



Gunilla Almgren Bäck – a special needs teacher who provides ICT expertise to schools

The context for the use of ICT for Inclusion

Gunilla Almgren Bäck – a special needs teacher

Gunilla Almgren Bäck works as a special needs teacher in a town of about 62,000 inhabitants. Her tasks are comprehensive, including working with the municipal *Skoldatatek* and in other school forums to promote the implementation and use of ICT in pedagogical situations. The 'Digital Narrative and Book Conversation' project is an example of her work. It has a proactive work method, which is both collective and formative (process-orientated), with digital tools for supporting pupils' reading and writing development.

The following two quotes from Gunilla reflect how she regards her work and the role of ICT in learning:

'Special needs teaching primarily involves the relational perspective, learning together with others and preventive work'.

'There are many ways to reach the goals – if you base your pedagogy on the pupil's terms, ICT has many possibilities.'

The 'Digital Narrative and Book Conversation' project, which is a joint effort by the *Skoldatatek*, school libraries and the town's public library, is geared towards pupils in grades 1 and 2. Using ICT, the libraries' existing supportive reading programme is being expanded. Several alternatives for reading are offered and ICT use provides greater possibilities for knowledge searches, communication, co-operation, creativity and learning. The book reviews can be presented in many ways, such as with images, text and sound.

The policy context

The Education Act and 'A Strategy for Implementation of Disability Policy'.

The use of ICT

In this example we would like to show how one of the many special needs teachers in the country works on a comprehensive municipal level. The teacher has a high degree of competence when it comes to embracing new technologies and tools and converting them into practice in teaching situations and other areas of use.

The teacher has a widespread network and gets ideas from many sources, but above all has many people around her, including pupils, colleagues and school administration in her municipality, as well as in other municipalities through several courses at 'GR', a joint endeavour in the Gothenburg region encompassing 13 municipalities with a combined population of 940,000. The teacher also has an influence on the manufacturers and suppliers of tools by being able to see the pedagogical needs and translate them into technical solutions. Thanks to her skills, she also influences public agencies in her contact with them.

In the project, computers with speech synthesis (text-to-speech) for reading and support for writing have been used, including the DAISY program for reading DAISY books, word processing programs and other programs for creating presentations together.

All pupils using the new technologies get to try different ways of reading and creating texts in a natural way. This gives them experience and helps them choose the method that suits them best, or they can mix them and use several. Pupils learn early on that various tools



are available and that they can be used in their future studies. This decreases the risk of a pupil being unaware of the tools' potential.

All the pupils test out the tools and many experience their advantages. Some benefit more from them than others, but they are not singled out, and this promotes the experience of inclusion through ICT.

Key outcomes and benefits

The special needs teacher

School improvement through ICT has been achieved in the municipality from which the example is taken. Inclusion, participation and accessibility through ICT are guiding terms. The teacher's ability to convert new technologies into teaching applications helps spread the knowledge further to her own and other municipalities. The teacher's ability to see and convey pedagogical needs to the manufacturers/supplies impacts upon the technologies, making them even more useful in schoolwork.

The 'Digital Narrative and Book Conversation' project gives pupils a natural attitude to ICT tools as a means of reading and writing. They can then take this experience and knowledge of the tools into their future studies.

Main challenges and obstacles

Attitudes, training of teaching staff:

The special needs teacher visits the classes, demonstrating speech synthesis (text-to-speech) to the children and teachers at the same time. The advantage is that the class teachers can observe and learn at the same time, making it collective learning.

The pupils pick up on the technology quickly. The teachers can focus more easily on other parts of digital competence: how and why.

It also makes it easier to overcome possible technical obstacles, since the teacher can provide direct feedback on anything that might come up.

The special needs teacher brings books with them, including audio books in DAISY format. They show the class the books via a projector and the content of the books is discussed in different ways. In the next step, the pupils work in pairs, making up stories by writing with the word processing program and using the speech synthesis at the same time.

After the classroom visits, the special needs teacher meets with the entire team of teachers and the head teacher for a follow-up, where the work in the classroom is linked to the curriculum, research on speech synthesis and research on 'Writing your way to reading'.

The educators also get to test new digital tools for creating digital narrative, using aesthetic learning processes in images and film. A Google Form evaluation is also carried out and the results are used as the starting point for the continued work.

Technical resources:

The city of Mölndal is presently in the second year of a three-year ICT campaign. Digital tools are distributed to children in grades 1, 4 and 7.



Additional information

Link to the teacher's blog: <http://gunillaalmgrenback.wordpress.com/> (in Swedish only)

The Gothenborg Region Association of Local Authorities (GR) website:

<http://www.grkom.se/grutbildning/nyhetsarkivgrutbildning/aktuelltgrutbildning/gunillaalmgrenbackspecialpedagogmolndalskommunochvidgrutbildninghartilldelatsguldapplejuryrnssarskildapris2011.5.6ab2af0132b1070c43800011545.html>

<http://www.grkom.se/grutbildning/laromedel/iktochspecialpedagogik/dokumentation.4.3260184d116870f43bc800014.html> (in Swedish only)