



IT in education

The municipality of Nacka has created a unique educational IT tool for its schools. Skolportalen 2.0 gives both teachers and students the opportunity to cooperate and work in completely new ways. Course material, student literature and teaching aid services are always available and teachers can make the most of one another's experiences quickly and easily.

THE MUNICIPALITY OF NACKA SETS its sights high when it comes to teaching in its preschools, schools and leisure clubs. Development of IT is an obvious element in the creation of the best education in Sweden for all students, children and young adults, every day.

IT support was introduced for information and communication in the schools data network back in 2002. A pilot project implemented in some schools has now given rise to a portal for all 25 schools in the municipality. A school portal in which modern tools such as blogs, wiki functions, podcasts and other IT resources become a natural part of the classroom and teaching.

COMMUNICATION IS FACILITATED between teachers, students and parents. Teachers also have direct access to various course materials and databases. Lena Byström and Lars Ekelöv are two of Nacka's e-developers who've been with the project from its very beginnings. They're teachers at heart, as are all the staff working with IT in schools in the municipality.

"The Skolportalen school portal started off as a trial project

at Björknäs school," says Lena Byström. The project seemed to go well. This was why the head of schools in Nacka decided to include all the schools in the municipality. The EU has identified eight key skills required for success in today's labour market, and digital expertise is just one of them. The school

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portal will provide support and underpin the development work already ongoing in schools and preschools.

Some elements of the portal can be described as simplifications of functions and communication paths in the old, analogue schools which most of us recognise. All teachers are equipped with laptop computers linked to the network.

Technical Facts

The Nacka School Portal is built on a Microsoft SharePoint Platform MOSS (Microsoft Office SharePoint Server), along with ready-to-use components that are configured in order to function well together. SLK, Sharepoint Learning Kits, is part of the solution, an open source e-learning application, built as a Windows SharePoint Services 3.0-solution. Contains valuable possibilities for follow-up and statistics. SLK is SCORM-certified. SCORM (Sharable Content Object Reference Model) is a technical specification of how e-learning is created and delivered to students.



The Nacka e-developers: advice for anyone wanting to run a similar project

- You have to have an appropriate infrastructure and bandwidth. This might be difficult in sparsely populated municipalities, where a school portal could otherwise be a great boon. But a group of schools, a number of municipalities or a consortium of private schools could implement a similar project together.
- Schools are a part of the municipality, and a lot of the issues that arise when creating a school portal of this size affect the entire municipality; so you have to take a holistic approach. The municipal management team, officials, politicians, IT departments: everyone has to be involved.
- The municipality has to have achieved a certain degree of IT maturity; classrooms and homes must have computers in them. The municipality needs an intranet, an extranet and supporting systems.
- You have to work together with the business-linked staff to create a well thought-out structure and identify clear roles and flows. A decent list of requirements is an absolute must. It's often necessary to restrict projects rather than trying to come up with new functions.

A MINUTE or so after a lesson starts, therefore, students' parents can essentially find out whether their children are in school and whether they turned up to their lesson on time. When current sets of all the maps of the world can be stored in a central database, the dusty old map and chart room can be pensioned off. All the rivers and lakes in Halland can be displayed on screen behind the teacher at the touch of a button. Videos, slideshows and audio files that are simple and quick to access mean that the AV centre has to be used for something else.

School archives of old tests, blank maps and other teaching materials are now readily available to all teachers. Other functions and teaching methods are completely new elements of the teaching process.

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“To comply with the EU directives and our own local e-strategy, we've been working for a long time on enhancing the digital skills of our teachers,” says Lars Ekelöv. IT in schools not only simplifies teachers' jobs; it also adds educational value thanks to all the smart tools and modern techniques that can be used for schoolwork. Schools can now subscribe to course information, course material, student literature and teaching aid services; these are all examples of new communication paths.

For instance, we've bought a municipal licence for the National Encyclopedia which will be available to all teachers and students. But the really interesting thing? All the modern technologies that can now be used for schoolwork.

“We ran the e-Smart project in spring,” says Lena. “This was a course consisting of lectures, seminars, workshops and active working with students and preschool children. Teachers were able to learn how to use and develop web-based resources such as wikis and blogs. The project ended with a fair with a view to passing on and sharing all that new knowledge for further work out at the individual units.”

At the fair, enthusiastic teachers presented a range of projects to equally enthusiastic listeners. Among other things, they showed how Google Earth and other free resources have been used in teaching at preschools. Wiki functions have been used in group exercises in which students worked together on texts: they typed texts, edited them, commented on them, trialled them and evaluated one another's texts.

TEACHERS SET UP discussion fora, gave advice and acted as moderators. The wiki structure means that everything is logged, so teachers can monitor all changes and analyse them



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afterwards, view user statistics and see who the most active students have been and what everyone contributed or edited. Chat functions, blogging tools and logbooks have been used in lesson time and for homework purposes. Students out on work experience have been able to submit regular reports on their daily activities.

“Other options that will be available via the school portal are podcasting, documentation of teaching and laboratory experiments,” continues Lena. Important elements can be recorded, sent via Bluetooth to the teacher’s computer and distributed directly to all students’ computers.

At Atea, Jonas Karlsson is one of the people responsible for the project. The Nacka school portal is part of the strategy for Atea’s schools initiative, which in turn is part of AKE, the Atea Municipal Service (Ateas Kommunerbjudande in Swedish).

“No matter what technical platform is used, our primary objective is to understand how everything works at the schools,” says Jonas. Information logistics come first, followed by the architecture and technology.

The quality of what we supply lies in our analysis of the processes in the schools. How students, parents, teachers, administration staff and youth leaders interact at present, and how they will and can interact in a school portal.

THIS SUMMER, Atea started work on installing the portal in all schools. A teaching programme will then commence in which all 25 schools in Nacka will be given an introduction over a period of one year, according to a rolling schedule. When it’s finished, the portal will have 42 000 users.

“We couldn’t have done this two or three years ago,” say Lena and Lars. “Our teachers now have good enough IT skills, and nowadays there are actually quite a lot of teachers who’d find it difficult to teach a lesson without IT support. We’re already planning the next version. We’re constantly having new thoughts and ideas, and other opportunities open up to us as the technology develops. A school portal should never remain static!”

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