Problem-based learning approach in teaching denim washing techniques in university level

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## Abstract

This study explores as a case study to use problem-based learning approach in teaching denim washing techniques which is offered in local University. This case study describes how to design and apply problem-based learning task in facilitating the students to learn more effective when compared with traditional teaching and learning practice on subject with high technical demand.

## Keywords: denim, problem-based learning, washing techniques, technical demand, case

## **Content:**

A subject "Denim Manufacture" is offered in a local University for teaching students about different industrial denim washing techniques. Since students taking this subject have different academic background, problem-based learning task was designed to teach the students.

The aim of this subject is to provide student with problem-solving skill in the design and technology of denim fashion to meet the industrial need. This subject is a Level 3 subject and students are required to complete two Level 2 pre-requisite subjects relating to (i) garment making and (ii) coloration and finishing of textile and fashion products.

FOUR topics would be taught in 13 lessons which are:

(i) Basic knowledge of denim fashion products and their manufacturing process

(ii) Advanced technical techniques related to denim fashion products

(iii) Design aspects in denim fashion products and their variables

(iv) Quality control and assessment of denim fashion products

Since this subject is a practical-based and industry-driven subject, although traditional direct instruction is good way to deliver all useful information the students, the students may receive the knowledge passively. Direct instruction may not be a good way to increase the students' interest in learning as well as solving real world cases and problems. In order to meet industrial requirements, problem-based learning would be an effective and useful way and this study is aimed to analyze the design of a problem-based learning task to address the major issues and elements in an industry-driven subject.

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