

INQUIRY BASED LEARNING IN UNIVERSITY SCHOOL OUTREACH PROGRAM

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BACKGROUND

The aim of this project is to examine the effect of including inquiry based learning activities into the education outreach program run by the Sydney University School of Physics called Kickstart Physics. Kickstart Physics sees approximately a quarter of the total number of students that sit the NSW HSC Physics examination.

The rationale for the project was to utilise the large percentage of participants and include inquiry, which is advocated in the mandatory NSW curricula and is recognised as an appropriate pedagogy for school science.

APPROACH

A worksheet outlining an activity/experiment is handed out to half the students while the other half receive a worksheet designed on inquiry-based learning. The learning outcomes are the same for the two groups and syllabus dot points are the same. Some 1000 year 12 school students are surveyed.

The project considers how students arrive at different inquiry-based outcomes such as making hypotheses, displaying and interpreting data, validity, reliability.

RESULTS AND CONCLUSIONS

The design of the worksheets are critical for eliciting elements of inquiry in comparison to learning sequential content with the normal worksheets.

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