Poster presentation

Evaluation of genetics educational technologies used by science teachers

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The explosion of information and communication technologies has dramatically expanded the number of multimedia teaching and learning resources available. In addition, genetics is a rapidly-evolving subject that can be difficult to understand and requires up-to-date resources. Genetics educational technologies may be useful for teachers as the technologies may have the capacity to be updated and could overcome some difficulties in teaching and learning genetics. However it is not clear who the technologies should be tailored to – the teacher or the learner – and there is a lack of explicit guidelines relating to their use in the classroom. The first phase of this doctoral research project will determine what technologies are currently being used to teach genetics in Australian secondary schools. The second phase will comprise eight case studies of classroom practice, using the most popular technologies to evaluate: (i) how teachers incorporate technology into classroom learning environments; (ii) the degree to which popular resources accommodate a range of approaches to teaching and learning; and (iii) practical factors that enhance or diminish teachers' and learners' educational experiences in the classroom. From these evaluations guidelines will be produced for teachers, learners and the wider community on how to appropriately select and use genetics educational technologies.

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