Improving Students' Writing Skills through Effective Small-group Peer Feedback
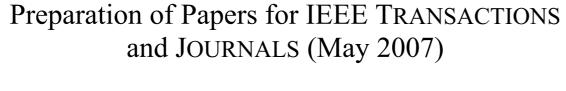
Abstract

The Electrical Engineering (EE) department has pursued efforts to innovate the existing study programs both at bachelor and master level. One of the major challenges is the growing number of students. In addition, one of the major problems identified by the teaching staff is the quality of writing skills.

Giving feedback to students' reports and paying attention to individual need to be strengthened. Peer review and peer feedback in a small group setting has become an alternative to improve writing skills. These, together with the feedback by expert teachers and supervisors, and with the use of appropriate feedback instruments such as rubrics or criteria lists, are suitable methods to enhance peer feedback.

Objective

- To develop an educational strategy to provide effective small-group peer feedback that can be used within the department in BEP projects but also in other courses at bachelor and master level.

- To improve students' writing skills through effective peer feedback.
- To create an IT online platform for the students to provide feedback during external internships.

Context

The EE department is keen on looking for suitable educational methods that can bring potential solutions for the development of academic writing skills. Furthermore, to optimize feedback and relieve the teachers' and supervisor's burden, potential effective educational options to explore is peer feedback in small-groups.

Within the EE department, there is special interest to work on new educational methods that can allow effective supervision by researching possibilities to organize feedback. These methods will be used and explored in order to identify the most suitable one(s) to supply the need for feed-back, feed-up and feed-forward to guarantee that students' writing skills are at the level of the end qualifications of a Bachelor engineer and a Master graduate.

Practice

Improving writing skills in EE courses through peer feedback.
Pilot 1 (finished) – Improving writing skills in Bachelor End Projects (BEP) through peer-to-peer review and feedback
Pilot 2 (in progress) – Integrating writing skills within two master courses and using peer-to-peer review and feedback in an online platform (PEACH)

Peer feedback strategy
Training students in
- Writing skills
- Peer feedback methods

Feedback by
- Peers
- Trainers
- Expert teachers & supervisors

Educational supervision methods
- Evaluation rubrics of Academic writing following IEEE guidelines
- Criteria lists for IEEE papers
- Before: Self-assessment instrument: diagnostic test level in writing skills
- After: Self-assessment instrument: Exit test level

Results of the first pilot

- 11 BEP Smart Sustainable Society students were trained in peer feedback and peer assessment methods.
- Teachers/supervisors have learned and use coaching methods to provide feedback.

- An educational and effective strategy grounded on peer feedback that can be easily adopted in other EE bachelor and master courses.
- Training materials and feedback instruments were developed and piloted to be used in all kinds of courses and settings.
- The quality of students' reports has been improved.

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