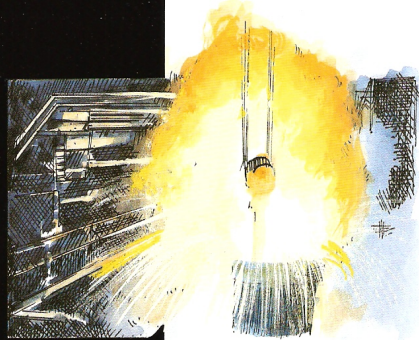


LEARNING TECHNOLOGIES

Open Learning in Action at Sheerness Steel

TRAINING STRENGTHENS SHEERNESS STEEL



Sheerness Steel is an independent steel company with 700 employees, which makes

steel bars and rods from scrap metal. In 1982 it was struggling for survival, badly hit by the recession in the early eighties. But today Sheerness Steel is a healthy profit making organisation, largely as a result of its training initiatives.

The rebuilding of the company began in 1983. Sheerness Steel recognised that investment was necessary for a secure future, but did not have the finances to invest in new equipment. Instead, it decided to invest in a more valuable resource – people.

The first step was to decide what training was necessary, and find the most efficient ways to implement it. Sheerness Steel wanted to learn from the best. Over 50 people from the company visited the most successful factories abroad. The German steel industry was identified as the one which had the most to offer, with companies that were very efficient.

In equivalent companies in Britain the usual practice used to be that each person in a production line had only one skill. This meant that if a part fell off a steel making furnace and needed to be welded back on, an engineer would have to be called to look at it, then fetch the tools and eventually mend it. This could hold up production for as long as 30 minutes. In Japan and Germany if the same thing happened, whoever was nearest would repair the furnace immediately and work would continue.

German practice helped set the standards Sheerness Steel wanted to reach. It was decided to increase the skills of the workforce, so that an individual would not only work on a production line but be capable of maintaining that production line too. Training was required to build a workforce which was more flexible – a workforce made up of multi-skilled workers.



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LEARNING METHODS CASE STUDY

L E A R N I N G T E C H N O L O G I E S

Sheerness Steel decided that training was also necessary to improve the vocational qualifications and technical abilities of its employees, to match them to the levels of their counterparts in Germany and Japan.

A training programme was quickly developed which could be implemented throughout the workforce. The factory runs 24 hours a day, seven days a week, so classroom tuition would have been extremely difficult to organise. As four people were doing the same job during different shifts – when could they all be brought together? It was clear that innovative and flexible training approaches were required.

Open learning facilities introduced included libraries and computer training rooms available to employees 12 hours a day. A learning tool which has proved to be particularly useful is interactive video. Interactive video is a computer-based training system that allows students to access and control lessons by pressing touchpads on a computer screen or by using a keyboard. This involves students more actively than an ordinary video and they can learn at a pace which suits them. These facilities are supported by self-help and study groups.



L E A R N I N G T E C H N O L O G I E S

People are assessed on their training in two ways, on the knowledge learnt and the skills gained. Knowledge is measured with written tests and qualifications, skills are measured through workplace assessment by trained assessors.

One key to the success of the training carried out at Sheerness Steel is that it demands consistent standards, no matter how long it takes employees to reach these standards. Someone who is computer literate may learn an accounts system taught by interactive video in two days, another person may take two weeks. Open learning guarantees results that are not easily achieved with chalk and talk methods. In the classroom, people of different abilities (and knowledge) are expected to learn at the same speed, following exactly the same lessons.

Flexibility is one reason why 50 to 60 per cent of all training at Sheerness Steel involves open learning methods. As people are expected to learn on their own, measures are taken to prevent them feeling isolated. Workshops and seminars are organised and each trainee has a mentor – someone who will oversee and discuss how the training is coming along.

Open learning is a cost-effective way of training, as people usually learn in their own time. By offering training programmes tailored to individual needs, it often solves training problems that traditional methods cannot.

Sheerness Steel now has a skilled and flexible workforce, with 50 trained assessors. Each employee with a skill is qualified to train others in that skill. As Mike Henderson, the training manager explains: "We have 700 trainers at

Sheerness Steel and 700 trainees." The main aim of the training is for people to have multiple skills that reach specified standards. Increasingly these standards have become National Vocational Qualifications (NVQs). Sheerness Steel led the way in generating NVQs for the steel industry. For instance it has written many of the draft standards for electric arc furnace steel making.

Sheerness Steel has achieved striking results. Currently, 63 per cent of the workforce have vocational qualifications and another 27 per cent are studying for them. The employees are motivated in a variety of ways. They can see how training will improve their career in the company, and as training improves the company's efficiency, the resulting increase in profits is reflected in pay packets.

As well as needing to have certain skills to be capable of carrying out their jobs well, employees are also motivated by their desire to learn. The facilities available mean they can learn a wide range of subjects and choose the best times to study them. Some employees build on previous courses to become experts in one field, others learn a variety of subjects to increase their understanding of the whole steel making process.

John Arnold, an electrician, chose to learn a spreadsheet package on interactive video. He explained: "I have never understood computers, and I thought it was time I became more familiar with how they work. I am using this video to learn the basics – such as how to get around the computer keyboard – before I go on to learn MS-DOS."

L E A R N I N G T E C H N O L O G I E S

All members of the workforce, from apprentices to those near retirement age, can benefit from training whether in particular skills, such as how to operate a new piece of equipment, or in subjects which relate to steel-making, such as metallurgy. Sheerness Steel's aim is that by the end of 1992, 75 per cent of the workforce will have an NVQ – they are currently on course to exceed this target.

In 1983, Sheerness Steel personnel were flying all over the world looking for best practice, yet no visitors from other factories came to learn from Sheerness Steel. By 1988 outside companies were beginning to show interest. Now, so many people ask to visit, quarterly seminars have to be arranged to cope with the numbers.

Sheerness Steel won the Investors in People award, an initiative sponsored by the Department of Employment, in October 1991. This award

recognises the company's achievements in training its workforce and improving the business. Such awards, given by neutral assessors, help the training department measure how well new initiatives are working.

Open learning techniques are one reason why Sheerness Steel has succeeded in improving efficiency and productivity. And the improvements are impressive. In the last ten years, productivity has risen by 90 per cent, quality currently runs at 98.7 per cent (this means that 98.7 per cent of steel produced first-time is of high quality) and scrap metal is down to just 2 per cent. At the beginning of the 1980s Sheerness Steel was losing up to £10,000 per employee per year; by 1989 each employee was generating around £20,000 for the company.

In the words of Mike Henderson: "Training is an investment, not a cost."

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