

ASSESSING COMPETENCE IN NUMERACY SKILLS IN MOLECULAR BIOLOGY STUDENTS

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ABSTRACT

Competency in quantitative literacy is essential in all life sciences including molecular biology, but there have long been anecdotal concerns that the standards of undergraduate and postgraduate students in this area are declining and a large proportion of current students lack the skills required to complete coursework and move into employment and/or research (Phoenix, 1999). We have conducted a pilot study to understand and measure levels of competency in this area as well as address any shortfalls in both final year undergraduate and first year postgraduate students studying molecular biology. This has involved an initial diagnostic, followed by a series of teacher and self-driven interventions, culminating in a summative assessment. The major feature of the diagnostic tool is the subdivision of quantitative skills in molecular biology into smaller areas to determine any specific subsets of concern for students. This has allowed the identification of specific weaknesses and issues in numeracy that need addressing. We anticipate this study will provide useful information on the progress of students' quantitative skills and allow the development of better strategies to empower their learning in this area.

REFERENCES

Phoenix, D.A. (1999). Numeracy and the Life Scientist! *Journal of Biological Education*, 34(1), 3-4.

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