# Using the Journal Peer-Review Process to Improve Student Practical Experiments

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**Broad discipline area:**
Natural and Physical Sciences

- Chemistry

**Year level:**

- Second and third year undergraduate

**TRN strategy:**

- Using postgraduate research to inform undergraduate teaching
- Involving students in departmental research projects
- Conducting and drawing on research into student learning to make evidence-based decisions about teaching

**Teaching and learning context:**

- Practical experiments

**Brief description of the initiative:**
This academic developed a set of practical exercises based on research projects being conducted by his PhD students. In this way his teaching of undergraduate students was informed by the research of his postgraduate students. He then documented his experience of using the research-based exercises and submitted them to the *Journal of Chemical Education* to obtain peer-reviewed feedback to enhance the standard of the practical exercises. This feedback resulted in a simplified, more effective set of practical exercises for students in *Analytical Chemistry 2* and *Analytical Chemistry 3* taken as part of a Bachelor of Science (Chemistry) with typical enrolment numbers of 40 and 20, respectively.

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