small figure of an electrical arrangement, and to read and present the biography of one of the many famous physicists that contributed to the field, such as Alesandro Volta, Andre Marie Ampere, Georg Simon Ohm, Michael Faraday, etc. This approach automatically strengthens the project-oriented working habits, while also helping individual students to frame their own depths of inquiry and to use their own learning styles.

David Larsson and Rosemarie Wolf, two bright students from the ninth grade who have been given the extra job of guiding visitors around, think this freedom is great: "We can learn things in our own way," they say. "This helps the good students. But less independent students might need a bit more guidance." Therefore, they are supervised more frequently by the team of teachers and, if necessary, placed in a support group. The promotion of individual learning styles is integrated into the physical space even down to the careful selection of colour and temperature in the rooms. For example, after a small enquiry among students in the purple unit, David and his mates were granted the right to furnish their own ideal study room. The result was a room that is not too warm, has subdued light, and can be reserved for individual meetings with music by Enya playing in the background. Other purple learning places are called "Milky Way" (light, warm), "Ocean" (dark, cold) and "Lightyard" (light, warm, quiet).

The combination of project work, group work and self-tuition, supported by a well-equipped and caring environment, creates the perfect preconditions for the declared pedagogical goals of Futurum: an atmosphere of security, prosperity, respect for the background, an interest in other people, the development of individual responsibility, and a strong focus on reflection and critical thinking. "Here we have three teachers," says Gunnar Lundgren. "The first and most important teacher is the child. The second is the teacher and the third is the environment."

## Spreading the word

The story of Futurum is not only a story about educational experts who wanted to try out their ideas in a concrete setting. Rather, it began when the mayor of Bålsta, Søren Andersson, had to renovate the Kvarnback School. Instead of using seven million Euros for the restoration of the old school, Andersson and the town council decided to try something entirely new. They asked Hans Ahlenius and some of his colleagues to do some research into the possibility of creating a "school for the future". After three years, several council meetings and public discussions, Futurum was built. Today the school is used as a model for the Vibyskolan, Skogsbrynet and Annehill schools in Bålsta. The pedagogical ideas behind these schools are framed by the concept of "School 2000".

School 2000 regards learning as an active and creative process that is acquired through interaction with other people. Competence development and the growth of social capabilities are an intrinsic part of learning. One of the main

philosophies of the School 2000 approach is that people are different and that each child as well as each adult has individual needs, methods, and approaches to learning. The roll of the teachers is to make individual learning possible through cooperation and guidance. They must be able to listen and follow the ideas put forward by the students. Teaching styles as well as learning styles are individual, and students are actively engaged in planning, carrying out, and following-up the work. Also, the physical milieu is regarded as an active element within all this. Providing a stimulating atmosphere and up-to-date technology creates a flexible and functional working environment for all.

School 2000 has achieved widespread recognition throughout Sweden. Several schools are following the example from Håbo. A rough estimate says that about ten percent of all Swedish schools have started to use the School 2000 approach to learning. In Denmark, the local school in Hellerup, north of Copenhagen, has started a similar project, and there has also been considerable interest in Germany. But whether this new school concept from Sweden will actually change the school systems in European countries depends on many things. Above all, there are huge cultural differences that are not easily changed – and maybe should not be changed. Some countries emphasize competition, others cooperation. Some countries prefer a highly selective and differentiated educational system, while others prefer a comprehensive system. Some countries choose to promote extensive local autonomy, while other countries might not be able or willing to do so.

There can be no doubt about the importance of the educational system to the way children are brought up and shaped in a particular culture. Schools are the mirrors of society. And schoolchildren are their reflection. But they can also become the representatives of another future. Therefore, educational reforms, in whichever direction they go, must be rooted in a clear vision of a future community. In order to succeed, reforms must depart from the preconditions and contexts that already exist in a given society. And they must make the best use of their virtues.

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