The digital exams are over us - what do we do?

From the summer of 2018, schools nationwide are implementing digital exams. Smartshare Systems and Eltel are helping schools getting their wireless networks ready.

Background
The highschool leader unions and the Ministry of Education, have agreed to use a common system to streamline the processes at exams and major written asignments. But what impact does that have on your school, and how can you successfully prepare for it?

The challenge
Is your wireless network able to handle many simultaneously active users, being on the internet in the same space? It is a challenge for most schools, getting ready for the digital exams.

Maybe the daily use of wireless internet works flawlessly. But when the concentration of students changes from being spread out on the entire school, to being gathered in a singular space, and everybody simultaneously connects to the internet, the wireless network will be exposed to major stress. It is at this point you can really see, if the schools' network is correctly dimensioned.

Take on the challenge
On Gørlev Idrætsefterskole they participated in the national trial for digital exams, and acquired valuable knowledge and experience.

Headmaster on Gørlev Idrætsefterskole, Niels Skak Jensen, is a man who takes his school into the future. The school began in a closed down nursing home, but today also includes the former town hall, an advanced multi-gym and a functional outdoor area for sports and leisure.

FACTS

Place
Gørlev Idrætsefterskole

Number of students
160

Bandwidth
500/500 Mbit +
SmartShare StraightShaper 4000

Wireless transmitters in the examination room
4

Of course, the schools' network is dimensioned for the 160 students being online during classes, as well as in their spare time. Thus, the school decided to participate in the national trial of Netprøver.dk, to avoid unpleasant surprises in the future of digital exams.

The school has a 500/500 M/bits connection. A SmartShare StraightShaper is connected to their network, to secure all students an equal amount of bandwidth, and access to the internet.

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Experiences from the exam trial test
The number of Wi-Fi access points are dimensioned to handle the amount of students. Everything ought to run smoothly, but not untill an hour after start, all the students are finally connected to the internet. The students are frustrated, and many now have an hour less to solve their assignments, because the internet connection failed.

Naturally, this may not happen in the future, when the exams really count - but then how do you succeed?

A good networkmay not solve all obstacles. If you are not an expert, it can be difficult to know what causes the problems, and how to fix a malfunctioning network. For the exam trial, Gørlev Idrætsefterskole cooperated with SmartShare Systems and with Wi-Fi specialist, Bo Ør Iversen from Eltel.

During the entire exam, the network and the computers, were monitored by the it specialists. The SmartShare clearly showed that there was plenty of bandwidth available, but the monotoring showed that the connection between the clients (the computers and smartphones) and the Wi-Fi transmitters, were slow.

It can be a problem when many clients in a smaller area, like in an exam situation, simultaneously connects to the internet. The clients must wait for their turn to get access to the internet, and the users will experience a poor network despite ample bandwidth.

The reason for this, may be that some clients are not compatible, and differ in the Wi-Fi standards they support. An older client is very likely to run slower when downloading and uploading than a newer client, and this makes a queue that delays all other users.

So a good network only works at its' best when also the clients meet certain technical requirements.

"We have also confirmed that it is a good thing to have a SmartShare, it has more possibilities than I was aware of, so I have increased our use of functions in it."

Henning Sand,
it responsible at Gørlev Idrætsefterskole

The solution
Make a trial for a digital exam. It is a good idea to be sure the schools' network can handle the stress.

Use an independent it specialist to go through the schools' network. There are many parameters to take into consideration. Therefore you can save both money and resources, by paying for external professional advice.

Execute a digital exam without problems
The school itself, can also initiate actions to secure an exam without interruptions.

Read the good advice below from Bo Ør Iversen, Wi-Fi specialist at Eltel.

DO THIS BEFORE THE EXAM:

- **Update the computers' ope-rating systems.** Make sure, that all the students have updated their operating systems. Shut down the computers and restart, to implement the updates.
- **Update firmware.** It increases the performance of the computer. Find updates on the suppliers website.
- **Make sure the computers are connected to a printer,** and the printer-driver is updated.
- **Test that all students can simultaneously connect to the wireless system,** that they have acess to the internet and can print. Test it in the actual exam space, and with the actual number of studens taking the exam. This will show if the network is working correctly.

DO THIS ON THE DAY OF THE EXAM:

- **Meet up in good time before the exam starts**, so there will be time to solve any technical problems.
- **Bring a SHUT DOWN computer to the exam**, when using a wireless connection. This avoids the computers to be stuck in Wi-Fi transmitters somewhere else in the building, which can impair the internet speed.
- **Make sure you have a plan B**, if you can not complete the exam digitally.

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