

'EXPEDITIE ZEELEEUEW', AN E-LEARNING PROJECT ON MARINE SCIENCES

Ameye Karel

SHE Consultancy

't Hoge 39, B-8200 Brugge, Belgium

E-mail: kameye@sheconsultancy.com

Starting on the 12th of January 2005, 2000 Flemish high school students embarked on the 'Zeeleeuw'. The oceanographic research vessel owned by the Flemish government is designed to accommodate 12 scientists at most. That is why 'Expeditie Zeeleeuw' had to be virtual. The eLearning project takes 17 to 18 year-olds on a problem solving expedition in the North Sea. Participants have to find creative solutions to ten problem cases. They receive assistance from 20 scientists who are briefed to act as a coach. All educational tools are available on the Internet.

The problem cases represent ten major domains in which 500 scientists perform varying types of research in the North Sea realm. These domains are: climate, shipping, fisheries & aquaculture, biodiversity, pollution, marine heritage, marine air quality, beach litter, space use and war ammunition.

At the end of the project, three objectives will be evaluated. They are:

To which extent do participants of 'Expeditie Zeeleeuw' show more interest into a science degree?

The real-world context and hands-on activity provided by this educational project is assumed to trigger more interest in sciences.

Is the case-based pedagogical method more effective as compared to a cognitive method?

The over-arching pedagogical method is 'social constructivism'. Constructivist learning landscapes are composed of the following attributes: (...the learning style is...) active, constructive, interactive, focused, complex, contextual, collaborative and reflective.

What is the value added by specific ICT tools?

'Expedition Zeeleeuw' attempts to measure the greatly intangible added value of various ICT tools. These are: hypertexted and annotated bibliographies, electronic slide shows, discussion forums, simulations, clickable and layered abstraction models, virtual role play and video interviews.

The objective of today's presentation is to illustrate the underlying methods and tools using the eLearning platform located at www.expeditiezeeleeuw.be.

By July 2005, an evaluation report should provide answers to the above questions.