Danish University Colleges

**Transfer Promoting Simulation in Education for High Technology Professions**

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Introduction
The didactic strategy for teaching laboratory skills at the Faculty of Health Sciences, UCL University College, Denmark, should in the future be based on real life simulation rather than just practical exercises.

Programs such as Biomedical Laboratory Science and Radiography are both targeted towards high technology professions. The high-tech equipment can challenge simulation in the teaching laboratories when the equipment in these laboratories differs significantly from the equipment used in clinical practice. This challenge can create far transfer. Far transfer occurs when actions must be transferred between two situations that are relatively different. Far transfer requires extra attention to the didactic approach, as students may find it difficult to identify identical elements between the two situations, which is necessary to create transfer. Therefore there is a need for changing the current practice in the teaching laboratory towards being more simulation based and include initiatives that support far transfer.

New learning activities is therefore to be linked to the current practical exercises in the teaching laboratories of the faculty by adjusting them to be more simulation based rather than just practical exercises.

Objective
The aim of this project was to develop a new didactic educational concept to increase transfer promoting simulation of the work of high technology clinical praxis performed in teaching laboratories. The educational concept was to be based on a didactic model accompanied by a guide for didactic reflections.

Method
Through a literature search, we located a relatively small amount of literature dealing with simulation in settings with far transfer due to a high technology profession. Due to the asmall amount of literature focus group interviews with students from Biomedical Laboratory Science and Radiography were chosen in order to clarify challenges and possible solutions. The three elements of the concept have therefore emerged through the work with existing knowledge about simulation and transfer as well as the knowledge related to the students’ experiences. To operationalize the didactic model (the triangle), we developed an action-oriented reflection guide (the table) to support the teacher’s development of transfer promoting simulation. By combining the model and the instrument an action-oriented didactic concept is obtained.

Literature
(4) Henningsen SE, Mogensen F. Mellem teori og praksis: Om transfer i professionsuddannelser. Aarhus: ViaSystime; 2013.