UNIVERSITY OF TECHNOLOGY SYDNEY

2017 First Year Experience (FYE) grants
Embedding transition pedagogies in the curriculum

Application form

Project applications (expressions of interest) must be submitted on this form.
Applications must be submitted by **10 am Monday December 5th, 2016.**

Applications are to be submitted by email to Kathy Egea, UTS FYE coordinator at Kathy.Egea@uts.edu.au

Project applicant/team leader:

Name: Jacqueline Melvold — Position: Associate Lecturer

Contact email: Jacqueline.Melvold@uts.edu.au — Contact phone no: 02 9514 7346

Faculty: Science

School/Department (if applicable): School of Life Sciences

Other applicants if team application:

Name: Catherine Burke — Position: Lecturer

Name: Garry Myers — Position: Associate Professor

Title of project: The integration of reflective learning into Research Methods

Transition subject involved: 60207 Research Methods

Endorsement by Associate Dean (Teaching and Learning)

I …… endorse this project application and confirm that embedding of the project outcomes in the subject will be supported by the Faculty.

Signed

Date:

Have you received one or more FYE Grants previously?

☐ Yes – please attach a progress summary (max 1 page) for any 2014 grant that is not yet completed. Reports from earlier grants will be taken into account.

☑ No

Project outline (max 1-2 pages) (See guidelines for detail)

A brief description of the aims and rationale for the project

"We do not learn from experience…we learn from reflecting on experience" – John Dewey

Reflection is an integral part of the learning process, as it leads to individual growth, self-awareness and improved academic skills (Boyd, 1983). Teaching students how to properly reflect on their learning and allowing them the opportunity to see *how* they learn in conjunction with learning disciplinary content increases their ability to think critically and understand how they learn best, both of which are essential for successful scientific practice (Baird et al, 2009). Whilst tertiary education focuses on an active, student-centred approach to learning, secondary education focuses more on the teaching of disciplinary content in a teacher-centred, passive format. Thus, implementing reflective activities into first year subjects can assist in student's transition to university and the self-regulated learning that accompanies it as well as arming them with the skills they need to succeed in their university studies.

Research Methods is a first year subject within the Advanced Science degree at UTS and the majority of students entering into the subject are transitioning from high school studies. It can be overwhelming for students and initially difficult for them to grasp student-centred learning, particularly for students in the Advanced Science degree as they undertake second year university subjects in their first year of this degree so a higher level of self-directed learning is expected. Therefore, a smooth transition into active learning is essential for these students.

The goal of this project is to create opportunities for students to engage in reflective learning throughout Research Methods in order to ease the transition into university. This will be performed by redesigning the subject to include the:

- Implementation of self-reflection on all assessment tasks against the marking rubric. This will give students an opportunity to evaluate and reflect on their own work.
- Integration of self-reflection into their preparedness, understanding of disciplinary content and professional practice at the conclusion of selected workshops.
  This will be implemented to allow students to reflect on their preparedness for class, which reflects on their engagement with the Online Learning Modules for this subject, their interaction with their peers, which links to their professional practice, and their understanding of the disciplinary content. Teaching staff will also mark students based on the reflective criteria that week, so students will gain a sense of perception into professional scientific practice.

By implementing reflective learning into Research Methods, students will have an ease of transition from their past secondary educational experiences into tertiary education and learn valuable self-reflection skills which will provide the foundation necessary for first year learning success. This will overall engage student learning and allow students to feel a sense of belonging within UTS (Kift, 2009).

First Year Curriculum Principles for Transition Pedagogy (TP) addressed by the project

See Kift (2009) First Year Curriculum Principles for Transition Pedagogy - http://fyhe.com.au/transition-pedagogy/fy-curriculum-principles/

Select (tick) from the list below, one or two strongest TP principles that frame your project aims.

☑ Transition

☐ Diversity

☐ Engagement

☐ Assessment

☐ Design (broader focus)

☑ Evaluation and Monitoring (broader focus)

Explain how each of the selected principles selected frame the new practice in your application.

Transition – supporting students to build on past educational experiences and become independent, lifelong learners

This project will allow students the ability to reflect on their learning experiences, learn form these experiences and engage with teaching staff. The implementation of self-reflection and receiving constant formative feedback from teaching staff aims to smooth the transition into student-centred learning, which is crucial for the success of all students. Furthermore, reflection of their preparedness for class (via the completion of Online Learning Modules), professional practice and assessment tasks will teach student critical thinking and a deeper understand of themselves. This fosters student independence and allows them to become lifelong learners.

Evaluation and Monitoring – strategies to enable teachers to identify students at risk, intervene in a timely way and reflect on ways to improve classroom practice

The addition of reflective learning into Research Methods will allow students the opportunity to evaluate and monitor their own learning by reflecting on assessment tasks sand their professional practice. This is enhanced by students receiving feedback from the teaching staff on the same criteria,, which allows students to see how their understanding of preparation, professional practice and disciplinary content align with experts their fields and understand what is expected of them each week. Together, this will allow for student and teaching staff to identify and monitor any problems early on and implement strategies to overcome this.

Other University/Faculty/Course/Subject priorities addressed (optional)

Reflective learning aligns with the UTS Model of Learning and Learning.Futures, both of which focus on student-centred learning. The use of interactive learning technologies, such as Review, is also supported by UTS. In addition, maintaining the retention of students in the Advanced Science degree is a priority of the Faculty of Science, so smoothing the transition of these students into this degree and teaching them the importance of reflective learning will aid in student transition retention.

Key project activities and timeline, including appropriate activities that engage the overall teaching team (if applicable)

Activity 1 – Development self-reflection criteria and workshop (July 2017)

- Write self-reflective criteria for chosen workshops
- Amendment of assessment criteria for Professional Practice to include self-reflection as a weighted component
- Design a workshop to teach students how to reflect and use Review

Activity 2 – Set-up of reflective learning activities into Review (July 2017)

- Set-up Review to enable self-reflection on selected workshops and assessment tasks
- Training teaching staff in use of Review
- Run student workshop on reflection to ensure students understand how to reflect and how to use Review

Activity 3 – Evaluation of reflective activities (October - November 2017)

- Development of student and staff surveys to investigate the integration of reflective learning in assessment tasks, understanding of discipline content and professional practice
- Collation of survey findings and SFS results from student and teaching staff
- Write up of final report

Your evaluation strategy i.e. how you will know that the project has been successful, with particular focus on the transition pedagogies that you have chosen, and how will you collect information to improve the outcomes?

The success of the project will be evaluated by the completion and engagement of the self-reflection exercises and also via student surveys and SFS questions which will provide information on the value of reflection to students and the implementation of self-reflection via Review. In addition, teaching staff will be surveyed, as they provide a valuable insight of the usefulness and clarity of the reflective process, which is crucial for suggesting and implementing any changes into use of self-reflection in Research Methods.

Attach a copy of your evaluation plan available here: http://tiny.cc/evalplan (done)

Project Budget (insert table or spreadsheet if appropriate) **and budget justification** (remember to add on-costs – approximately 17%) Salary rates- see guidelines for comments.

Activity	Item	Pay Scale	Hours	Amount
1	Consultation with subject coordinator	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	5	$267.29
	Development of self-reflection criteria	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	20	$1069.15
	Consultation with T&L designers	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	5	$267.29
	Design of reflection workshop	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	10	$534.56
2	Set up of Review	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	5	$267.29
	Training staff in use of Review	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	2	$106.90
	Run student workshop on refection	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	1	$53.45
3	Development of evaluation surveys for students and TA's	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	5	$267.29
	Collation of survey information from students and TA's and SFS	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	15	$801.86

	Write up final report	Casual Academic, other – student assistant (May 17) $45.69 + 17% on costs	5	$267.29
TOTAL			**73**	**$3902.37**

References

Baird, J. R. et al. 1991. "The Importance Of Reflection In Improving Science Teaching And Learning". Journal of Research in Science Teaching 28.2: 163-182.

Boyd, E. M. and A. W. Fales. 1983 "Reflective Learning: Key To Learning From Experience". Journal of Humanistic Psychology 23.2: 99-117.

Kift, S. 2009 Articulating A Transition Pedagogy To Scaffold And To Enhance The First Year Student Learning Experience In Australian Higher Education. 1st ed. Strawberry Hills, N.S.W.: Australian Learning and Teaching Council, 2009.