

Brain Power

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Can FOCUS make training more effective for the Swedish paper industry?

Eddie van de Steeg, engineer and former production manager, is nowadays supervisor and instructor for the training programme FOCUS in Holland. Here he is on a training course at the SCA plant in Zaandam close to Amsterdam.

New Opportunities

FOCUS, a modern teaching aid with both breadth and depth and with exciting pedagogics. This material is now on its way to be launched in Sweden and everything indicates that FOCUS can be used as a good basis for blended learning for us as well.

In all essentials, the Swedish paper industry shares the same picture regarding needs with its colleagues on the continent. It is becoming increasingly common with in-house training in the mills. As far as possible, the training shall be adapted to the individuals and the work place needs. New media have created new opportunities for learning. Flexibility is the decisive factor for success.

There is no simple patent solution for how a company's need for competence development is met. But FOCUS can provide a good basis for systematic learning across a broad front. Therefore, it is gratifying that the Swedish paper industry can soon be offered parts of the training material translated into Swedish. It opens up new ways for developing the company's training schemes.

As can be seen from the experiences in Holland, it is crucial that FOCUS is used in the right connection and with the right methodology. A training instructor who supports and sets up individual goals is sensible. Project tasks that are linking FOCUS with the workplace increase the benefits further. FOCUS shall be seen as a part in an overall picture where the company's current competence needs decide how the training shall be designed.

So far there are only a limited number of modules that will be translated and adapted to Swedish conditions. It will be exciting to see how they will be received by our companies. Swedish Forest Industries Federation is involved in the reference group that gives advice in the on-going translation work. We get valuable help from the people responsible for training at some of the mills involved.

As such large resources already have been invested in Europe to develop FOCUS, partly with the support of the EU, it feels natural that also Sweden is part of the project. Here we are offered a short cut to a practically ready training package. Therefore, it is good that Packaging Greenhouse has jumped on the wagon.

New opportunities are created with FOCUS for systematic learning at the workplace.

Mårten Ericsson
Swedish Forest Industries Federation



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email: marten.ericsson@skogsindustrierna.org, from where also more copies of Brain Power 1015 can be ordered.

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Interactive studies changes educational training

Three operators from SCA's Dutch paper mill de Hoop in Eerbeek are sitting in a group room, each with a computer in front of him.

Video films and animations of the processes they work with daily are shown on the screen.

'At the moment we are working with three different modules, among others, process control and different forms of

drying', says Walter de Jager, who has himself worked here for six years.

At a number of paper mills and converting plants in Europe, operators today are being trained with the help of a new system, FOCUS, where self study and instructor led sessions at the own company are blended with self tests and a final certification of each participant.

'It is easy to acquire the knowledge', says Ernie Hinderks, Walter's colleague, who has twelve years' experience of pa-

per making behind him.

'We see our own process on the computer, we can try on our own paper machine and have group discussions on how we can work more efficiently as a result of what we learn'.

The paperboard production here in Dutch Eerbeek goes, among other places, to SCA's converting plant in Zaandam

Read more on the next pages.



At SCA Packaging de Hoop, there is a special education training room with computers where the operators can sit and study. They also have computers at the work place in order to use any time left over during production. Ernie Hinderks is in the foreground with Walter de Jager and Maarten Lelsz in the background.

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in north Amsterdam, where approximately 80 employees work in two shifts. The same training programme is being carried out in Zaandam, but adapted to the process they work with there; finished cartons with four colour print.

Internal Competence Targets

Ruud Rijks is production manager and says that the company a year or so ago set up internal competence targets. However the target that all employees reach a level of 80% in the assessment we had, was not reached at that time.

Then the company started to work with the FOCUS system and today all of the employees have attained the set goals.

'We often see how the personnel discuss the different problems they meet during the training', says Ruud Rijks. New employees ask those with more experience, who must think about the problem and thus everyone increases their knowledge.

The training is based on building blocks where the computer modules filled with video films of processes, clarifying animated sequences and text based education form the basis. Everything is alternated with questions and multiple choice answers. However, the instructors play an important role as they support the operators all the time during the training.

Blended learning

In Zaandam this particular day is Eddie van de Steeg, an engineer and a former production manager at another converting plant.

'In order for the training to function, we instructors must provide a thorough introduction and also be at hand at intervals during the self study periods', he points out. He uses the expression "Blended learning" to clarify what he means.

Eddie also emphasises the dialogue that arises – not least when the operators go into their computers and look at other processes in connection with their own.

'They see new things on other machines and transfer their findings to their own. Possibilities can be seen for the entire process'.

Back to the 17th century

Back in Eerbeek, paper has been produ-



Walter de Jager has worked as an operator at SCA Packaging de Hoop for six years. He is now studying three of the foundation modules that are in FOCUS, among others, the drying process and a general module called "Process Control"

ced for more than 350 years. Today the mill employs 185 persons – most of them work in five shifts. The heart of the manufacturing is the two paper machines that produce 350,000 tonnes of paper per annum. Only recycled fibres are used here.

Not far away, in the town of Apeldoorn, VAPA, the united paper industry's own educational unit, has its centre. VAPA has some ten employees plus double as many free lance instructors. The managing director for VAPA is Peter Lokhorst and today he has joined the training manager at the paper mill, Theo Rensen, in order to introduce FOCUS into the daily work.

Around 40 modules

FOCUS, which today is used at all paper mills and converting plants in Holland, has been developed in close co-operation with several large paper producers, amongst others, StoraEnso, SCA and SmurfitKappa.

'CEPI is also involved and supports the project', says Peter Lokhorst.

Somewhat more than 40 different modules in four languages concerning different parts of the process are in FOCUS, where also about 3000 different explanatory video clips are incorporated. The modules mainly concern the central processes, but there are also parts on adjoining processes, quality and process costs, energy, safety, maintenance and fault finding.

Everything is structured so that it can be quickly changed and adapted to the specific process of the individual company.

'It is not only the operators who find the courses beneficial', Peter Lokhorst points out.

'We also use the FOCUS modules in training courses for maintenance personnel and sales people or for suppliers, he adds.



Peter Bronsveld has worked at SCA's converting plant in Zaandam, Amsterdam, for 25 years. At the moment, he is continuing his training with the help of the FOCUS programme. 'I can see and learn at the same time', he says. 'It is much easier than learning from books and gives a deeper understanding of what is really happening. We print inline in our machine and here, for example, I can go in and see the special sections about printing in order to better understand the whole process'.



Maarten Lelsz is a newly employed operator at SCA Packaging de Hoop. After work, he is studying a couple of hours a week via the interactive programme FOCUS in order to learn more about the basics of the paper production.

Puts new demands on the company

THEO RENSEN SEES how the introduction of FOCUS puts higher demands on his own company:

'Previously we sent people on a course for a few days. It was simple and we only needed to pay', says Theo Rensen, training manager at SCA's paper mill de Hoop in Eerbeek, Holland.

'Now we shall link the training to our own process and besides that, train the personnel here on-site - with accessibility to computers for multimedia training, seminars and study visits to the own machine in order to apply the skills'.

Raises the basic competence

With the help of FOCUS, the collective basic competence has been raised here in Eerbeek. The personnel who have a relatively low theoretical education from the beginning now get a more defined knowledge base to stand on.

At PM5, we meet three of the course participants. Maarten Lelsz works on the rewinder and has only a few months' experience. Ernie Hinderks sits in the control room and out on the shop floor we meet Walter de Jager. The last two men-

tioned have between six and twelve years experience:

'Everything I have learnt before I have picked up from colleagues', says Ernie. 'I get a completely different understanding with FOCUS, for example why the cylinder shall be at a certain temperature and what effect this has for optimising production.'

'If something happens in the machine, I now more often know the cause and how to handle it. I become more effective and avoid surprises.'

Self tests

After they have finished their shift a while later, we meet up in the training room one flight up. All three work at their own pace with the course programme and carry out different self tests to see if they are ready for the final test. Today they are all deeply involved in the drying process.

'We work here three hours a week and get paid for it', says Ernie. 'But we work at least as much at home too. It is necessary, but at the same time, it is an opportunity for me', says Ernie Hinderks.

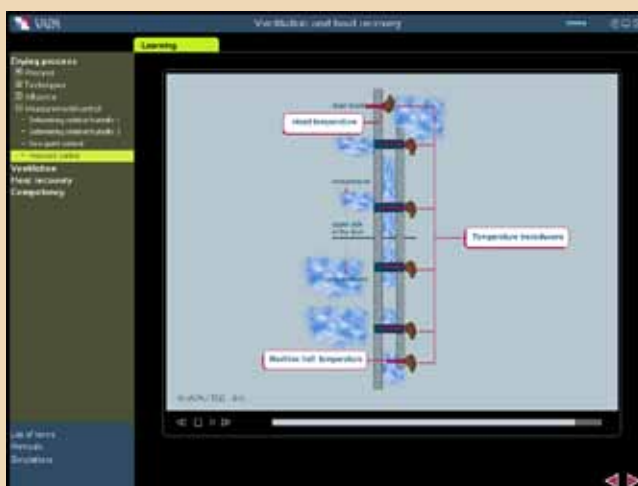
Increased responsibility

Robert Krauts is personnel manager at SCA Packaging de Hoop. He points out that the modules the personnel are now studying is not the goal in itself.

'They are means - we invest in the personnel's competence', he says and explains with an illustration how the knowledge is measured at five levels and that the individual himself has the chance to attain higher competence.



The training manager at SCA Packaging de Hoop is Theo Rensen (on the left). Here together with Peter Lokhorst from VAPA Schooling & Training.



This is FOCUS

For mills it is more and more difficult to send employees away for a long period of class room training. So there is a great need for flexible learning that is suitable for guided self study.

The educational centers of Holland, Germany and Austria (VAPA, Gernsbach and Steyrmühl) have finished a project with the support of the EU, to develop this kind of multi media teaching material. CEPI, Fefco, StoraEnso Germany, SmurfitKappa Europe, Sappi Benelux, SCA Benelux, Mondi and branch organizations of in total 9 European countries have been participating in this project. Also Sweden (Packaging Greenhouse) is one of the partners.

Multi media modules

In total 40 multi media FOCUS modules have been developed focused on the paper-, board- and corrugated board industry in four languages (German, English, French and Dutch).

Every module consists of 60 to 100 video clips or animations. More than 3000 clips in total!



All modules have the following sections:

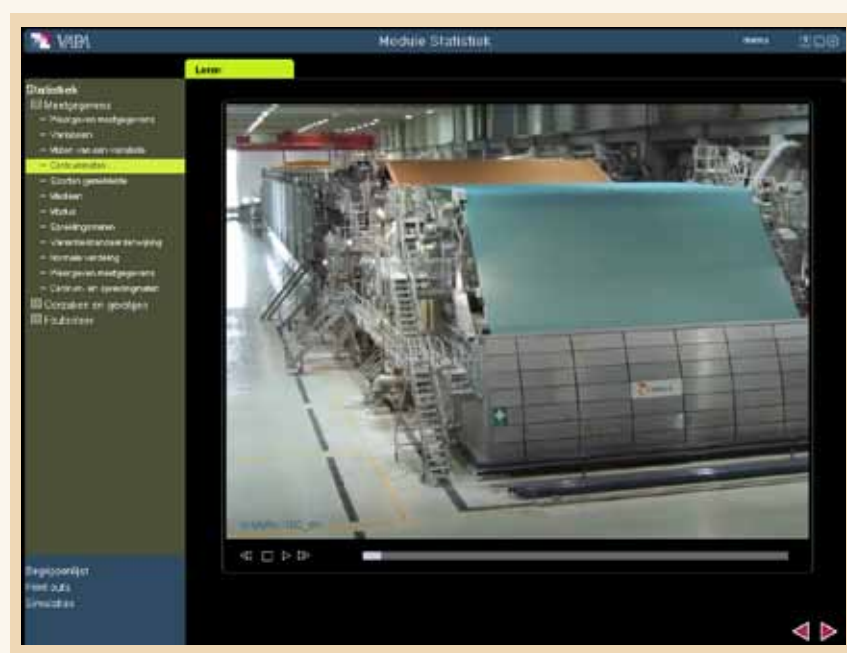
- Introduction
- Learning with all video clips and animations
- Questions and assignments
- A self test
- List of terms
- Simulations

Examples of modules

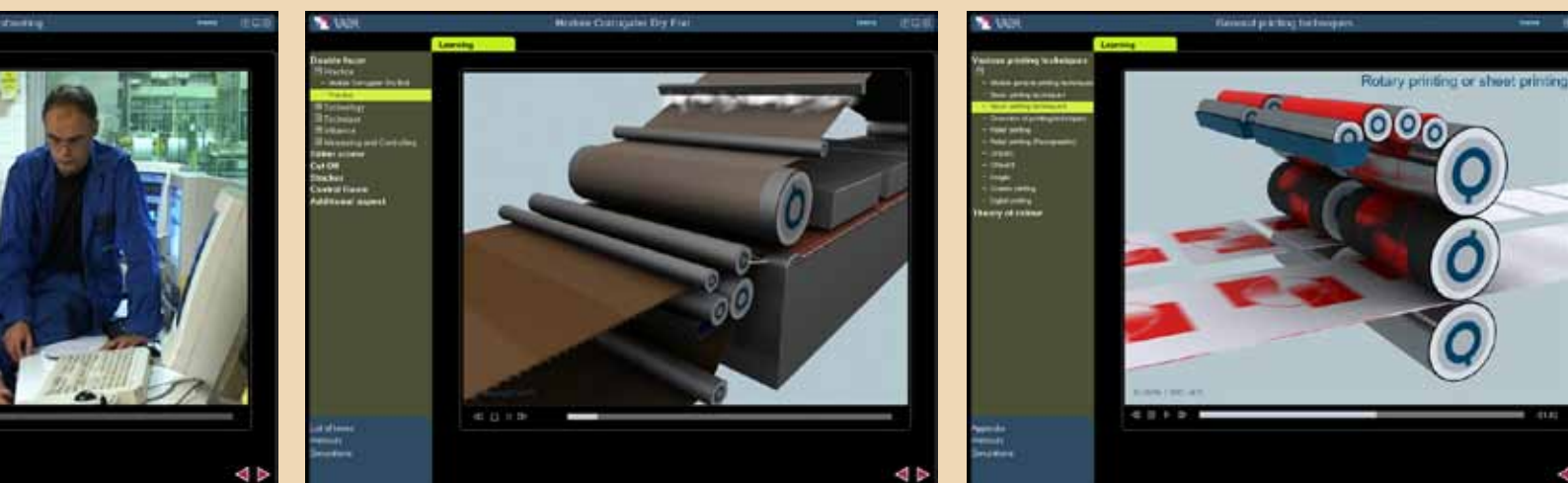
Some examples of modules are: Chemical Pulping, Mechanical Pulping, Paper

properties, Stock preparation, Headbox, Pressing, Drying; Steam and condensate, Wet-end chemistry, Calendaring, Coating, Water management, Corrugated board machines, Dying, Flexo printing and general modules like Safety and Trouble shooting.

The FOCUS modules are used in blended learning situations for mills but also used in schools, Universities and by suppliers for example who use them to train the sales people.



Different processes are illustrated by means of animation and video films.



FOCUS is a multimedia training programme for the paper, board and corrugated board industry

Blended learning is a combination of:

- Group instruction
- Selfstudy with the FOCUS modules
- Practical assignments related to the own machine
- If needed; individual guidance on the job.

A Road Map

An “Organiser” plans the organization of one module for the students as a “road map”. This Organiser will be different for more experienced employees (less group sessions, more detailed on the job instruction related to specific optima-

tions) than for people who just started in the mill (more group instruction, more general focus).

For one module 3 to 6 group sessions of half a day are planned, depending on the target group.

Between the group sessions the students have to do some self study and some assignments.

At this moment the FOCUS modules are used in several countries like Holland, Germany, Austria, England, South Africa and even in the US and recently also in China.

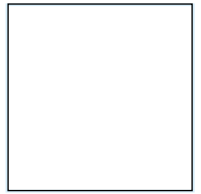


Day 2:	
	Go through the section “.....” on the DVD.
	Answer the questions in Process on the DVD.
	Read the chapter “.....” in the course folder.
	Go through the section “.....” on the DVD.
	Answer the questions in Process.
	Go through the section “.....” on the DVD.
	Complete the Cases (See Print outs) on the DVD.
	Read the chapter “.....” in the course folder.
	Answer the questions “.....” in the course folder.
	There is a group meeting after all the Day 2 material has been gone through. The material and any questions concerning it are looked at with the trainer as required. The working out of the cases is also be dealt with where applicable.

The Organiser: clear instructions show how the education will be organised for a student.



Peter Lokhorst from the Dutch VAPA, who has developed the training programme FOCUS. Here he can be seen in discussion with Ernie Hinderks, an operator at SCA Packaging de Hoop in east Holland.



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The programme is built up around so-called Blended learning, where self study via DVD discs is combined with instructor led introductions and discussions.

FOCUS is now on its way to the Swedish mills

FOCUS is a training programme that has been developed mainly in Holland but also in Austria and Germany and which is also on its way to Sweden.

Packaging Greenhouse in Karlstad, which is a trade owned independent research and education environment in paper and pulp technique, are working on a Swedish version.

'We are working on a translation of the material and will have the first module ready in the autumn', says Managing Director, Susanne Öhman. Totally there are approximately 40 modules in FOCUS. First to be translated is an overview module, which shows the whole process from pulp to paper. The paper machine will be in the next stage.

'Then we will go more deeply into different processes', says Susanne Öhman.

Today, Packaging Greenhouse arranges

custom made, process focused training out at the mill and that is where the different modules will gradually, starting from the autumn, be implemented in training courses for different positions.

'Initially we will use the classic classroom way of training with video clips, animations and illustrations', says Susanne Öhman.

Well thought out material

As the material becomes more complete, FOCUS will function as a training programme in itself, as it is used today in, among other places, Holland.

'It is an extremely well thought out material and good training at a reasonable cost,' summarises Susanne Öhman.

'When the Swedish version is complete, teachers, perhaps local instructors out at the mill or teachers from us will be needed.'



Susanne Öhman from Packaging Greenhouse is working on a Swedish version of FOCUS.