Improving Written Communication Skills in Engineering Programs

Magnus Andersson*, Hossein Nadali Najafadi and Joakim Wren
Department of Management and Engineering, Linköping University, Linköping, Sweden

* CONTACT-EMAIL: magnus.andersson@liu.se

Objective

The objective with this study was to investigate how supportive documents can be incorporated into undergraduate courses to promote students written communication skills.

These documents are intended as a natural part of the course syllabi, at different stages of the educational process, aiming for a progressive development towards the final thesis writing.

This project in progress aims to improve students’ written communication skills within several engineering programs at Linköping University.

Approach

Two guideline documents were constructed:

**Report structure** - outline the extent and nature of the content to be covered within the technical/scientific reports

**Report formatting** - highlight text formatting requirements as well as artwork recommendations

Current Status

In a recently developed course in Fluid Mechanics, given at the last semester of a two year Mechanical Engineering masters’ programme, a tailored version of these supportive documents where integrated into the learning-centered course design [1].

A survey evaluation indicated overall positive feedback from students, where 70% considered the guidelines to be valuable in finalizing a report.

To assess the real value of these documents, however, further evaluations are needed, at different course level as well as for the master thesis written dissertations.

Some Identified Challenges

- How to encourage/motivate students to embrace these documents
- How to find a suitable comprehensive level of these guidelines
- How to conform these documents into different educational levels

References