FOLLOWING UP ON SCAFFOLDED PHYSICS LABORATORY SKILLS: WHAT WORKED, WHAT DIDN'T, WHAT'S NEXT?

Thomas Dixon[a], Kate Jackson[a]

Presenting Author: Thomas Dixon (Thomas.dixon@unsw.edu.au)
[a]School of Physics, University of New South Wales

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This poster is a follow-up to the 2023 ACSME Oral Presentation (Dixon & Moya, 2023) in which the authors presented a new structure for explicitly scaffolding skills within a first-year laboratory program for students majoring in physics. This scaffolding was vital to maintain the utility of physics laboratories, as studies have shown that they cannot be relied upon to improve examination scores (Holme et al., 2017) (i.e., they do not reinforce content). Instead, their value to students is in the development of the skillset expected of an experimental physicist.

In the year since the original presentation of this project, the first cohort of students have moved into higher year laboratory physics and begun applying the skills learned in a new context. As preparation for higher year laboratory physics was an explicit goal of this restructuring, feedback was gathered from students on the usefulness of the skills they were taught and how well prepared they felt for the challenges of upper year experimental physics. In this poster, I will discuss the key themes of student feedback, showcase the evolution of the program, and discuss its future directions.

REFERENCES

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