

E-learning at the oil rig



Betty Collis

She's commuting between UT and Shell in Noordwijkerhout. Professor Betty Collis, appointed Shell Professor of Networked Learning in October 2001, makes the translation of university e-learning practice to the worldwide industrial environment a focus of her research. The learning effect is obvious. In both ways: from university to industry and the other way round.

“Suddenly I'm dealing with new terminology, like drill techniques, petrophysics: within Shell Exploration and Production (EP) we do R&D on learning and work processes. EP employs 30,000 highly skilled professionals worldwide. In many ways, the use of our own TeleTOP learning environment is comparable to the use we make of it at UT, I see more similarities than differences. But at Shell we're dealing with true one-of-a-kind specialists you cannot simply send to a training session somewhere. The company has advanced systems for knowledge management to which we have to connect learning tools. Infrastructure for this relates to one of the three major research topics that “the Twente Team”, as we are called at Shell, are working on. Secondly we have to be able to integrate the learning process within the day-to-day working practice, that's the user and tutor side of it. Thirdly for a multinational like Shell, return on investment is much more an issue than at a university. You have to be able to defend your choices to the utmost, within this competitive branch. One wrong choice can have an immediate impact on results, that's why I think it is good for any academic to gain experience in a 'hard' business environment like this one.”

Examples of current projects:

- CANDLE: Collaborative And Network Distributed Learning Environment (EU / FP5)
- DELFE: Decision-support for E-learning Flexibility and Enrichment Generic re-usability situations for web-supported learning: Metadata requirements
- Digital University





“For example, Shell is introducing e-business very fast, putting strict demands on their suppliers in all business-to-business transactions. We’ve developed e-learning tools for those involved in this process. Using these, Shell was soon able to save a lot of money. With an online course it is possible to teach the process of ‘online bidding’, taking all steps one at a time. One of the UT-graduates in our project has done a great job in developing this course and getting to know all the ins and outs of e-business in the Shell context.”

“For me this is truly a rewarding experience as well, although in practice it means that I have two fulltime jobs to fulfill. It prevents me from getting too far away from practical issues, or developing things that are only relevant in an academic context. Within this Shell EP project, we deliberately involve students in our faculty’s international Masters programme, e.g. from Nigeria, China, Indonesia and Jamaica. In this way we can further our focus on intercultural aspects in the collaborative and ‘blended learning’ processes we develop. For Shell this was an absolute prerequisite.”

“One of the current questions in our research is about the way learning tools can be interchanged and parts of courses can be reused in another context. You have to define the specifications at an abstract level, but at the same time you have to translate them to the individual workspace and speak to employees and line managers about what they want. Partly this is an infrastructure issue again, partly understanding of the workflow demands. And as anywhere within the company, it has to do with money. Future ideas are about introducing mobile and wireless applications into the learning environment. You can imagine advanced use of TeleTOP on a handheld computer, but it can also start with small experiments with SMS-messages, used for tests or quizzes.”

“We recently defined a number of new projects and research proposals, and I’ve noticed interest from other divisions of Shell. So for the coming years, I expect a lot of new challenges coming our way!”