AN EFFICIENT FORMATIVE/SUMMATIVE FEEDBACK CYCLE TO ENHANCE SKILLS IN PRESENTATION OF PRACTICAL RESULTS

Heather Verkade

Presenting Author: Heather Verkade (heather.verkade@monash.edu)
School of Biological Sciences, Monash University, Clayton VIC 3800, Australia

KEYWORDS: practical classes, report writing, results presentation, formative learning

ABSTRACT
The presentation and interpretation of results generated during laboratory classes are key skills for undergraduate science students. However growing class sizes, time constraints and shrinking budgets have made it increasingly difficult to provide a meaningful formative cycle for the writing and marking of large practical reports with sufficient feedback to improve these skills for subsequent reports. I have tackled this problem in a third year Bachelor of Science genetics unit by re-designing four practical reports into four condensed reports focusing on presentation and interpretation. The reports require 1) answers to analysis questions (to guide interpretation), and 2) a formal ‘results figure’. The results figure comprises a) figure panels with appropriate labels, b) figure legend and c) written results. This isolates the task of presenting and interpreting results, normally just one section of a formal practical report, enabling it to be marked (with meaningful feedback) fast enough to allow an iterative submission-feedback cycle. This promotes student focus on improving their practical presentation and interpretation skills, and analysis demonstrates that this formative cycle not only allowed students to improve their skills, but also enabled them to be as engaged as they would be with the full practical reports in similar units.