A possible way to use student peer review to improve report writing skills

Abstract
Writing reports is one of the skills that need to be trained during an engineering education. Here, I will describe my experiences from a student peer review process of laboratory reports, which I have used for the last three years in a second year course in wave physics and thermodynamics for electric engineering students at KTH. In this course, there are two laboratory exercises, which each should result in a short written report (max 4 pages). These reports are written individually under pseudonym (only known for the student and the laboratory assistant) and the handed-in reports are sent out to other students for peer review assessment. The students are asked to write a peer review report, which is graded by the laboratory assistant to give a few points (corresponding to 6% of the total) on the exam in the course. Finally, they should improve their own laboratory report based on the comments they receive in the peer review report in order to pass the laboratory part of the examination in the course. To introduce the students to the peer review process, a 45 minutes combined introductory lecture and group discussion based on an old laboratory report is given before the laboratory work begins. From the course evaluations, more than 80% of the students answer that they have gained more insight into assessments of reports than before and more than 60% answer that they have gained more insights into writing reports.