

DEVELOPING A STUDENT ASSISTED LEARNING APPROACH FOR REPORT WRITING AND ORAL PRESENTATION

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PROBLEM

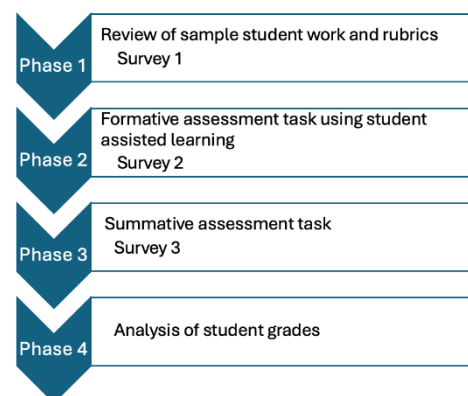
Can formative assessments and student assisted learning be used to enhance student learning outcomes and achievement in scientific report writing and oral presentation skills?

PLAN

Monash College Foundation Year students who are predominately international, often struggle with scientific report writing and oral presentations due to language barriers and a lack of exposure to non-test style assessments. Formative assessments will be implemented in this project as they allow students to develop their writing and speaking skills without the pressure of being graded as with summative assessments. This research project involves students evaluating past work samples with the teacher so that they better understand the success criteria that constitutes quality work. They are then encouraged to attempt a formative assessment which will be assessed to provide students with feedback before they embark on the summative assessment.

ACTION

Our study employed an action research cycle consisting of planning, acting, observing and reflecting. Throughout this process, we gathered various forms of data including survey responses, assessment grades and general classroom observation of students from one semester of teaching. A total of 45 Physics and 46 ICT students took part in this project. The four stages of the research cycle are outlined in the flow chart. In the first phase, students were shown samples of student work from previous years and asked to link them to the appropriate rubric. In the second phase, they were given the opportunity to complete a practice (formative) assessment using student-assisted learning. Phase three involved the completion of the summative assessment. The final phase involved analysis of student grades.



REFLECTION

Formative assessments, supported by feedback and exemplars, improved student performance in both Physics and ICT, enhancing confidence and skills in scientific report writing and presentations. For Physics, there was an increase of 7% in the average grade when comparing the formative and summative practical reports. For ICT, there was an increase of 8% in the average grade when comparing the formative and summative oral presentations. Most of the students recommended using formative assessment as a learning tool for reporting writing and oral presentation. Some students suggested further improvements, such as including graph plotting in Physics and peer feedback in ICT, which could be implemented in future formative assessments to enhance learning outcomes. The implementation of formative assessments with strong feedback mechanisms has proven beneficial, and this approach can be applied to other assessments within ICT and Physics courses, other science subjects within Monash College and other academic institutions.

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