# Peer Enhanced Scholarship of Teaching and Learning (SoTL):

# **Creating a Teaching Commons**

#### INVITATION TO APPLY FOR A GRANT FOR RESEARCH INTO TEACHING AND LEARNING

You are invited to apply for a grant to undertake research into the teaching of your discipline with the aim of developing your teaching and research capacity and improving student learning.

The funds are part of the Teaching Development Grant provided by the Department of Higher Education and Training.

The emphasis of this grant is on investigations that are institution related, which could include

- Evaluating teaching interventions, such as tutor systems, special programmes, etc.
- Investigating student academic support within a disciplinary context.
- Inquiry into student learning in higher education disciplines to underpin a culture of continuous innovation.

#### **DEFINITIONS AND SCOPE OF SOTL**

Research as defined by Boyer (1977)<sup>1</sup> is 'Knowledge production and scholarship that covers the full spectrum from pure to applied – including the scholarship of discovery, integration, application and teaching'. The latter was later expanded to include 'learning'. The Scholarship of Teaching and Learning (SoTL) has been defined in a variety of ways. Two early definitions remain fundamentally true:

- 'problem posing about an issue of teaching and learning, study the problem through methods appropriate to the disciplinary epistemologies, applications of results to practice, communication of results, self-reflection and peer review' (Cambridge 2001)<sup>2</sup>.
- 'engagement with the existing knowledge on teaching and learning, self-reflection on teaching and learning in one's discipline, and public sharing of ideas about teaching and learning within the discipline' (Martin, Benjamin, Prosser and Trigwell 1999)<sup>3</sup>.

It is clear that, like all research, SoTL is governed by the same ultimate criteria: 'An act of intelligence or of artistic creation becomes scholarship when it possesses at least three attributes: it becomes public; it becomes an object of critical review and evaluation by members of one's community; and members of one's community begin to use, build upon, and develop those acts of mind and creation' (Shulman 1999)<sup>4</sup>.

More recent discussions of SoTL can be found on the websites of the International Society for the Scholarship of Teaching and Learning (<a href="http://www.issotl.org/">http://www.issotl.org/</a>), including information on their conferences and publication, and the Carnegie Foundation for Teaching and Learning (<a href="http://www.carnegiefoundation.org/scholarship-teaching-learning">http://www.carnegiefoundation.org/scholarship-teaching-learning</a>), which includes a gallery of portfolios showing examples of SoTL. Hutchings, Huber and Ciccone (2011)<sup>5</sup> make it quite clear that contemporary approaches to SoTL are collaborative, a adopting a 'teaching commons' approach.

PURPOSE

<sup>&</sup>lt;sup>1</sup> Boyer, E.L. (1997). Scholarship reconsidered: Priorities of the professoriate. San Francisco: Jossey-Bass.

<sup>&</sup>lt;sup>2</sup> Cambridge, B. (2001). Fostering the Scholarship of Teaching and Learning: Communities of Practice. In D. Lieberman and C. Wehlburg (Eds). *To Improve the Academy*. Bolton, MA: Anker, pp. 3-16.

<sup>&</sup>lt;sup>3</sup> Martin, E., Benjamin, J., Prosser, M., and Trigwell, K. (1999). Scholarship of Teaching: A Study of the Approaches of Academic Staff. in C. Rust (ed.). *Improving Student Learning: Improving Student Learning Outcomes*. Oxford: Oxford Centre for Staff Learning and Development, Oxford Brookes University, pp. 326-331.

<sup>&</sup>lt;sup>4</sup> Shulman, L.S. (1999). Taking Learning Seriously. *Change*, 31:4.

<sup>&</sup>lt;sup>5</sup> Hutchings, P., Huber, M. T. and Ciccone, A. (2011). *The Scholarship of Teaching and Learning Reconsidered: Institutional Integration and Impact*. San Francisco: Josey-Bass <u>AND</u> Hutchings, P., Huber, M. T. and Ciccone, A. (2011). Getting there. An Integrative View of the Scholarship of Teaching and Learning. *International Journal for the Scholarship of Teaching and Learning*, 5(1), online at <a href="http://academics.georgiasouthern.edu/ijsotl/v5n1.html">http://academics.georgiasouthern.edu/ijsotl/v5n1.html</a>.

The purpose of the grant is to facilitate peer collaboration and review of SoTL as a professional development activity and as an institutional research activity that gathers and analyses data to increase student learning and success. For that reason, priority will be given to applications that involve collaboration among individuals/ departments to build capacity and increase research output. However, applications by individuals will also be considered on merit.

The project should become self-sustaining, preferably within a year, as the budget relies on grant funding that might not be forthcoming in 2014.

#### **APPLICATION PROCESS**

- 1. Complete the form in Appendix A, which also serves as an example. Take note of the types of activities that will be funded.
- 2. Submit to Professor Wendy Kilfoil (wendy.kilfoil@up.ac.za) for consideration by a small committee comprising the VP: Academic, the VP: Research, the Director: Education Innovation and two Deans or Deputy Deans for Teaching and Learning.
- 3. The committee will meet once a quarter (dates to be announced). Applications must reach Professor Kilfoil two weeks ahead of a meeting for inclusion on the agenda. Should the funds be exhausted early in the year, the later meetings will be cancelled.
- 4. The committee will consider the merits of proposals and decide on the allocated funding. The committee will also consider the ethical issues related to the research and eventually decide whether the institutional information may be submitted for publication outside the University.
- 5. DHET requires annual reporting on expenditure of the grant. Successful applicants will submit a report on the achievement of the intended outcomes and the expenditure a month before the report to the DHET is required (date to be announced, but probably February 2014).

#### **EXAMPLES GIVEN IN RED: TO BE REPLACED BY OWN INFORMATION**

#### UNIVERSITY OF PRETORIA

TEMPLATE: Project Proposal for Peer Enhanced Scholarship of Teaching and Learning

**Criterion: The project must focus** on investigations that are institution related, which could include

- Evaluating teaching interventions, such as tutor systems, special programmes, etc.
- Investigating student academic support within a disciplinary context.
- Inquiry into student learning in higher education disciplines to underpin a culture of continuous innovation.

#### 1. Title

Fostering Capacity Development in Science Education through the development of a Faculty Professional Learning Community to be known as SCIENCE TEACHING AND LEARNING FORUM (SCITAL).

# 2. Faculty

Natural and Agricultural Sciences (NAS) but with other collaboration as well

#### 3. Departments involved

Mathematics, Chemistry, Statistics, Biochemistry, B.Sc. Four-year Programme, Education Innovation, Library and others that may join

# 4. Project leader(s):

Professor Marietjie Potgieter, Professor Ansie Harding

# 5. Description of the project and the interesting questions that will be asked about learning

The proposed initiative is a long term project that involves the establishment of a Professional Learning Community in the Faculty of Natural and Agricultural Sciences (NAS). The overall purpose is to improve teaching and learning in the sciences through the cultivation of the scholarship of teaching and learning (SoTL) along with a focus on education research in the sciences. An interdisciplinary approach to SoTL will serve to enhance teaching and learning practices, increase teaching related research outputs and enhance interdisciplinary collaborations.

Questions to be addressed would include the following: How can we engage students more in large classes? What are the important/ threshold concepts in this discipline and the best ways for students to learn them? How can I redesign my course to scaffold student learning? How can I use technology in the classroom and outside to enable learning?

# 6. Motivation/ Rationale for the project

There is a small number of mathematics and science education researchers in NAS who are isolated in different departments and need the critical input of others to enrich and refine their work. There are academics who wish to enter this research area and need mentorship and support to develop the necessary expertise in order to establish themselves in their own niche research areas. Additionally, there are academic staff members who do not intend to become active education researchers, but who have a keen interest in the contribution that education research can make to improve their own teaching practice. This initiative is intended to serve all three of these groups through a variety of activities focused on capacity development and the sharing of best practices for the attainment of teaching and learning outcomes. It will create the critical mass needed to sustain the efforts in this important area of activity and will also make it possible that larger cross-disciplinary education research projects can be undertaken.

The establishment of a professional learning community in the Faculty will afford an opportunity to improve capacity among academic staff by providing a platform for identifying, creating, sharing and using knowledge on best practices in the scholarship of teaching and learning (SoTL). An important objective for the establishment of the SCITAL Forum is the stimulation of research in tertiary science and mathematics education, a new and growing field. This forum will provide the thrust and support for delivering education research outputs of high quality, thereby giving an identity to and obtaining recognition for this field of research. In turn, it will inform and improve teaching and learning by means of informal feedback to colleagues in home departments. Furthermore this forum will serve as a vehicle for improving the alignment of the Faculty's plans and activities with the university's 2025 strategic plan for foregrounding the core activities of research, teaching and learning.

Since the focus of this group is capacity development of academic staff in SoTL, large numbers of students will benefit at both postgraduate and undergraduate levels, especially where lecturers of HIMs are involved. The enthusiastic support and involvement of the Director of the B.Sc. Four-Year Programme (BFYP) will ensure that teaching staff associated with that programme will be encouraged to join, which will benefit BFYP students as well.

7. How the research will improve student learning and what data will be collected to show improvement Given the variety of the members of SCITAL, we expect that the research could influence curriculum design, teaching practices, assessment practices, student retention, student success, and so on.

Data collection will depend on the nature of the research but the following will be important: **student success**, student feedback through the Student Feedback Instrument and/ or focus group interviews, and so on.

# 8. Envisaged processes and procedures

Bi-monthly gatherings in the form of symposia, colloquia, research presentations, invited talks and workshops. Reading groups with common interests would meet during alternate months for sharing discussion of science education research literature.

# 9. Viability

As long as the focus of the project remains teaching within our disciplines and thus relevant to the members of the group and as long as the scheduled meetings are regular but not excessive, the project is viable.

The actual initial number of participants might not be large but it is hoped that the initiative will grow. Currently the following colleagues have expressed interest, but a number of others may join once the group is established. Academics in NAS who are active in education research or who wish to join this community for information or participation in research will join as time goes on.

# 10. Date of implementation:

This initiative will be launched in the second semester of 2012 starting with a symposium on mathematics and science education research currently conducted in NAS.

# 11. Outputs/ Making SoTL public (e.g. in terms of conference papers read and publications)

Two papers at South African disciplinary or higher education conferences in 2013.

Two outputs in accredited journals in 2013.

Sharing of data on student academic development initiatives (HIMs, extended programmes, use of tutors, etc.) with Faculty.

Internal reports where permission to publish externally is restricted.

### 12. Budget:

[Text in green to be deleted altogether – do not include with proposal – included here for planning purposes only]

The following expenditure may be included in the budget:

Meetings or workshops

- Conference attendance within South Africa provided a paper is read based on SoTL
- Page fees for publication of articles resulting from SoTL
- Staff on a limited basis as assistants student assistants, external subject experts as speakers at workshops, people to transcribe focus group interview tapes, statistical analysts
- Language editing/ translation [depends on no. of pages]
- Marketing [depends on what you need to do, costs can be very high]
- Printing/ duplication costs
- Internet usage
- Graphic visual material that may be used; e.g. in conference poster
- Video or audio recording of classes
- Audio or video recordings of focus group interviews
- Please keep costs to a minimum. Budgets will be carefully interrogated.

These are estimated costs based on the assumptions of a meeting every second month and 20-25 attendees except for special events when a larger turnout is foreseen. Travel and accommodation costs are based on one national guest presenter during the 2013 financial year plus attendance of five SCITAL members at national conferences to present papers.

	SoTL seed funds	Budget source to sustain project
Budgetary item	2013	2014
Personnel:		
Contractual costs (honorarium for guest	R5 400	
speakers)		
Administrative assistant (12hrs p/m)	R3 200	
Operational budget:		
Marketing (posters to advertise events)	R1 100	
Travel and accommodation costs for		
invited scholars	R3 500	
Ad hoc costs (e.g. photocopying;		
refreshments)	R4 200	
Participant support costs (national		
symposium attendance) – 5 people		
Fees	R20 000	
Travel	R20 000	
Accommodation	R10 000	
Page fees	R5 000	
TOTAL:	R72 400	

Project proposal compiled by	on	2013.
Project Leader	Date	
Head of Department/ Dean	Date	
Director: Education Innovation	Date	
Vice-Principal	Date	-
Approved by committee:	2012	