



Bridgewater Learning



e-Learning Made Easy



Case Study: The AREVA Mine in Namibia

Restrictions on Use and Disclosure of Document Information and Data:

This document is the property of *Bridgewater Learning*. All information herein is confidential to *Bridgewater Learning* and must not be copied or disclosed to any third party without the prior written consent of *Bridgewater Learning*.

© Bridgewater Learning 2010.

Introduction

AREVA Resources Southern Africa owns a new uranium mine on the west coast of Namibia. The mine started operation in 2008 and is expected to reach full production in 2012. Additionally they have offices in Johannesburg where administrative staff are based.

A large number of new staff were taken on board in Namibia during the mine commencement. These employees were sourced predominantly from the local area though also from abroad. When we started discussions with the client the initial need was for policy and procedure-based training. It quickly became apparent that the underlying knowledge of mining operations was required before specific procedural training could be introduced.



The Need



AREVA had a need to quickly and effectively up-skill a wide range of employees in every aspect of their mining business. The target learner population needed to hit the ground running in order to meet very strict output targets.

The primary learner audience is matriculants with either mathematics or science. None have ever worked on a mine or studied any specific mining subjects. On the mine these employees are expected to rotate between functions and are responsible for carrying out operations in each area of the mine. They thus needed a solid understanding of every aspect of the operation.

The range of training subjects is thus extremely broad encompassing:

- Induction
- Health and Safety
- Environment
- Pit Operations
- Processing Plant Operations
- Geology
- Engineering

Across each of these disciplines AREVA required advancing levels of awareness including:

1. Knowledge-based training
2. Policy and procedure training
3. Practical training

Bridgewater's Solution

Analysis

Bridgewater started by trying to understand the scope of training that was required. Due to the segmentation of functions within the mine, there was some duplication of effort in training and writing procedures and policies.

We received a large number of policies and procedures as well as other information from the client and grouped together similar or duplicate sources. The difficulty was that each department had developed as much material as was relevant to their needs but this material covered only parts of broader subjects. We needed to fill in the gaps.

Design

Through visiting the mine and interviews with functional heads and subject matter experts we were able to develop training guides for each discipline. These specified:

- The outcomes required,
- The material requirements
- How that material would be broken down into lessons and courses
- How learners would be assessed
- The integration of the e-Learning training with practical training on site

These guides were approved by the relevant managers and used as the basis for the next phase.



Development

Once the preliminary plan was agreed we researched the subjects further, worked with the subject matter experts, extracted and collated useful information from across the documents and files we were provided and put together scripts for the lessons.

The scripts were then developed into graphical, interactive e-Learning lessons.

The lessons were built to incorporate a wide variety of instructional design techniques including:

- **learner aids** (such as copies of relevant documents discussed in the lesson, practice document templates to complete, glossaries, tables and summaries of material covered in the lesson for the learners to keep etc.)
- **In lesson quizzes** with learner feedback
- **Scenarios** that placed learners in “life-like” settings and challenged them to make tough choices
- **Interactive features** to keep learners engaged
- **Media** such as sound and video. Video can be particularly useful for demonstrating health and safety aspects and machine functions.

Because of their ease of deployment, multiple choice tests were the preferred knowledge testing method, though in-class practical worksheets were also used.

Delivery



Bridgewater then delivered the training through our learning management system. The majority of training is completed in a training center though many of the supervisors and managers complete their e-Learning at their desks on the mine.

Learners completed the work at their own pace and a training coordinator was on hand in the training room to assist with questions.

Due to the poor bandwidth availability, Bridgewater installed an offline server in the training room and in the office in Johannesburg allowing for near zero lag time in the delivery of courses.

Learners could also choose to watch their courses online allowing them to complete training when away from the training room or office.

Although there was dispersed delivery of courses, the online centralized learning management system provided one location for administration and reporting.

Along with the multiple choice knowledge assessments, a feedback survey was used at the end of each course to assess learners' impressions of the material, test and overall experience. The feedback from this survey was used to continually improve the training delivery.

Conclusion

Over 32 courses have been developed thus far and training is ongoing with upward of 150 courses being delivered per month. We continue to deliver weekly reports to management on the progress of their staff.

The results are evident in the feedback we've received from learners and managers. Learners have given the training material an average score of 8.79 out of 10 and the e-Learning service overall an 8.94 (across over 650 responses). See below for representative comments from managers and learners:

Comments from the Client:

"I can see a lot of thought and effort has gone into this training course. It is excellent." – Head of Health and Safety at the Mine

"I think (the lesson is) very good, for me it is the first time that we have a full lesson on this very important aspect. This will take a lot of the load off me and I can focus together with this just on the practical training." – Metallurgy Practical Training Officer

Comments from Learners:

"Well all of this is very new, interesting and exciting and I cannot wait for more information and knowledge. E-Learning is the best idea for mining introduction."

"I learned a lot from the lesson about my safety as well that of my colleagues."

"All the main points and objectives were set out clearly"

"Very well established, easy access anywhere a net access is available, you study to your own pace and help is just a click away."

"Convenience is the key reason for my rating of 10 out of 10"

"I like the whole setup of the course and the test; it was done very professionally and is outstanding."

"Covering all aspects and spot-on"

"I liked the video, because I could see what was happening"

"The test and retest is a good reflection on the work covered"

"It's very professional and easy to use."