Now I can hear the teacher straight in my ear

In places like England, New Zealand and Norway a loudspeaker system called "Active Learning System" has been tested. This new system makes learning much easier for hearing impaired pupils. Now a number of Danish schools are testing this system.

By Eva Helena Andersen, journalist

The bell has just rung for classes and the hum of the pupils can be heard in the process of taking their seats. The teacher walks in with a small wireless transmitter attached to her blouse. Immediately after her first words are spoken into her headset, all goes quiet in the classroom, as the children turn to face her. A few of them have hearing aids. Through the four loudspeakers placed around the room, her voice reaches out to all the children. While the day's exercise is written up on the blackboard, the children can hardly wait for their turn to come up to solve the task. Now and then the sound system is switched off for working in smaller groups.

The scene looks more like a game than an exercise in learning and could be every teacher's dream of teaching. This is already an everyday scene in many foreign schools.

A trip to the Hairdressers

Originally, there was a fair degree of scepticism among teachers, but now the overall response is positive:

- In the beginning I felt like a pop star with the headset on, but I quickly got used to it, so much that I would be reluctant not to use it now, says Ginny Day, teacher at an English school in Nayland, Essex, which have implemented the Active Learning system over the past few years.

- In fact I have got so used to it, that I sometimes forget I have it on, she laughs and tells about the time she had to get her hair cut and had just got comfortably seated, when the hairdresser asked her whether she was going to have the headset off. Another teacher forgot to switch off her microphone during morning assembly, so that her singing was heard in the classroom, much to the amusement of her colleague. Mishaps like this are taken lightly and notices are hung up in the staffroom reminding teachers to switch off the microphones. Ginny believes that the advantage of using the Active Learning system is that her voice sounds
more friendly. It’s not necessary for her to raise her voice, so the pupils can hear her and this in turn makes her feel more relaxed:

- The trick is to speak quietly, so that the children in effect also become more calm. At the same time you are not perceived as being angry. If one day you are hoarse, you just have to turn up the volume, declares Ginny.

**Children surrounded by sound**

The system has already been positively accepted by the pupils. Hearing consultant Judith Laughton follows the progress of pupils with hearing difficulties at various schools:

- The first time children try it they are very surprised. They look up and point at the loudspeaker, where the sound is coming from. They really like it and the parents are enthusiastic too. I think what mainly impresses people is that the sound isn’t any higher. Originally the sound came from one direction only, now it surrounds the children and is in a normal tone of voice, explains Judith Laughton.

Children with special needs are by law secured access to ordinary schools, which is one of the reasons that the Active Learning system has attracted interest in England. Allan Shoote is headmaster of an English primary school in Combs Ford with children between the ages of six and nine years:

- At the start I would only use the system in the class for children with hearing aids. However when I saw it in practice, I realised that all the children had become more calm and consequently they became more involved, which is a great benefit. We have ten children with autism and some with special needs. Also here we have had a positive response, says Allan Shoote. Audiology students, Marie Kirketerp and Nina Larsen have as their thesis project implemented a six month trial in twelve Danish schools. Their expectations are to discover the potential of the system and its long term effect.

- We believe that we will discover the advantages of this system when it has been used over a longer period of time. One should focus more on the causes, rather than the symptoms. Teachers have less voice difficulties when they adopt this technique. Foreign research already points to teachers with less absence and less stress because of the clear noise reduction, explains the team.

The Active Learning system has already a ten year history in New Zealand. Michael Heeney, deaf teacher and consultant, has done a four year research project on the subject:

- Because there was such a massive interest in our schools
for the Active Learning system, I decided to look into it a
little closer, tells Michael Heeney, who has completed a
PhD degree in this area. During his research he compared a
number of schools; those that had introduced the new
system with those that hadn’t. One of the conclusions from
his study showed a positive impact on all pupils using the
system, irrespective of the pupils hearing abilities. In the
subjects of mathematics and languages the impact was
twice as high in schools that had used the new system.

**Straight in the ear**

After half a year perhaps the Danish research will show the
same success in Danish schools. In the first phase it will be
up to the teachers, the school principals and the politicians,
if they want to regard this new system as a possible
solution. As there are more children with hearing loss and
other special needs going into the normal education system,
it will be of major interest to follow the development of the
study in these twelve Danish schools. A look into an
English classroom gives us an optimistic outlook:

Shyness of having to talk in a large group is apparently a
rare problem, when one has adjusted to the system already
from the first grade. They all want the chance of going up
to the microphone. In the middle of the room a boy sits
with his hearing aids on and follows the teaching intently.
Before this, he used a lot of concentration to understand
everything going on around him, now it’s much easier to be
a hearing aid user:

- Now I can hear the teacher straight in my ear, says
Brendan with an big smile.

**Facts:**
The Active Learning system comprises of a headset and
a transmitter for the teacher, some wireless microphones
distributed between the pupils and four loud speakers for
the classroom. Gradually more and more facilities are
adopting this system, for instance in sport and drama.

Canada, U.S.A, Australia, New Zealand, Norway and
Iceland have already been using this system for some
years.

Study results from the countries previously mentioned
show that the number of pupils needing specialized
teaching is reduced to fifty percent. Children with other
special needs like D.A.M.P and autism can also benefit
from this system.