Hello

Introduction

[SLIDE MED KARTA ÖVER VÄSTERBOTTEN]

My name i Thomas Ylvin and I work for the Västerbotten County Council as an educator and media producer. Västerbotten Count Council has two big hospitals, one university hospital closely connected to the Umeå University and several health care units. We have nearly 10000 employees spread out on an area as big as Denmark. We are a public organisation and funded by tax money.

The demands for robust and accessible teaching material have led to the introduction of an e-learning platform and courses at Västerbotten County Council.

The e-learning platform is an interesting tool for the distribution of courses, perhaps in particular for a sparsely populated area such as our county , with several large and small healthcare units....

In this presentation, I will tell you about our work and the results after working with e-learning courses in a large organisation.

Is it effective?

[SLIDE MED GAINS OF E-LEARNING]

The e-learning approach to teaching materials has enabled a much larger impact than conventional teaching, since it is often difficult to reach all eligible personnel, particularly in interventional and external healthcare departments and units. However, a sparsely populated area is not the only factor that would indicate that an e-learning platform is beneficial. A normally staffed department cannot easily complete the required courses in the form of lectures and practical exercises. An e-learning course can be studied when it suits an employee. A supervisor can help employees to find time to study. An e-learning course can be studied over time, repeated many times and can be used as a reference book. That's the nature of e-learning isn't it? An important advantage is that the council does not need to find a replacement for the employee while he or she is studying. A supervisor can also follow which courses an employee is studying and follow their progress. And keep in mind that a 20 minutes of e-learning is equal to 1 hour traditional classroom training.

To create an e-learning course

[SLIDE MED PRODUCTION TEAM]

The e-learning teaching material has been developed in collaboration between subject experts, media educational specialists, graphic artists, film and photography professionals, as well as reference groups of various clinical specialities, in this case doctors, nurses, technicians, engineers or administration staff, depending on the subject.

To develop an e-learning course is a costly process that must fund subject experts, educators and media producers, as I mentioned. The County Council has built up its own production department in support of those who want to use e-learning to reach out with their knowledge and skills. The time it takes to develop a course is a good investment as a large number of employees can use the material at a very low cost.

Reference group does the priorities

A reference group looks through the applications received and prioritises the courses that primarily reach many employees and primarily are about patient safety.

What kind of courses do we have today?

[SLIDE MED MT UTB]

- The e-learning courses today cover areas such as medical technical equipment.
- New employees must learn how to use the equipment.

- Some procedures are carried out infrequently and e-learning helps employees maintain their skills in these areas.
- Some medical equipment is expensive and breaks easily if treated the wrong way, etc.

[SLIDE MED KONFLIKTHANTERING]

• Other examples are that employees sometimes end up in situations with patients who are mentally ill and appear threatening or for other reasons may behave in a threatening way. Employees can study a course on how to be prepared for such situations.

[SLIDE MED STRÅLSKYDD]

• The Swedish Radiation Safety Authority requires that all employees who work with radiation must undergo training and maintain knowledge by doing tests every few years.

How do we do it?

[SLIDE MED TOOLS]

We try to make courses visual and interactive rather than text-based. We use a lot of illustrations, photography, video and we use narration as much as we can. We have been inspired by the action-mapping model Cathy Moore has developed. It's a basic template for how to build course materials. We list actions that employees must take to meet the goal of the course. That way we can strip away unnecessary information that serves no purpose for the goal. It can be included as further reading for those who want to immerse themselves. When we have a script for the course, we plan how we visualize it and make it more interesting. After that, we begin to produce the material in close collaboration with subject experts and after a time, we are ready to publish course in our LMS.

The tools

We use some rapid e-learning tools called Articulate Studio and Storyline to build the courses. The subject experts can build their course with Powerpoint and with those tools we can turn that presentation into a Flash-based interactive and interesting course. It's easy to build the courses with Articulate and Storyline and we can concentrate our efforts on pedagogy and visualization.

[SLIDE MED LARANDE...]

We export course in a SCORM format in our Learning Management System and make it available to our employees. With help of our LMS we can keep track who's passed what course.

[SLIDE MED FILM]

I'm gonna give you some samples of what we have done starting with some video. It's in Swedish but I guess you get what is all about. We make instruction movies and quite often use scenarios or situations.

[SLIDE MED ILLUSTRATION]

Our subject experts often have images or illustration that they found on the internet that we can 't use. We use them as a template to develop our own that we can use as much as we like.

[SLIDE MED PHOTO]

Same photography. We mainly do the photo shoots ourselves.

[SLIDE MED ARTICULATE]

This is what it looks like when we work with a course. It's Powerpoint but then we have this Articulate tab added that gives us more opportunities. Storyline is a little bit different. It's not based on powerpoint and it's possible to export courses for iPad's or other tablets.

[SLIDE MED SCORM]

And this is what it looks like when it's been published in our LMS. It's easy to navigate and you don't have to follow a strict order. That way you can use it as a reference book when needed.

[SLIDE MED STORYLINE]

Storyline looks like this and this is a little game we made were you practise in what order you do things when cleaning body liquids from on the floor. This course is about basic hygiene.

[SLIDE MED CAMTASIA]

When there is little time we also do screen recordings where a subject expert talks to his powerpoint. We can record a seminar or do live streaming with video. Even though we prefer to do a proper e-learning course. But if there isn't enough time, it's better than nothing.

Experiences and results

[SLIDE MED EXPERIENCES AND RESULTS]

In traditional educational situations we had poor attendance. We experienced unwillingness to participate - maybe because it took time away from ordinary activities - if it was due to managers or employees, we do not know. It took a lot of time to travel to the parent hospital where most of the courses took place and to participate in a course, it took a lot of time from continuing operations due to the travel times. As you can see we have some costs we can cut from using e-learning.

In the case of course in "Radiation protection" - authority requires that authorized employees are trained and requires us to report the results.

Some comments from emplyees.

- It was relevant knowledge for my future work
- Useful with repetition
- Smart to make training available online
- A good complement to traditional education
- Good to be able to take it at your own pace and when it suits me. But it requires time and concentration.

Recommendations:

[SLIDE MED EXPERIENCES AND RESULTS]

It must be easy to login and access the courses. There is also a generational issue. Young new employees do not feel there is anything remarkable to register on the portal on the Internet.

Set aside time for employees to take the course. E-learning is not the only solution to effective training.

Start with a knowledge test so that the employees can determine if they needs to take the course, or if they already have relevant knowledge of the subject.

An in house Production Team. Our budget is \in 200,000. An e-Learning course costs \in 17,000 for 15 minutes of training. With our budget we could buy almost 3 hours of e-learning but we can produce ten times more, at least with our own production team.

In both cases, we must add the cost of topic expert - who already do training in the traditional form.

And that $\acute{}$ s all I had to say. I hope you found it interesting listeneing to our work with e-Learning in our organistation.