



Headmaster Simon Svenstrup in front of the old school which has been Hørsholm Lilleskole since 1970.

# From frustration to joy with SmartShare

When Simon Svenstrup began as headmaster at Hørsholm Lilleskole, the internet would sometimes be down for several days. Together with the schools' IT consultant Sanders PC Service, he quickly started a review of the schools network. More bandwidth and a SmartShare StraightShaper 4000 solved the schools' problems.

The new headmaster came from a school with a well functioning network and he knew how important it is for a schools efficiency and well-being, that the internet really works. "Sometimes, when the internet didn't work for a longer period of time, we just had to find something else to do," says headmaster Simon Svenstrup about the beginning of his employment at Hørsholm Lilleskole. "It is really frustrating when the internet doesn't work. It diminishes work efficiency and is a disturbing element in class, which is disrupted when the students don't have access to the internet, or when the teacher can't present them to the planned YouTube video on our Smartboards."

"It has been a time consuming process to make our network function as it does now. We had to review different functionalities and check hardware and software for deficiencies and lack of functions, to find the cause of the malfunctioning network connection.

But one thing was very clear; streaming and movie downloads made the internet connection run extraordinarily slow, and often the users were simply disconnected!"

## More bandwidth is not enough

When the internet connection is slow, most people think that the solution is to buy more bandwidth, but that is rarely enough. Just a few diligent users who stream and download movies and use peer-to-peer applications, can use up all the bandwidth. With more bandwidth, the more bandwidth demanding users will just have more bandwidth at their disposal. The remaining users will still not have enough bandwidth available, and will experience an unstable internet. The solution to the problem can be found in the way the bandwidth is distributed among the users, and that is what SmartShare does.

SmartShare distributes the available bandwidth evenly among all active users on the internet at all times.



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*Simon Svenstrup, headmaster at Hørsholm Lilleskole*

This means that all users have the same amount of bandwidth available and thus a faster responsetime. Many users will quickly be done, and the spare bandwidth will now be distributed among the remaining users on the internet. The bandwidth is dynamically distributed among the active users and they experience a stable and fast internet. Also the few bandwidth demanding users will experience a fast internet connection, but they can no longer disrupt the internet and be a nuisance to all the other users.

Hørsholm Lilleskole has about 200 students in classes from kindergarden to the 9th. grade. The younger classes can borrow iPads and laptops from the school when they need it. From the 7th. year up, it is expected that all students bring their own devices.

The school does not have an official set of IT rules, but speak to the children about behaviour on the internet in compliance to the schools' own values.

#### **When a non-technical person needs to make a technical decision**

As headmaster, it is Simon Svenstrup who makes the final descisions for the schools IT investments, but he is not so technical himself when it comes to IT. "For a long time we have had an exellent collaboration with Sanders PC Service, who takes care of everything concerning our network and IT. They are also very pedagogical when technical talk is needed. Among other things, I was shown some graphs in the SmartShare software which tells me how much available bandwidth the users have, how much bandwidth is being used and when our use of bandwidth peaks.

This made it very clear to me, how much SmartShare really improved our internet connection, because I physically could see the effect. This, and consulting Sanders PC Service made me feel ready to take a decision which would also affect expenses in our IT budget in general."

#### **Budget for IT has multiplied**

In general, schools today are much more digitized than they were just a few years ago, and this also affects Hørsholm Lilleskole economically. "Previous we had a little internet subscription which cost us a couple of thousands (danish kroner) a month, and we had an internal member of staff who took care of our IT operations. Today we need to use professional consultants to care for operations, and our expences for IT have increased significantly. It feels a little like a waste of money, but actually its good money spent. Now the internet works, which is very beneficial for the students and the employees at the school. And the SmartShare - well, we don't think about that it is there, because it just works!"

With almost 200 active students and employees, the school has bought more bandwidth.

They have gone from a 10/10 Mbit/s to a 100/100 Mbit/s internet connection, and have connected a SmartShare StraightShaper 4000 to the network so everybody has access to an effecient internet. Now they are ready for the future.