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# Reflections on Developing the Scholarship of Teaching and Learning

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*"… we see the scholarship of teaching as about making transparent, for public scrutiny, how learning has been made possible*" (Trigwell and Shale, 2004)

*SoTL is a research informed, evidence based, critical yet collegial reflection on teaching and learning practice with the aim of improving practice within the aligned disciplines and professions.* (Weller & Prosser, 2023, 27)

*The aim of SoTL is not to publish but to uncover the complexity of academic practice through reflection and engagement with relevant partners (colleagues, students) and to draw lessons that are subjected to debate and contradiction. Change emerges from inquiry* (Fanghanel, 2013)

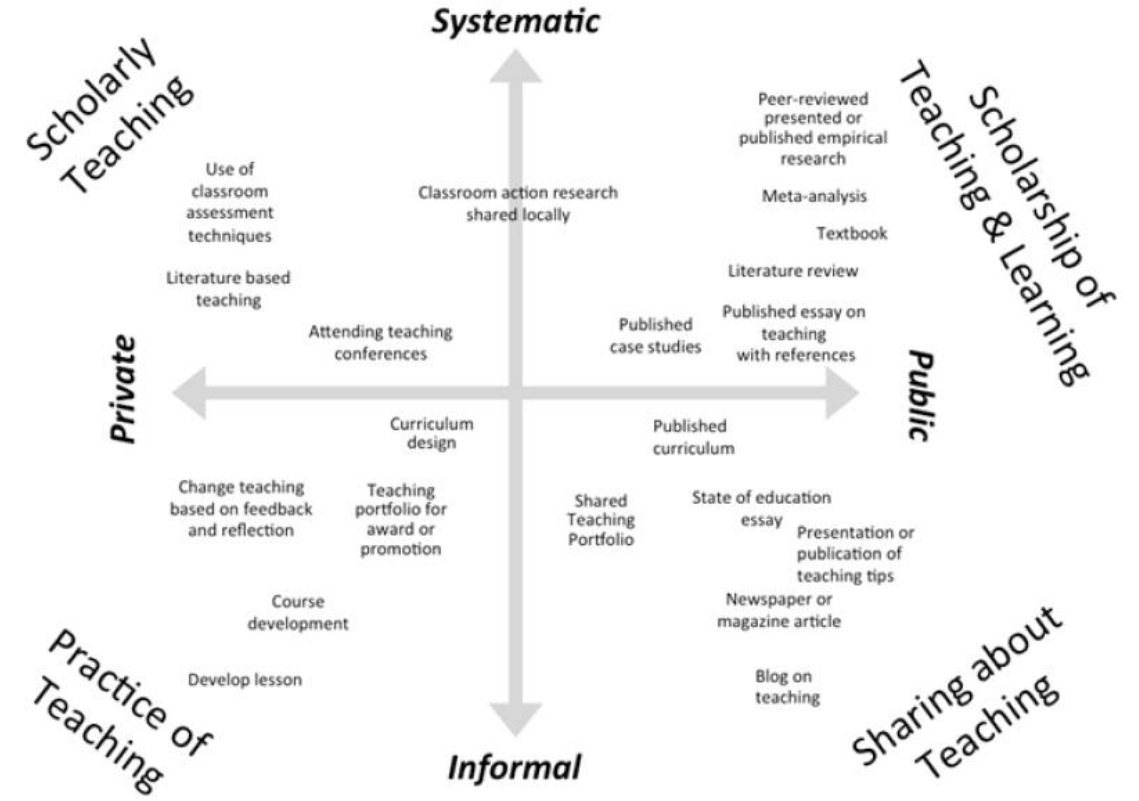
If you find this handout useful, please cite it as: Healey, M. (2023) *Reflections on developing the scholarship of teaching and learning*. https://www.healeyheconsultants.co.uk/resources. For references see bibliographies on SoTL, Engaging students in research and inquiry, and Students as partners and change agents on our website under resources.

**Structure**

1. Concepts, definitions and issues
2. Case studies
3. Engaging students as SoTL practitioners – Selected case studies
4. Developing and evaluating SoTL projects
5. Strategies to support staff/faculty engagement in pedagogic research & SoTL
6. SoTL resources

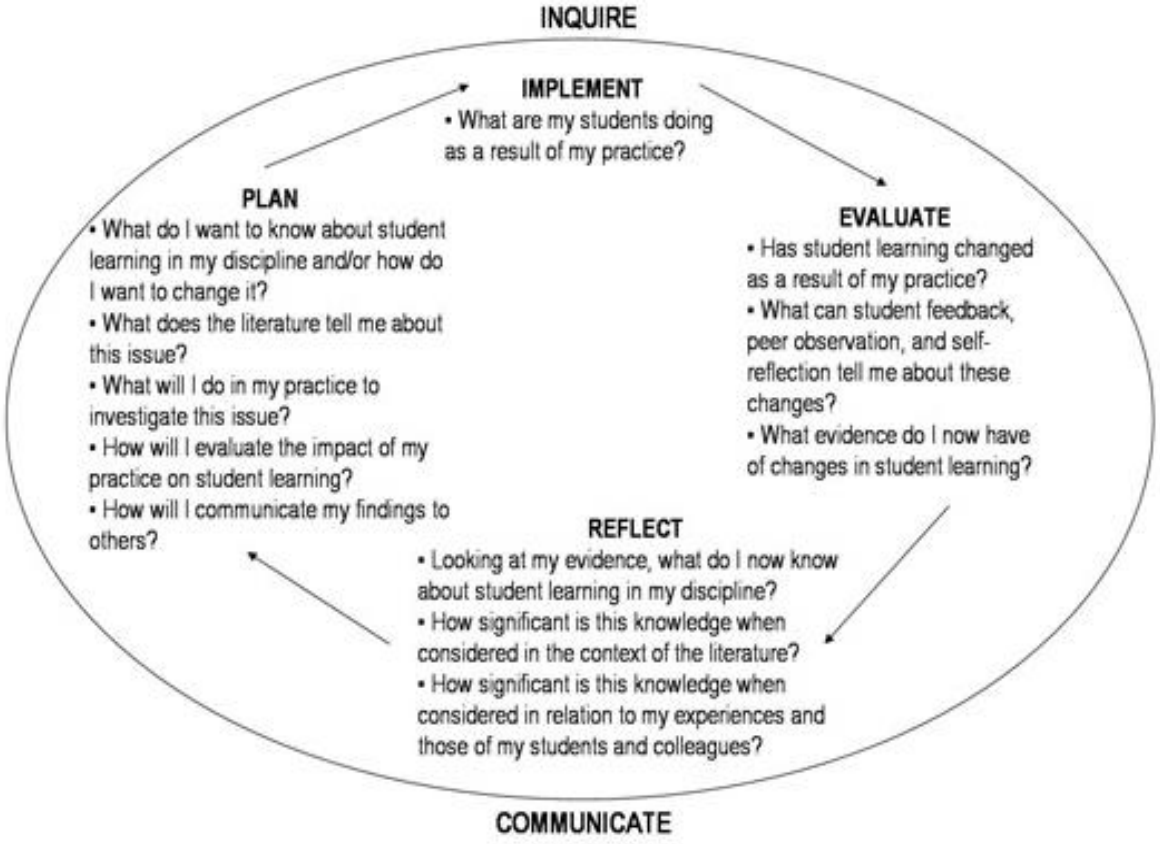
## 1. Concepts, definitions and issues

**Fig. 1** Dimensions of Activities Related to Teaching (DART)




*Source*: Kern et al. (2015, 5)

**Fig 2 The SoTL Process**

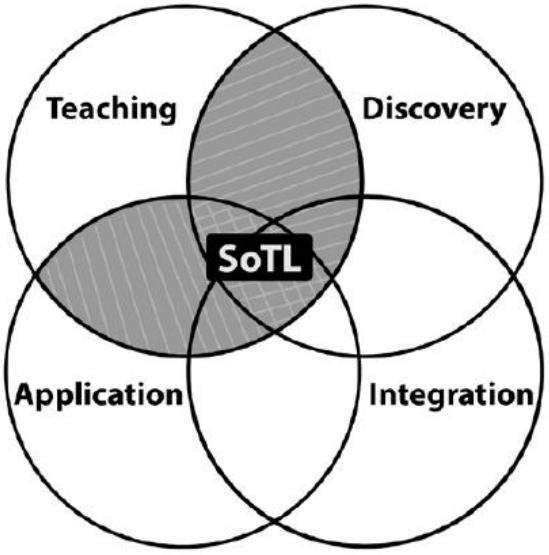



Source: UNSW

**Table 1: Principles of good practice in SoTL**

| | |
|---|---|
| 1. Inquiry focused on student learning<br>2. Grounded in context<br>3. Methodologically sound | 4. Conducted in partnership with students<br>5. Appropriately public<br>*Source*: Felten (2013) |

**Fig. 3 Incorporating SoTL into the Boyer Model**




***Source*: Kern et al. (2015, 8)**

**Table 2 Views on excellent/effective teaching, scholarly teaching and the scholarship of teaching and learning**

| | |
|---|---|
| **Excellent/effective teaching** | |
| "Effective teaching has been broadly understood as teaching that is oriented to and focused on students and their learning. Beyond that fundamental assumption are two broadly accepted components of effective university teaching: that it requires a set of particular skills and practices as identified by research … and that it meets the requirements of the context in which it occurs …" | Devlin & Samarawickrema (2010) |
| | |
| According to Skelton there appears to be 'a culture of excellence' developing in HE in many countries. There is a view that *all* institutions can provide teaching excellence and that *all* teachers can become excellent through continuous improvement. In this view different forms of excellence can co-exist and have equal value. … | Skelton (2005) |
| | |
| **Scholarly teaching** | |
| "teaching grounded in critical reflection using systematically and strategically gathered evidence, related and explained by well-reasoned theory and philosophical understanding, with the goal of maximizing learning through effective teaching." | Potter & Kustra, (2011, 3) |
| | |
| "the reflective practice – informed by the literature, teaching experience, or consultation – of applying theories of teaching and learning to the act of teaching. The goal of scholarly teaching is to improve one's teaching through thoughtful analysis of what is effective and not effective in one's practice" | Hunt *et al*, (2009) |
| | |
| **Scholarship of teaching and learning** | |
| "The scholarship of teaching involves three essential and integrated elements: engagement with the scholarly contributions of others on teaching and learning; reflection on one's own teaching practice and the learning of students within the context of a particular discipline; and communication and dissemination of aspects of practice and theoretical ideas about teaching and learning in general and teaching and learning within the discipline." | Martin et al (1998) |
| | |
| "the systematic study of teaching and learning, using established or validated criteria of scholarship, to understand how teaching (beliefs, behaviours, attitudes, and values) can maximize learning, and/or develop a more accurate understanding of learning, resulting in products that are publicly shared for critique and use by an appropriate community." | Potter & Kustra, (2011, 2) |
| | |
| **The distinction between scholarly teaching and the scholarship of teaching and learning** | |
| Scholarly teaching and the scholarship of teaching are closely interrelated. However, they differ in both their intent and product…. The purpose of *scholarly teaching* is to impact the activity of teaching and the resulting learning, while the *scholarship of teaching* results in a formal, peer-reviewed communication in appropriate media or venue, which then becomes part of the Knowledge Base of Teaching and Learning in Higher Education. | Richlin (2001, 58) Italics added |
| | |
| **The distinction between excellent teaching, scholarly teaching and the scholarship of teaching and learning** | |
| Developing the scholarship of teaching is more than striving to be an excellent teacher or being scholarly. Whereas striving for *excellence* involves a high level of proficiency in stimulating students and fostering their learning in a variety of appropriate ways; a *scholarly approach to teaching* entails being familiar with the latest ideas in one's subject and also being informed by current ideas for teaching that subject. A scholarly approach also involves evaluating and reflecting on one's teaching practice and the student learning which follows. The *scholarship of teaching*, on the other hand, shares these characteristics of excellent and scholarly teaching, but *in addition* involves communicating and disseminating about the teaching and learning practices of one's subject and also entails researching into how students learn within a discipline. | Based mainly on Hutchings & Schulman (1999) and Healey (2000b) |

**Table 3 Statements about the scholarship of teaching**

Note: The sources for the quotes were not identified until after participants had examined the statements

| | **Statements** | **Sources** |
|---|---|---|
| 1 | Teachers practising the scholarship of teaching are well informed, stimulate active not passive learning and encourage students to be critical, creative thinkers, with the capacity to go on learning. | Boyer (1990, 23-24) |
| 2 | There are '*multiple* scholarships of teaching'. The scholarship of teaching involves *all four* forms identified by Boyer: *discovery* research into the nature of learning and teaching; *integration* of material from several disciplines to understand what is going on in the classroom; *application* of what is known about how students learn to the learning-teaching process; and *teaching.* | Based on Cross and Steadman (1996, 28) |
| 3 | Scholarly teaching and the scholarship of teaching are closely interrelated. However, they differ in both their intent and product…. The purpose of *scholarly teaching* is to impact the activity of teaching and the resulting learning, while the *scholarship of teaching* results in a formal, peer-reviewed communication in appropriate media or venue, which then becomes part of the Knowledge Base of Teaching and Learning in Higher Education. | Richlin (2001, 58) Italics added |
| 4 | The scholarship of teaching involves three essential and integrated elements: engagement with the scholarly contributions of others on teaching and learning; reflection on one's own teaching practice and the learning of students within the context of a particular discipline; and communication and dissemination of aspects of practice and theoretical ideas about teaching and learning in general and teaching and learning within the discipline. | Based on Martin *et al.* (1998) |
| 5 | If the scholarship of teaching is to match that of research there needs to be comparability of rigour, standards and esteem. | Healey (2000a) |
| 6 | Scholarship in teaching isn't for people who are incapable of research. Just as only a small proportion of university staff are outstandingly productive and respected researchers, so only a few academics will emerge as brilliant scholars of teaching. | Ramsden (1999, 4) |
| 7 | Developing the scholarship of teaching is more than striving to be an excellent teacher or being scholarly. Whereas striving for *excellence* involves a high level of proficiency in stimulating students and fostering their learning in a variety of appropriate ways; a *scholarly approach to teaching* entails being familiar with the latest ideas in one's subject and also being informed by current ideas for teaching that subject. A scholarly approach also involves evaluating and reflecting on one's teaching practice and the student learning which follows. The *scholarship of teaching*, on the other hand, shares these characteristics of excellent and scholarly teaching, but *in addition* involves communicating and disseminating about the teaching and learning practices of one's subject and also entails researching into how students learn within a discipline. | Based mainly on Hutchings and Schulman (1999) and Healey (2000b) |
| 8 | There is a scholarship hierarchy. Whereas we might expect that all teachers in higher education should strive to be scholarly in the way that they approach their teaching, some will be involved in investigating teaching and learning within their discipline and a few may wish to engage in full-blown pedagogic research. | Based on Healey (2000a, b) |
| 9 | Scholarship is an activity which is distinct from research. | HEFCE (2000) |
| 10 | Although a decade has passed since the *scholarship of teaching* entered the lexicon of American higher education, that concept remains intertwined with the activities of scholarly teaching. It will only be by separating the different activities, and focusing on the scholarly process, that each can receive the honor and rewards it deserves. | Richlin (2001, 67) |
| 11 | To be scholarly, academics need to use the same kind of thought processes in their teaching that they apply to their research | Based on Elton (1992) |
| 12 | For most academics, developing the scholarship of teaching will only bring about change in their priorities if it is embedded in disciplines and departments. | Healey (2000b, 73) |

Source: Healey M (2003) The scholarship of teaching: issues around an evolving concept, *Journal on Excellence in College Teaching* 14 (1/2), 5-26

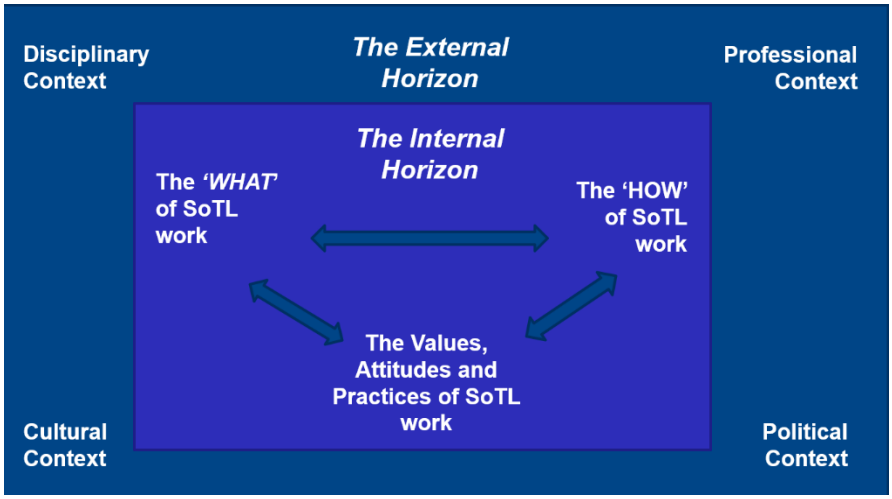
**Table 4 Extent to which delegates agreed with statements in Table 2**

| | Disagree | | Agree | |
|---|---|---|---|---|
| **Statements** | **% 1 to 3** | **% 4** | **% 5 to 7** | ***n*** |
| 1. Boyer (1990) | *9* | *13* | *77* | 75 |
| 2. Cross & Steadman (1996) | *12* | *9* | *78* | 74 |
| 3. Richlin (2001) | *35* | *18* | *46* | 71 |
| 4. Martin *et al*. (1998) | *3* | *5* | *92* | 75 |
| 5. Healey (2000a) | *9* | *7* | *84* | 74 |
| 6. Ramsden (1999) | *38* | *19* | *43* | 72 |
| 7. Hutchings & Schulman (1999) | *7* | *10* | *84* | 73 |
| 8. Healey (2000a, b) | *8* | *12* | *79* | 73 |
| 9. HEFCE (2000) | *27* | *16* | *56* | 73 |
| 10. Richlin (2001) | *37* | *31* | *32* | 68 |
| 11. Elton (1992) | *22* | *15* | *64* | 74 |
| 12. Healey (2000b) | *7* | *14* | *79* | 72 |
| Familiarity with scholarship of teaching debate: no familiarity (1) to fully familiar (7) | 41 | 24 | 34 | *58* |

Participants were asked 'How would you rate your familiarity with the debate on developing the scholarship of teaching in HE on a scale of 1 (no familiarity) to 7 (fully familiar)' 1 2 3 4 5 6 7

*Source:* Healey (2003)

**Fig. 4 A relational model**



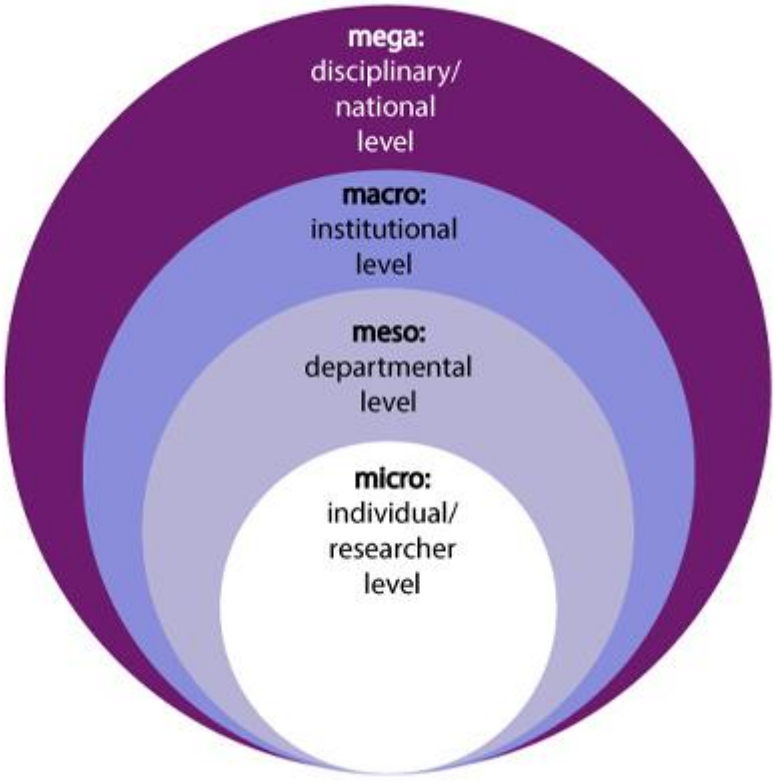

*Source:* Booth & Wollacott (2017)

**Table 5 Levels of pedagogic investigation**

| Level | Purpose of investigation | Evidence gathering processes will be | Investigation results in |
|---|---|---|---|
| **1** | To inform oneself | Verified by self | Personal knowledge |
| **2** | To inform a group within a shared context | Verified by those within same context | Local knowledge |
| **3** | To inform a wider audience | Verified by those outside of that context | Public knowledge |

Source: Ashwin and Trigwell (2004, 122)

**Fig. 5 The 4M framework**




Source: Simmons (2016)

## 2. Case Studies

The following case studies were chosen to illustrate a wide range of strategies for promoting SoTL. Though several are no longer operational, the ideas behind them are still adaptable to other contexts.

**Case Study 1: An action research project to improve conceptual understanding**

***Issue***

The point at which staff undertake course or curriculum revision - introducing, for example, new pedagogy, technology, or content - is often an opportune moment to introduce the idea of evaluating those changes: that is, of doing action research in teaching and learning. Such was the case at the Massachusetts Institute of Technology when, in 1999, Physics Professor John Belcher began to work on ways to transform a required course in electromagnetism that was being taught in the standard lecture / recitation format.

***Innovation***

His innovation was to adopt a studio physics model pioneered in the USA by such schools as Rochester Polytechnic Institute and North Carolina State University; he named this project TEAL (Technology-Enabled Active Learning). In the studio physics model, the instructor explains important concepts in short (15- to 20-minute) presentations. The students are then asked to explore these concepts by *doing* something, for example, by conducting desktop experiments, interacting with simulations, or practicing sample problems. These activities are usually done in small groups of three or four. Research by the science education community (Redish, 1997; Springer *et al.,* 1997; Hake, 1998) has shown that learning improves when these kinds of interactive pedagogies are used. Professor Belcher wanted to research whether the changes he was instituting were improving conceptual learning.

***Outcome***

The evaluation effort was begun almost in parallel with the curriculum effort. Professor Yehudit Judy Dori of the Technion, Haifa, Israel, whose area of expertise is in science education, was engaged by Professor Belcher to work with him on the evaluation.

In order to evaluate conceptual learning, students in two TEAL classes (fall semester 2001 and spring semester 2003) were given pre and post tests. These students' test results were compared to the scores of students who took electromagnetism in the conventional lecture format in the spring semester 2002. The pre and post tests from both semesters showed improved conceptual learning using the TEAL format (Dori & Belcher, 2003). A longitudinal study is currently underway to compare retention of electromagnetism concepts in TEAL and non-TEAL students taking upper level courses that use these concepts.

**Case Study 2: Developing a department's curriculum**

***Issue***

The General Dental Council's (2002) document on the initial education and training of dentists was the starting point for this development. The Teaching and Learning Service (TLS) at the University of Glasgow was asked by the Dental School to assist in the process of redesigning the curriculum. At the outset, the notion of adopting a problem-based approach was rejected. The TLS provided a series of workshops where a variety of approaches to learning and teaching were presented and discussed. The School choose to adopt a model based on the notion of the reflective practitioner as developed by Cowan (1998).

***Method***

The main issue is how those delivering the curriculum develop themselves as evidence-based reflective practitioners (since that is what they are setting out to develop in the student body). The methodology adopted is essentially a cascade approach. Those involved with year one students are being mentored by an educational developer and are, through both reflecting and conducting investigations on their own practice, gathering evidence of the effectiveness of their own practice. This has involved the staff in writing proposals, which describe how they propose to conduct the investigation,

receiving feedback, and then seeking funding for the work either from the appropriate Learning and Teaching Support Network Subject Centre or from the University of Glasgow's own Learning and Teaching Development Fund.

***Impact***

At the time of writing the project is in its first year of operation and thus far one major course in prosthodontics has been redesigned. The staff concerned have designed a research protocol to investigate the effects of the change. This work is being closely overseen by an educational developer who is acting both as a mentor to the staff involved and as a data collector, using focus groups and self perception studies.

The idea is that those being mentored this year will mentor further staff in the next session. Thus it is hoped that this cascade model will support the rolling out of the new curriculum over the next five years – with a growing number of staff becoming active evidence-based practitioners which lead to continued enhancements in the student learning experience.

**Case Study 3: Developing a discipline-based community of practice**

***Issue***

The impetus for this project arose from a wish to encourage SoTL within the UK Geography, Earth and Environmental Science (GEES) community and to raise participants' capacity (i.e. understanding and confidence) to engage with SoTL.

***Method***

A grant was obtained from the Learning and Teaching Support Network (LTSN) for LTSN-GEES, one of the national subject centres, to run the SoTL programme. It was based on a partnership in which specialist educational researchers supported discipline staff to carry out discipline-focused SoTL projects. The programme involved 34 colleagues from GEES, two pedagogic researchers (Liz Beaty and Glynis Cousin) and a 'management' group. The team met together in four workshops over an 18-month period. Four small cross-university research projects were undertaken. All of them had the aim of enhancing the quality of fieldwork across the three GEES subject areas. A common theoretical framework based on constructive alignment was adopted (Biggs, 2003). A further small project was established to research the effectiveness of this discipline- and practice-based way of raising capacity to undertake SoTL.

***Outcomes***

By focusing on research issues which were central to the discipline a high level of practitioner involvement was achieved. Interestingly the central practitioner concerns in doing such research was more about issues of 'objectivity' and the degree to which such educational research approaches were close to their 'parent' discipline, than their competence at particular techniques.

Two key conclusions arise from the programme. First, learning by doing is critical in changing people's confidence, capacity and attitudes towards SoTL. Secondly, discipline staff working alongside specialist researchers, who are sympathetic to challenges discipline-based colleagues face when beginning SoTL projects, is an effective model for raising participants' capacity (Cousin *et al*., 2003). These are illustrated by the following quotes from the four workshops:

*June 2001*: "My confidence in performing qualitative research is low … this stems from the fact that I am suspicious of it"
*September 2002:* "It is not as difficult as I thought it would be. Some of the methods (action research etc) are respectable and appropriate"
*May 2002*: "Once we had invited them to segment and label their data on the basis of emergent recurrent themes … those unfamiliar with the procedures of qualitative data analysis began to appreciate the value of their data"
*January 2003*: "Confidence 'much' higher – able to ask more appropriate questions."

**Case Study 4: The role of mentoring and peer support in engaging staff in discipline-based pedagogic research projects**

The Learning and Teaching Support Network Art and Design Subject Centre (ADC-LTSN) Pedagogic Research Fund is intended to support the building of pedagogic research capacity. As the subject communities do not have well established practice in this area, the fund is targeted at key research questions and supported by expert research mentors.

***The pedagogic research fund***
Individuals or teams bid to the centre for funding of between £3,000 and £5,000 per research project. In the first round of bidding six projects were funded and aimed to complete within one year. Research themes were identified for the call, especially in these disciplines where there has been little or no exploration of these issues using pedagogic research. The themes are:

- Assessment of creative practice
- Relationship of theory and practice in the learning process
- Student learning

***The mentoring approach***
A call for mentors was circulated to the educational research community via various Listserves. Potential mentors were asked to outline their experience and how they would go about the mentoring process. There were two mentors selected, Keith Trigwell (Oxford) for student learning and relationship of theory and practice and Roger Murphy (Nottingham) for assessment. These research mentors assisted projects with research methodology and practical concerns such as project planning and writing up.

The first of three group seminars was arranged for all of the projects to discuss project set up, methodologies and to encourage a peer support process. The other seminars discussed progress and assisted with writing up and concluding project outcomes. The peer support element of the seminars grew as the process developed, project teams were able to act as critical friends in the seminar environment, exchanging approaches, methodologies and strategies as well as tales of woe about changes to their intended outcomes or plans. Throughout the projects mentors were available for email and telephone enquiries.

The following year a scaled down version of the project scheme was embedded into the centre's planned activities. Two further projects were awarded funding. The first seminar this time round included two of the original project teams, who joined in to offer peer support from the perspective of having been novice pedagogic researchers themselves. This proved to add a powerful dynamic to the first seminar group. The peer and expert mentoring dimensions of this approach to project support have proved to be as valuable as the outcomes of the projects themselves.

**Case Study 5: Developing pedagogical action research within an institution**

***Issue***
This venture, undertaken at Liverpool Hope University College, was a low cost initiative, and a direct attempt to encourage academics to carry out research on their own teaching practice. It was designed to take an 'enthusiasts', not an 'expert' approach and to address issues which are of direct relevance to each individual academic, which they own, have control over, and can see the immediate effects (Norton, 2001).

***Method***
The idea was kick started with an open day on action research in which Erik Meyer and James Hartley were invited key speakers. The day included workshops on identifying and tackling potential research issues that might arise from practice. To maintain momentum, a 'club' was set up called the Pedagogical Action Research Group (PAR), which was open to all staff to drop in and out of whenever they liked. The PAR group had lunchtime meetings twice a month, the purpose of which was to share common interests and concerns about teaching and learning. Members who were not able to get to these meetings were kept in touch by email. Initially, there was no funding available apart from a small hospitality fund for refreshments.

***Outcome***
A common focus on student assessment and its effects on student learning was chosen in order to have an overall framework of mutual support and interest in which to launch a number of mini-research projects run by teams of two to four academics. After a number of meetings it was decided to run six projects:

- Levelness and marking
- Improving essay feedback

- American students' perceptions of the fairness of assessment
- Assessing musical performance
- Procrastination and library confidence
- Module assessment and a deep approach.

Internal funding of £1000 was sought to pay for a research assistant who would collate and analyse data. Research teams reported back to the PAR group on a regular basis for fellow evaluation and support. The success of this venture resulted in 5 of the 6 projects being presented at national and international conferences on teaching and learning. One of these projects was also published in a journal and all six were disseminated in a one-day 'in-house' symposium on pedagogical research on assessment to which all colleagues at Liverpool Hope were invited to attend.

***Evaluation***

The PAR initiative continues to thrive and has been incorporated as one of the main themes in the College's Learning and Teaching Strategy with money set aside for more research projects. Like all initiatives there are still questions to be answered and improvements to be made. Colleagues need more formal support in tackling the practicalities of doing the research. There is sometimes some tension between a research focus and practice-based focus - i.e. is the purpose of this mini-project to add to research knowledge or to improve student learning? One question that remains is how such pedagogical action research can effectively impact on practice of the discipline beyond the level of the enthusiast.

**Case Study 6: Using an institutional audit to enhance pedagogic research and scholarship: A case study from the University of Plymouth, UK**

**Issue**

Encouraging and valuing pedagogic research and scholarship provides a challenge for many institutions. This case study describes an attempt to provide cross-institutional support for these activities at the University of Plymouth. The impetus for the project was the observation that, whilst teaching and learning projects appeared to be widespread at the university, there was little in the way of co-ordination or dissemination. A team of educational developers from the institution attempted to improve this situation by use of an institutional audit of pedagogic research and development projects.

**Innovation**

An institution-wide audit of learning and teaching projects was carried out, involving interviews with 60 members of staff. The aim of the audit was threefold:

- Increasing awareness of teaching and learning issues;
- Supporting and valuing teaching and learning as an activity;
- Enhancing cross-faculty networking through development of a projects database.

However, as well as illustrating the wide variety of teaching and learning projects underway, the interviews also revealed a wealth of constraints inhibiting staff from undertaking such work. These included negative evaluations of such projects by other faculty members, competing pressure to undertake discipline-based research, and a lack of appropriate skills for pedagogic research.

**Outcomes**

The online 'Pedagogic Research and Development Database' was an immediate outcome of the audit and has subsequently been maintained and expanded to include more than 120 projects. Given the issues raised by the survey, further changes within the university were also instituted. These included the development of two new research advisory posts within the educational development team (offering individual support and advice on teaching and learning projects), the launch of a series of pedagogic research workshops, and changes to the institutional learning and teaching strategy. This case study illustrates the potential benefits that can accrue from increasing centralised support for teaching and learning projects. Advantages include cross-disciplinary co-ordination, increased visibility of teaching and learning, and higher quality outputs. The overall effect is to enhance the scholarship of teaching and learning by making it rigorous, visible and accountable.

**Case Study 7: Building pedagogic excellence: learning and teaching fellowships within communities of practice at the University of Brighton**

Institution-led teaching fellowships that focus on pedagogic research, and operate within the context of collaboration and sharing of practice, are thought to be an effective model for promoting real teaching excellence.

HE teaching awards which focus on reward and do not incorporate educational development may not enhance learning and teaching extensively enough. Moreover, teaching awards which do not focus on collaboration and inclusivity can generate division among academic staff. However, previous research in HE institutions shows that fellowship awards that do incorporate both pedagogic research and educational development are effective in enhancing learning and teaching. It is also suggested that these benefits can be maximised when Wenger's COP model is applied as a framework within which such fellowships can operate.
UOB research has explored the benefits of learning and teaching fellowships that focus on pedagogic research and development within COPs. The research shows that learning and teaching fellowships within COPs:

- enhance the teaching and professional development of fellows and their colleagues;
- enhance student learning, well-being and professional development;
- reintegrate teaching and research identities through their pedagogic research element; and
- encourage collaboration and the sharing of good practice, leading to the sustainable development of projects.

Source: Jones (2010)

**Case Study 8: Building Educational Research Competence in Early Career Academics at Curtin University, Australia**
Arguably engaging in scholarship of teaching and learning is an essential component of an academic's role. Scholarship of teaching and learning at Curtin is defined as "systematic inquiry, critique, research and development in teaching, learning and the broader educational context which advances and publicly provides educational benefit to students, staff and the higher education sector." At Curtin to be promoted to Level C (senior lecturer) or above, staff must show evidence of SoTL under teaching and learning.

Most academics involved in teaching and learning want to achieve the best educational outcomes for their students; research within one's own teaching context is one way of improving student outcomes. However, many early career academics are not aware of educational research paradigms and methods. As a result the Educational Research for Early Career Academic Program (ERECA) was developed and trialled in 2012. Over a 12 month period, 25 academics participated in fortnightly face-to-face sessions and completed eight modules. There was strong interest in the initiative and several people had to be turned away. Staff successfully completing the program are given a certificate of completion.

The modules were:

- Introduction to educational research purposes and paradigms
- Research problems and methodologies
- Ethics and data sources
- Qualitative and quantitative data collection and analysis
- Writing up research
- Publishing research
- Applying for research grants
- Applying for tenders and contracts

Strengths of program

- Cross faculty interaction of T and L champions
- Explicit valuing of teaching and learning
- Supportive community of practice
- Improved educational research skills

Weaknesses of program

- Half ceased due to lack of time and support (e.g. workload)
- Academics did not realise how complex and difficult educational research is

Where now?

- Access funding to continue
- Mentor participants in bidding for internal funding and writing a book chapter

**Case Study 9: The Concept of Advanced Scholarship at Southampton Solent**

The following is an extract from a lecture on 'Linking teaching and research' given by Dr Roger Brown (then Professor and Vice Chancellor at Southampton Solent University) at the University of Gloucestershire, 14th May 2003.

**Definitions**

67. Part of the problem of course is that we do not have agreed meanings for terms like "research" and "scholarship". There can be no doubt that at the Institute both terms can turn people off. Some staff fear "research" because they equate it with RAE-type research that may or may not relate to their discipline, professional area or professional preferences. Others look down their noses at "scholarship"!

68. To try to deal with this, as well as to promote the link, the Institute has recently adopted a new term "Advanced Scholarship":

> *Advanced scholarship comprises a range of activities characteristic of and essential to the nature and status of a modern higher education institution. Advanced scholarship is most simply and broadly defined as the creation of new knowledge, or the critical reinterpretation and transfer of existing knowledge. In established usage within higher education, advanced scholarship is university-level activity informed by, at, or extending the forefront of the academic discipline or area of professional practice. This would normally include the application of knowledge and the production of visible outputs. A key characteristic is that the activity carries external credibility. The Institute expects that advanced scholarship will enhance the quality of the student learning experience and the reputation of the Institute and its staff. Advanced scholarship activity must have demonstrable links with teaching and the furtherance of Higher Education practice, if it is to be properly valued within an HEI.*
>
> Three criteria will be employed in determining whether an activity is to be considered as advanced scholarship, all of which need to be satisfied:
>
> (i) results in a visible output in the public domain,
> (ii) carries peer esteem; and
> (iii) contains an aspect of innovation/originality.
>
> (Southampton Institute, 2003: 1)

69. As you will appreciate, the aim is to find a more inclusive term, one which embraces, but avoids a narrow dependence on, conventional research categories. We are trying to encourage and make more visible a wider range of staff achievements, including what Charles Glassick has termed the "scholarship of engagement" (Glassick et al, 1997) and appropriate forms of diversification. These last include links with business, leadership in the community, knowledge transfer and contributions to the local and regional economies. The definition will serve as the basis of an expanded, indicative list of the range of activities that the Institute recognises and values under the heading of Research and Scholarly Activity, and in which it expects all academic staff to engage. The current indicative list is a handout for this talk (see below).

70. The definition is currently going through a process of internal dissemination, beginning with Faculty Boards. Personnel Service, in consultation with faculties, is producing a set of guidelines for building AS into the annual appraisal and work setting process. It is likely that a small number of subject groups will pilot the definition prior to Institute-wide use from, probably, 2004-05. There is also a group, chaired by one of the Associate Deans Enhancement, which is looking at examples of best practice in linking advanced scholarship into the teaching process. The early work has concentrated on what has been published and we are now collating examples of substantive links at the Institute and elsewhere. The only indications are that research work of a more applied nature tends to yield better results in terms of the links with teaching.

**Indicative list of Advanced Scholarship activities (indicative visible outputs in brackets) (Not in priority order)**

- Research and practice-based activities (commissioned reports or presentations, published articles in refereed journals, conference papers, books, chapters in books, film, photo, creative writing, illustrations, production of scientific, technological or creative artefacts)
- Involvement with Professional, Statutory and Regulatory Bodies, other Professional practice relevant to the HE curriculum (policy development relating to the professions, officer of professional body, fellow of professional body, some kinds of consultancy, ILT National Teaching Fellowships)
- Links with the business, public and voluntary sector (consultancy report, industrial research and development products, skills audits)
- Contribution to the local, regional and international economies (development plans, incubator units, environmental assay, market assessment, urban regeneration projects, economic impact study)
- Leadership in the community (membership of local strategic partnerships, member of Health Authority, JP)
- Knowledge Transfer (Teaching Company Schemes, patents, learning hubs)
- External educational partnerships (partnerships and access schemes, summer schools, progression frameworks, associated research projects)
- Postgraduate degree supervisor (MA/MSc dissertations; PhD supervision; completions)
- PhD/MPhil examiner – internal and external examinerships
- Acting as an advisor to another HEI in terms of academic discipline or other educational development (validation, curriculum development advisor, advisor on management and delivery of an HE programme, including teaching and learning strategies)
- Work for external bodies, such as QAA (Subject reviewer, institutional auditor)
- Reviewer of research bids and evaluator of projects for Research Councils, European Commission, Charities
- Member of research networks (Network of Excellence under EC Framework programme)
- External examiner/Verifier of HE programmes
- Membership of bodies such as QCA (contributing to establishing educational policy)
- Conference organisation (referee of papers, membership of organising committee or programme committee, production and/or editing of proceedings)
- External speaker (HE events, conferences, national and international media presentations/appearances as expert)
- Participant at international, regional and national level in consideration of a subject discipline development or other educational matter relevant to modern higher education (invitations to and membership of working groups, enquiries, networks, subject associations, related published reports and policy recommendations)
- Editorial and Refereeing activity (member of Editorial Advisory Board, editorships, Editor of Journal, Journal referee, Reader of submitted manuscripts, production of critiques of creative/performance activities)
- Book Reviewer (invitations and published reviews)

Southampton Institute, March 2003

***Reference*s**

Glassick, C, Huber, M and Maeroff, G (1997) *Scholarship Assessed: Evaluation of the Professoriate,* Jossey-Bass, San Fransisco

Southampton Institute (2003) *Definitions and Activities*, Annex 1 to the Review of Research and Scholarship, 02/rsc/02, Research and Scholarship Committee, 4 February 2003

For further discussion see: Collins and Palmer (nd)

**Case Study 10 University of Sydney Recognising and Rewarding Good Teaching**

**Achieving and Maintaining Excellence in Teaching and Learning**

In 2001 the University developed an integrated program to achieve and maintain learning and teaching of the highest quality. The program was based on:

- Academic Board's Teaching and Learning Committee (established in 1996)
- The position of Pro-Vice Chancellor (Teaching and Learning) established in 1999
- A refocusing of the Institute for Teaching and Learning (ITL) away from being an academic staff development unit into a strategic support unit providing research and teaching focussed on improving the quality of University learning and teaching
- The establishment of a University Teaching and Learning Plan (originally promulgated in 1999 for the 2000 - 2004 period)

Elements of the program to encourage and develop quality teaching and learning include:

- Faculty Teaching and Learning Plans
- Student experience surveys
- Performance Indicator data
- Evaluation and Quality Assurance Working Group
- Funding incentives

**Funding for Performance**

Recognition and rewarding excellence in teaching and learning was achieved by incorporating a performance and improvement component into the University funding model.

In the 2004 Budget, 6% of the total allocation for undergraduate teaching has been allocated according to performance on the agreed *Teaching Performance Indicators*. A further 1.5% of the undergraduate and postgraduate coursework teaching allocations has been allocated to the *Teaching Improvement Fund* (1%) and to the *Scholarship Index* (0.5%). The colleges (faculties) augment the TFI and SI from their own resources.

**Teaching Performance Indicators (The Teaching Dividend)**

These are based on data on: progression, retention, student course experience questionnaire, employment, continuation into full-time study. Rates are calculated to take account of average performance of seven other research-intensive universities in fields of study represented in the faculty.

*Teaching Improvement Fund (TIF)*

This is distributed to faculties based on student numbers. Departments and staff bid for funds, which are allocated as a result of a peer review process and are framed around the key goal areas of the University Strategic Plan.

**Scholarship Index (SI) (see also below)**

The purpose of the SI is to provide financial rewards to departments whose staff members contribute to teaching quality through the scholarship of university teaching.

***Awards for Excellence in Teaching and Learning***

- Vice-Chancellor's Awards for Outstanding Teaching
- Vice-Chancellor's Awards for Support of the Student Experience
- Vice-Chancellor's Awards for Excellence in Research Higher Degree Supervision

**Scholarship Index**

Departments are able to claim funding based on their staff's contribution to the scholarship of teaching during the previous year. The estimated budget available for distribution via the Scholarship Index in 2005 was AUS$841k (c£356k).

| Criteria | Points |
|---|---|
| Qualification in university teaching * | 10 |
| National or state teaching award * | 10 |
| National teaching award (finalist) ** | 5 |
| Vice-Chancellor's Award winner ** | 5 |
| College or Faculty award winner ** | 2 |
| Publication on university teaching – book *** | 10 |
| Publication on university teaching - refereed chapter *** | 2 |
| Publication on university teaching - refereed article *** | 2 |
| Publication on university teaching - non-refereed chapter, article or published conference paper *** | 1 |

* Can be claimed each year

** Can be claimed for five years

*** Can only be claimed for the previous year

Note: Pedagogic publications also contribute to the Research Quantum, and hence they count *more than* other publications.

For further information see:

Brew, A. and Ginns, P. 2007: The relationship between engagement in the scholarship of teaching and learning and students' course experiences, *Assessment & Evaluation in Higher Education*, 33(5), 535-545.

Brew, A. and Sachs, J. (eds) 2007: *Transforming a university: the scholarship of teaching and learning in practice*. Sydney University Press: Sydney. – See chapter by Brew and Ginns.

**SoTL Performance Index**

The Scholarship Index was changed in 2011 to the SOTL Performance Index, which rewards and encourages those SoTL activities and endeavours which are particularly effective at supporting the enhancement of teaching and learning within the University. The new index represents a shift in emphasis from research into HE to strategic SoTL activities that deliver the greatest benefit to the University.

| Criteria | Points |
|---|---|
| Teaching award applications (ALTC, VC, ACE) | 5 points /full application |
| ALTC grant applications | 5 points /full application |
| Qualification in university teaching | 10 points /completion |
| Foundations of Research Supervision | 2 points / completion |
| Formal mentoring of teaching | 2 points / completion |

As part of the University's budget review this DVC Education program stopped being funded in 2012 (Trigwell 2021).

A similar Teaching Index Policy was used at Macquarie University until recently

**Case Study 11: Development of a leadership in educational change program at Utrecht University, Netherlands**

The program began in 2000. Its content was built around two main themes: (1) teaching, learning, and assessment at a curriculum level in higher education, and (2) leading change processes. The content for the programme has not been articulated in much more detail, to be able to respond to participants' learning needs that in each cohort advanced with the development of teaching and learning at the university.

Academics wishing to participate in the programme have to be experienced staff members involved in research as well as teaching. As a prerequisite, candidates should possess the University Teaching Qualification. To be selected, candidates must have: responsibility for a considerable part of a degree programme; a role in the coordination of such a programme; and a role in the innovation of education. The governing board of the programme, consisting of respected peers appointed by the deans of the faculties, selects 15–17 participants on the basis of a curriculum vitae and an account of a selection interview held by the programme leaders and addressing the criteria mentioned above (specifically, whether their motivation and learning needs fit within the aims of the programme, and they have the possibility for executing an innovative project in relation to the programme's aims).

The programme provides eight residential meetings, planned from Thursday afternoon until Friday afternoon, in the course of an academic year. These are held in a conference hotel at some distance of the university to give participants the opportunity to literally step outside urgent everyday business and to provide them with ample opportunities for discussions and reflection over lunch, dinner, and drinks. In the eight meetings, time is assigned for peer coaching in groups of four to six. Participants work together in these groups to discuss critical incidents from their daily practice, using the so-called incident method.

Participants all select and carry out an innovative project in their own faculty. This project should include work on curriculum development, should result in a substantial change, and participants should have – at least for the duration of this project – a leading role in a project team within the faculty.

A study tour to foreign universities is an integral part of the programme, aimed not only at developing new insights and ideas that might be worthwhile to implement, but also at becoming more aware of the characteristics of the study programmes in their own university. By observing practices elsewhere, what is common at home can become more prominent. To reflect participants' specific interests and concerns, during the meetings the itinerary for the study tour to foreign universities is designed in collaboration between the programme leaders and the participants. In the past, visits have been made to universities in the UK, Scandinavia, Switzerland, the USA, Canada, and Australia.

The programme has led to a broader vision on teaching and learning in higher education; participants have used the knowledge gained in the programme to improve their own courses and in the innovative projects that were in general successful; participants were seen by principals as leaders of educational innovation and were more often asked for help on education matters by their colleagues; and the network of the participants widened, although the principals had expected even more networking activities.

An indication of the success of the program is that Utrecht have run similar programs for many other universities in the Netherlands.

Source: Grunefeld et al (2015)

**Case study 12: Development of Faculty Learning Communities (FLCs) at Miami University, USA**

A *faculty learning community* (FLC) is a group of trans-disciplinary faculty, graduate students and professional staff group of size 6-15 or more engaging in an active, collaborative, yearlong program with a curriculum about enhancing teaching and learning and with frequent seminars and activities that provide learning, development, transdisciplinarity, the scholarship of teaching and learning, and community building. A participant in an FLC may select a focus course or project to try out innovations, assess resulting student learning, and prepare a course or project mini-portfolio to show the results; engage in triweekly seminars and some retreats; work with student associates; and present project results to the campus and at national conferences. There are two types of faculty learning communities: *cohort-based* and *topic-based*.

Cohort-based learning communities address the teaching, learning, and developmental needs of an important cohort of faculty or staff that has been particularly affected by the isolation, fragmentation, stress, neglect, or chilly climate in the academy. The curriculum of such a yearlong community is shaped by the participants to include a broad range of teaching and learning areas and topics of interest to them. These communities will make a positive impact on the culture of the

institution over the years if given multi-year support. Four examples of cohort-based communities are those for junior faculty, for mid-career and senior faculty, for Preparing Future Faculty (graduate students), and for department chairs.

Each topic-based learning community designs a curriculum to address a special campus or divisional teaching and learning need, issue, or opportunity. Faculty and professional staff members may propose topics to the FLC program director, who then advertises a call for applications across the institution. These FLCs offer membership to and provide opportunities for learning across all faculty ranks and cohorts, plus graduate students and appropriate professional staff. They focus on a specific theme. A particular topic-based faculty learning community may end when the campus-wide teaching opportunity or issue of concern has been satisfactorily explored and addressed.

Faculty learning communities are more structured and intensive than most approaches that gather together a collection of faculty to meet and work on teaching and learning issues, for example, teaching circles (Quinlan, 1996), book clubs, seminars, courses, or a group coming together over "brown bag" lunches to read and discuss articles on teaching. Of course, with the addition of certain components such as community, scholarly teaching and the scholarship of teaching—these groups may be FLCs. Research teams have long been disciplinary groups that work together on discovery scholarship, but they may proceed without an emphasis on community.

*Source*: Cox (2004)

**Case study 13: Development of communities of practice at the University of Adelaide, Australia**

Meeting monthly (face-to-face and virtually) these groups discuss topics of strategic relevance to the institution, develop teaching resources, outline best practice and deepen their knowledge and expertise. The work of the CoPs is shared at the annual Communities of Practice Symposium and then put into practice in various ways across the University. Led by Community of Practice Facilitators these groups are voluntary and have representatives from all areas of the University. In 2023 the following CoPs were operational:

*Artificial Intelligence* - A cross-disciplinary forum that aims to bring together academics, professionals, and students to explore the impact of AI in various academic and professional contexts.
*Diversity & Inclusion in Teaching* - A community of staff and students to explore inclusive learning and teaching practices.
*Effective and Engaged Learning* – This CoP is for passionate educators who are dedicated to finding and sharing inspiring and practical examples of engaging and effective teaching from across the university.
*e-Learning* - A community for academic and professional staff interested in the development of digital learning resources, the transition of courses from face-to-face to online delivery, MOOCs, and/or evaluation of the impact of e-learning strategies on student learning.
*HDR Supervision* - A community of academic staff who are or have been engaged in the supervision of research students at MPhil or PhD level.
*Languages* - A community of academic staff who are teaching languages.
*Learning Analytics* - A community for staff to explore the potential for learning analytics to improve student learning
*Simulation-Based Education* - A community of academic and professional staff who are or would like to use simulation-based education practices in their teaching (both in clinical and non-clinical disciplines).
*Student Leadership* - Open to all staff and students with an interest in student leadership.
*UoA-Pearson Alliance Programs* - An alliance anchored in the design, development and delivery of a suite of fully online educational programs.

*Source:* https://www.adelaide.edu.au/learning/academic-development/communities-of-practice

## 3. Engaging students as SoTL practitioners – Selected case studies

These are taken from Healey (2019) *Students as partners and change agents in learning and teaching in higher education.* https://www.healeyheconsultants.co.uk/resources.

**3.1 The Undergraduate Learning and Teaching Research Internship Scheme (ULTRIS) introduces undergraduate students to authentic research outside their chosen discipline at the University of Western Australia**

By focusing their research on a teaching and learning issue of identified priority for the University, students are able to make significant contributions to the understanding of the problem and provide insights to inform future changes in policy and practice. Beyond the benefits to the institution and the individual students, this model of undergraduate research heralds an opportunity for research into teaching and learning to gain acceptance and interest amongst a new and previously uninvolved cohort of investigators. The second-year interns are allocated a supervisor and attend an intensive training period (basic research methods) at the commencement and throughout the semester long program. Each student is provided a $3,000 stipend to eliminate the need for outside employment. Each student selects a research question from an umbrella teaching and learning topic of strategic importance to the University. In 2009 the focus of research was on staff-student interaction outside the classroom; this was followed by the first-year experience, sustainability and internationalisation. The students develop their own research questions and subsequent research design, collect and analyse data, write an academic paper and report their findings both within the university community and at an external teaching and learning conference. ULTRIS was adapted for the new BPhil program at UWA, with 42 new 1st year students exploring sustainable education during the program in 2012.

*Further information:* Partridge and Sandover (2010); Sandover *et al.* (2012a)

**3.2 Building a network for undergraduates researching into teaching and learning: Connecting students across continents**

The Matariki Undergraduate Research Network (MURN) connects undergraduate researchers investigating teaching and learning topics in four universities spread across four countries: University of Western Australia; University of Otago, NZ; Durham University, UK; and Queens University, Canada. The universities are part of the Matariki network and in each institution 6-12 undergraduates are offered internships to explore extra-curricular teaching and learning research projects focused on a common topic (internationalisation in 2012 and 2013). The students start at the same time in June and share an online classroom using web technology to engage in synchronous and asynchronous learning. They are trained locally and globally in educational research methods (with some synchronous sessions) and are supervised locally as they undertake their research. The preparatory workshops are delivered to all students either in a synchronised process via online delivery or by staff in the respective universities. A timeline of activities and events throughout the six-month project is used to ensure that students in all universities are experiencing the same program at the same time and are able to meet online to discuss developments, progress, challenges and achievements. The students' network on a regular basis to share their learning journeys and research findings. This initiative has grown out the Undergraduate Learning and Teaching Research Internship Scheme (ULTRIS), which has been trialled and evaluated over two years at The University of Western Australia.

*Further information*: Sandover *et al.* (2012b)

**3.3 Students are engaged as partners in shaping and leading their own educational experiences through the 'students as change agents' initiative at the University of Exeter, UK**

The key concept is that students themselves take responsibility for bringing about change, based on their own research on aspects of learning and teaching. The approach enables students to be actively engaged with the processes of change, often taking on a leadership role. They are engaged deeply with the institution and their subject areas, and the focus and direction is, to a greater extent, decided by students. The most important aspect is the focus on research, and building change on evidence-based foundations. Students from across the university have contributed to this initiative, carrying out a series of research projects on their learning and teaching environment, selecting concerns raised through student-staff liaison committees, and providing recommendations and solutions to improve their experience. A small amount of funding is available from the University's learning and teaching budget to support this initiative. Students work as apprentice researchers; their research methods included focus groups, informal interviews and questionnaire surveys. Outcomes are presented at a student-staff conference, which results in institutional engagement with key research findings. More than 30 small projects had been undertaken by 2011, though overall, many hundreds of students have participated in the various projects. Student research has driven organisational change, contributed to student engagement in shifts of policy and

practice within the University, and supported students' graduate skills in the areas of research, project management and presentation of outcomes, leadership and understanding organisational development. For example, student projects in the Business School on the benefits students have gained from implementation of technologies in the classroom have contributed significantly to streamed video being now far more widespread, and 4000 voting handsets being distributed to undergraduate and Master's students.
*Further information:* Kay *et al*. (2010); Dunne & Zandstra (2011); Sandover *et al.* (2012a); Dunne *et al*. (2013)

**3.6 Students are co-inquirers in SoTL at Western Washington University, USA**
Students at Western Washington University (WWU) work alongside faculty, administrators, and staff from across the University, as well as several alumni and community members in the Teaching-Learning Academy (TLA). It provides a structure for integrating the student voice into institutional initiatives for enhancing learning. Each year the TLA participants talk together in bi-weekly dialogue groups to develop a BIG question on teaching and learning to study for the year. Typically, the Fall Quarter is entirely devoted to developing the BIG question. Next, often beginning in the Winter quarter, we survey ourselves to see what we think, and mine our collective knowledge on the BIG question. Then, we invite others into the study. Next, we collectively analyze the results of our study and then the Spring quarter is typically devoted to developing and enacting action projects based on our new understandings. Students participate in the TLA in a number of different ways. Most students enrol in one of several courses and participate in the TLA as part of their coursework, including through Communication 322, Communication 339, and other courses as well. Additionally, many students participate on a volunteer basis.

**3.9 Engaging undergraduate students in pedagogic research projects at Northampton University, UK**
URB@N stands for 'Undergraduate Research Bursaries at Northampton'. It is an innovative scheme developed by the university where undergraduate students are selected to work as paid researchers on a pedagogic research project alongside an academic supervisor. It was piloted on a small scale in 2009, and has been growing annually since then. URB@N enables undergraduate students to be funded to work with academics as 'novice researchers' on pedagogic projects. Each project has a named academic leader who acts as supervisor. Rather than being discipline-focussed, research projects are centred on learning and teaching and are explored through student voices. Academic staff members from schools across the institution and partner colleges, are encouraged to propose research questions which have the potential to benefit the department, school and/or institution and which will ultimately impact positively on the student experience. Under the guidance of the academic supervisor, students who are successfully selected for the scheme are involved in the design, data collection, analysis and dissemination of the research. On successful completion of the project, students receive a tax-free bursary payment of £500. Some examples of the topic areas investigated in previous projects have included:

- Student experience of transition into university
- Student use of assessment feedback
- Issues surrounding seminar participation
- Student engagement with employability
- Student use of technology enhanced learning
- Inclusivity in the curriculum
- The learning needs of international students

*Further information:* https://mypad.northampton.ac.uk/lte/urban/; Butcher and Maunder (2014); Maunder et al (2012); Maunder (2015); Maunder (2020)

**3.14 Using students as researchers to enhance the student experience at Sheffield Hallam University, UK**
In December 2011, colleagues within Sheffield Hallam University were asked whether or not they had a research question in mind that will help to improve the student experience. They were asked to prepare proposals on how to improve their module, course, or area, which could do with some help in exploring e-learning, innovative assessment methods or any activity that can enhance student engagement. The *Students as Researchers Project @ SHU* provides small amounts of funding for staff to help employ a student to conduct a research project on any aspect of the student experience, but centred on specific themes:

- Technology enhanced learning/e-learning (e.g. use of blogs; podcasting)
- The overall course experience
- Assessment and feedback (e.g. group work assessment; audio feedback).

Proposals were peer-reviewed, and then staff were contacted to put together a job description. This job description was posted within the student careers department and career online resource. Student researchers were selected in a competitive basis, short-listed and interviewed. An allocation of 100-hours for each appointed student researcher was budgeted. This excludes other expenses such as transcriptions costs, equipment, conference attendance, etc. Students were employed on a casual basis on an hourly rate of £8.00/hr. The student researchers are supported in their endeavours by research staff within Quality Enhancement. In terms of output, the student researchers are expected to write-up of a final project report, which is prepared for submission to our peer-reviewed *Student Experience and Engagement Journal*, and to present their work at the institutional-wide Learning, Teaching and Assessment Annual Conference. The overarching aim of this overall project is to promote greater student engagement and thereby improve the student experience.

**3.15 Students act as co-researchers into feedback and assessment for students with technology (FASTECH) at Bath Spa University and University of Winchester, UK**

Student Fellows from 15 programmes across both institutions act as change agents by encouraging student engagement, assisting with the collection and analysis of data, inspiring the team to ensure we meet students' needs, suggesting innovative ways of working, and liaising with programme leaders and other senior members of staff. The FASTECH project investigates how technology affects staff and students' experiences of assessment and feedback processes at the programme level, barriers and solutions to institutional embedding of effective practice, and successful change management approaches when introducing technology to address pedagogical issues. The FASTECH team has introduced the Student Fellows to the underpinning pedagogical principles of effective assessment and feedback and offered internal training opportunities in persuasive communication, research methods, and data analysis. Student Fellows will also have the opportunity to contribute to formal and informal dissemination activities such as blog posts, conference presentations, and peer-reviewed publications.

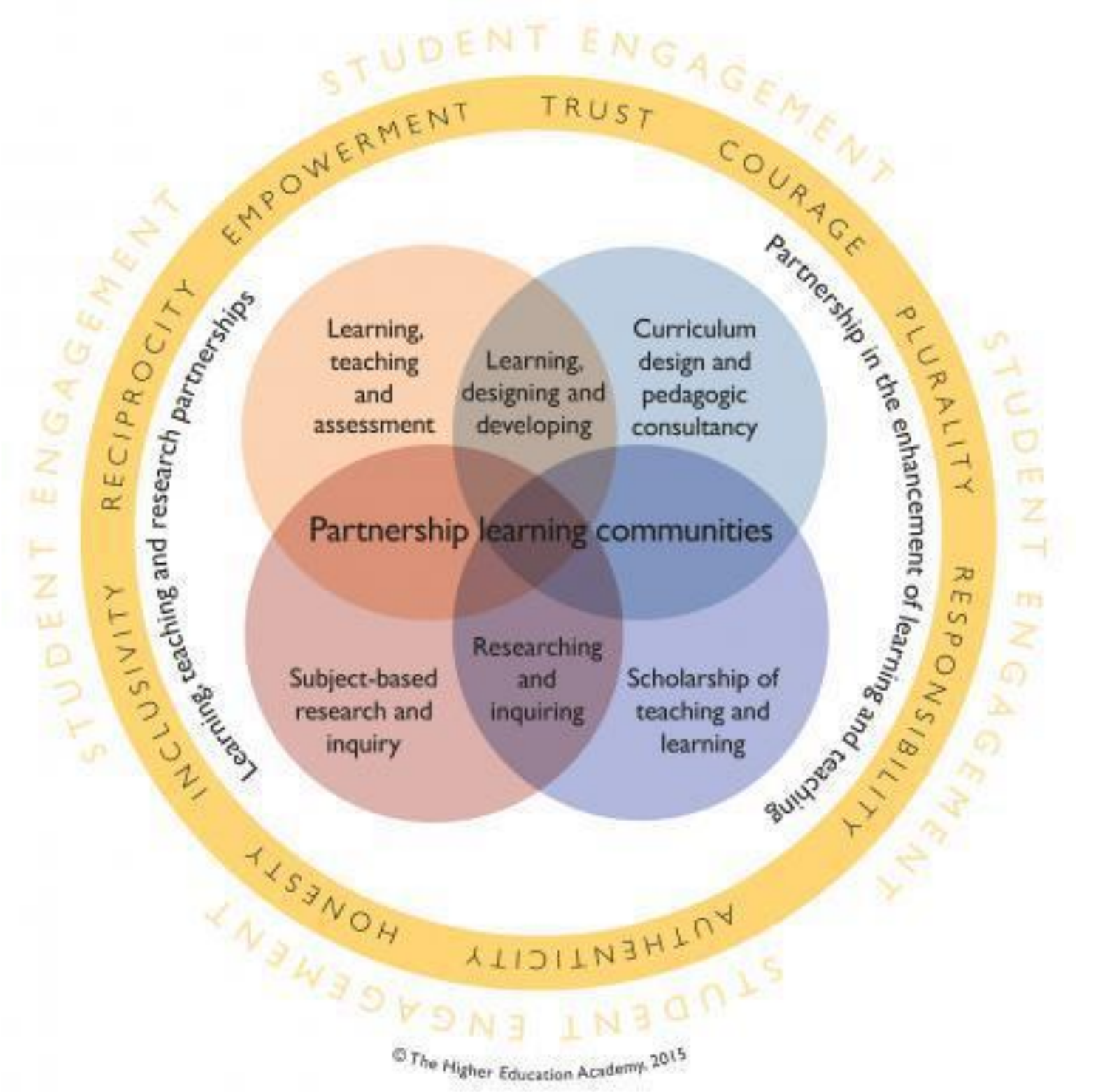
**3. 19 Students involved in international collaborative writing groups through ISSoTL**

International collaborative writing groups (ICWG) aim to build the capacity of participants to work and write in international collaborative groups. Eight or nine groups work at a distance to prepare a 2000-word outline for online discussion running up to a International Society for the Scholarship of Teaching and Learning (ISSoTL) pre-Conference workshop, where groups meet for two and half days. They spend time preparing their draft paper within their groups and in discussion with participants of other groups along with some social activities as part of the workshop. Following the workshop the groups have five to six months to complete and send in their papers for submission to the Society's international SoTL journal, *Teaching and Learning Inquiry*.

The first ICWG was in 2012-13 linked to the ISSOTL 2012 Conference hosted by McMaster University, Canada. Seventy people from 13 countries took part, spread across nine groups with each comprising at least one student member. Nine scholarships were provided to subsidize the costs of student members. The 2012 initiative resulted in eight publications in a special edition of *Teaching and Learning Inquiry* along with a SoTL publication evidencing the initiative's positive impact on participants. The second ICWG was associated with the 2015 ISSOTL Conference in Melbourne Australia involving 61 people from 11 countries with 9 full-time students. Fees for students were waived and all were offered free accommodation and a travel subsidy (for those outside of Melbourne).

*Further information:* Healey *et al.* (2013); Healey and Matthews (2017); Marquis *et al.* (2014, 2015); http://itali.uq.edu.au/matthews-studentsaspartners

**Fig. 6 Students as partners in learning and teaching in higher education: An overview model**




*Source*: Higher Education Academy (2015) Based on: Healey, M., Flint, A. and Harrington, K. (2014) *Engagement through partnership: students as partners in learning and teaching in higher education*. York: Higher Education Academy p.25. https://www.heacademy.ac.uk/engagement-through-partnership-students-partners-learning-and-teaching-higher-education

# 4. Developing and evaluating SoTL projects

## A taxonomy of SoTL questions

1. What works? – Is it working?
2. What is? – What does it look like?
3. Visions of the possible – What would it look like
4. New conceptual frameworks – Is there a different way of thinking about it?

Based on Hutchings (2000)

## Evaluating Pedagogic Research & Scholarship of Teaching and Learning

Glassick *et al.* (1997) propose six criteria for assessing the four scholarships:

1 Goals of the project
2 Preparation for scholar's work
3 Methods used to conduct work
4 Evidence gathered to demonstrate impact of work
5 Reflection on work
6 Communication of results to others

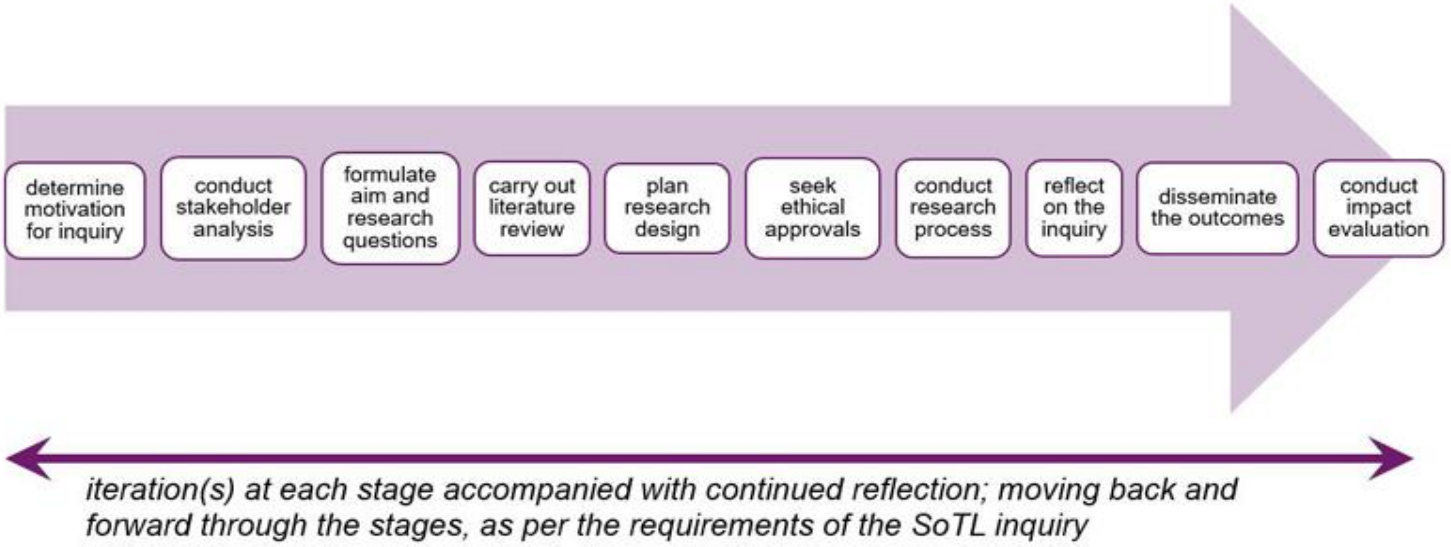
In later work The Carnegie Foundation for the Advancement of Teaching (2006) distinguish performance at threshold, advanced and exemplary levels.

**Table 6 Evaluating Boyer's four scholarships at different levels**

| | Threshold | Advanced | Exemplary |
|---|---|---|---|
| Goals of the project | Well-articulated and intentional | Move well beyond existing work in the field and represent innovations | Articulates new goals that will advance the work of other scholars |
| Preparation for scholar's work | Based upon prior scholarship in its area | Includes broad synthesis of prior work | Scholar acquires new knowledge and skills that enhance quality of the work |
| Methods used to conduct work | Follows conventions of scholarly efforts within its domain | Takes full advantage of methods available to make its impact | Generates new methods that enable others to enhance their scholarship |
| Evidence gathered to demonstrate impact of work | Evidence appropriate to the scholar's field to evaluate proposed practices or ideas | Evidence suggests that the scholar's ideas or practices are worth implementing | Evidence suggests practices or ideas have had great impact on other scholars |
| Reflection on work | Scholar has articulated lessons learned | Scholar has made adjustments in practice based on reflection | Scholar can report enhanced achievement of goals resulting from lessons learned |
| Communication of results to others | Work is publicly accessible for others to use, build upon, and review critically | Scholar's reflective work has been cited by others | Work has had broad impact on practices and inquiry of many others interested in the same questions |

Source: The Carnegie Foundation for the Advancement of Teaching (2006) Opportunities for Scholarship, Presentation to Hong Kong University Grants Committee, Hong Kong 23-24 January 2006. Based on Glassick *et al*. (1997) and an unpublished proposal by the Academy of Distinguished Teachers, University of Nebraska – Lincoln (2000).

**Figure 6 Stages of a SoTL inquiry**




- **Determine motivation for conducting a SoTL inquiry:** why is it important to investigate a particular aspect of learning and teaching? What evidence do you have to suggest the significance of this inquiry? What evidence will you need to prove that conducting this inquiry has been worthwhile?
- **Conduct stakeholder analysis:** who will be involved? What role will they perform? What information will they need before, during and after the inquiry?
- **Formulate aim and research questions:** what I am trying to achieve? What are the intended outcomes of this inquiry? Which research questions will help me to achieve the stated aim?
- **Carry out a literature review:** what is the existing published literature related to the aim and research questions? Are there other current/past SoTL projects within my discipline or other disciplines that are related to the inquiry that I am planning?
- **Plan research design:** which research methods/models/tools will I (or my team) need for data collection and analysis, for evaluation of the inquiry and for impact evaluation? What would be acceptable evidence in particular disciplines? Who will be involved as research participants and as co-researchers?
- **Incorporate ethical considerations and seek approvals:** are there any existing standards, frameworks and guidelines that can guide the ethical considerations of my inquiry? Who do I need to request permission from to carry out the research process?
- **Conduct the research process:** how do I collect evidence for the research questions by implementing the research design and by adhering to the ethical considerations?
- **Reflect on the inquiry for self- and peer-evaluation:** which models/frameworks of reflection will guide each stage of the inquiry, or tasks within a particular stage, or at the end of the inquiry? With whom will I conduct the reflections? With whom will I share my reflections?
- **Disseminate the outcomes for sharing and peer-review:** who will be interested in the outcomes? Which dissemination route(s) (including social media) should I choose before, during and at the end of the inquiry?
- **Conduct an impact evaluation:** how will I know that I have made a difference to learning and teaching, student experience, my professional/academic practice, my professional development?

*Source*: Minocha (2021)

**Impact Evaluation Framework for SoTL**

Based on a literature review and over a decade's experience of SoTL practice in eSTEeM, we have developed an Impact Evaluation Framework (IEF) for SoTL consisting of a set of 12 impact criteria. These 12 impact criteria or facets of impact can be useful for planning for impact when designing a SoTL inquiry, for evaluating the impact of a SoTL inquiry, or for guiding the collation of evidence when evaluating the impact of SoTL activity at the institution level.

The 12 facets of the Impact Evaluation Framework (IEF) for SoTL are divided into four categories:

1. Learning and Teaching.
2. Transfer to others.
3. Stakeholder benefits.
4. Cultural and economic benefits.

The facets and attributes of the IEF for SoTL are listed under each of these four categories in the Table below.

| **Learning and Teaching** | | |
|---|---|---|
| *1. Student experience*<br>pre-registration; induction; curriculum design; design of assessment; learning design; student engagement with course content; student engagement with the technological intervention; and student satisfaction rate. | *2. Student retention and progression*<br>student registrations; average marks as compared with previous year(s); module completion rate; module pass rate; student retention rate; and student progression. | *3. Excellence in teaching*<br>student skills-set (e.g. academic writing; critical thinking; reflection; problem-solving; group-working; digital literacy); student employability; evidence of research-informed teaching; data for assessments (e.g. UK's TEF), programme reviews and accreditation processes; inter-disciplinary collaborations in teaching; accreditation against professional standards; informing policy development internally at the level of department, faculty or University; and informing policy development externally (in another institution or in the sector). |
| **Transfer to others** | | |
| *4. Discipline-based teaching, research and practice*<br>change in the ways in which subject concepts are taught; leading to discipline-based research; uptake of outputs in industry practice. | *5. Dissemination of project's outcomes*<br>number of publications from the project; impact factor of individual journals or conferences; publications with students as co-authors; Google Scholar analytics or institutional analytics (e.g. OU's ORO on downloads of reports/publications; and sharing of novel research methods/strategies for conducting SoTL. | *6. Adoption of the outcomes*<br>adoption of the outcomes internally (within the institution) or externally to improve assessment, curriculum design in the same discipline or in other disciplines. |

| Stakeholder benefits | | |
|---|---|---|
| *7. Mutual stakeholder understanding*<br>understanding among students, tutors, learning designers, IT support; for example, their skills, challenges, requirements; a community that SoTL creates and moving outside traditional silos. | *8. Personal and professional development of project team and associated stakeholders*<br>improved practice or personal knowledge; developing an analytical mind-set; collaborative or team-working skills; reflective skills; becoming a mentor to others; becoming a champion for SoTL; continuity in SoTL activity by individual educators. | *9. Recognition of project team members and other stakeholders*<br>career trajectory that can be attributed to SoTL such as promotions; fellowships or memberships of professional associations nationally and internationally; invited speaker to events/conferences internally and externally; public recognition through awards, publications, conference presentations; leadership roles related to teaching and membership of strategic committees; external examiner and membership of external bodies. |
| **Cultural and economic benefits** | | |
| *10. Fostering of SoTL culture*<br>stimulating interest in SoTL; inspiring others to conduct SoTL; increased involvement of students in SoTL projects; a stronger overall faculty that values teaching and student learning; renewing/raising faculty excitement about teaching and making them more aware of how they teach; a move towards staff-student collaboration in curriculum design, development and evaluation; recognition of SoTL at par with disciplinary research. | *11. Financial implications*<br>opportunities for income diversification; effect on costs of modules or programmes. | *12. Funding opportunities*<br>internal (within the institution) funding for follow-on/new projects based on SoTL project's success; external funding (from outside the institution) for follow-on/new projects based on SoTL project's success. |

*Source*: Minocha, Shailey and Collins, Trevor (2023) https://www.open.ac.uk/scholarship-and-innovation/esteem/impact-sotl/impact-evaluation-framework-sotl

## 5. Strategies to Support Staff/Faculty Engagement in Pedagogic Research & SoTL

**Integrate into institutional strategies and structures**

- Build into teaching *and* research strategies and plans of university and faculties / departments
- Put on agenda of teaching *and* research committees, include committee representation
- Promote evidence-based learning and teaching strategies and initiatives through e.g. integrating into quality assurance procedures (e.g. evidence to support validation and review) and incorporating into quality enhancement processes (e.g. underpin curriculum decisions and developments in teaching, learning and assessment)
- Recognise PedR & scholarship in way implement HR strategy (e.g. appointments, promotions, annual reviews, sabbaticals, targets) on equal basis with other forms of research and scholarship and academic activities

**Provide opportunities, resources and expectations**

- Clarify different levels at which wish staff/faculty to engage with PedR & scholarship
- Make explicit time allocations and give incentives to departments for their staff/faculty to engage in PedR & SoTL
- Provide pump-priming funding
- Provide research assistant support
- Provide opportunities to 'go public' within the institution and advice on conference and publication outlets outside the institution

**Develop learning communities**

- Establish reading groups and PedR / SoTL interest groups
- Hold conferences, seminars, workshops and University / Faculty Learning and Teaching days
- Prepare Learning and Teaching Newsletters
- Encourage external networking
- Organise visiting speakers and fellows

**Partner with students in PedR / SoTL initiatives**

- Co-research and co-inquire with students on PedR / SoTL projects
- Enable students to undertake PedR / SoTL projects as part of their degrees
- Provide mentoring, training and funding for students to partner with staff/faculty
- Support student participation at conferences and writing and publishing about PedR / SoTL findings
- Appoint student fellows to work with the centre of learning and teaching

**Build capacity of staff/faculty**

- Make engagement in PedR a requirement of staff/faculty induction course (e.g. PGCHE)
- Appoint mentors, peer reviewers
- Support bidding for funds and undertaking educational literature reviews
- Run writing workshops and support PedR & scholarship conference participation
- Provide staff/faculty development workshops and individual support and advice

**Promote PedR degrees**

- Encourage staff/faculty to register
- Provide bursaries / studentships
- Build in registration for part-time PedR research degrees into grant applications

**Evaluate quality**

- Set standards for PedR & SoTL
- Build in peer-review processes
- Benchmark practices against similar institutions

**Celebrate and reward achievements**

- Make public achievements and give rewards through e.g. awards, fellowships, visits
- Keep publicly available database of activity (e.g. grants, publications, expertise)
- Develop and keep up to date attractive Web site

**Establish support structures**

- Establish a well-resourced Centre / Institute
- Appoint faculty / department co-ordinators
- Give overall responsibility to promote and deliver strategy to someone at Pro-VC level

Source: www.healeyheconsultants.co.uk/resources. See Myatt et al (2018) for a development of this list.

## 6. SoTL Resources

This is an extract from Healey, M. (2023) *The Scholarship of Teaching and Learning: A selected bibliography*. Available at: https://www.healeyheconsultants.co.uk/resources.

**Useful Web Sites**

Advance HE Knowledge Hub https://www.advance-he.ac.uk/knowledge-hub

AHRECS (2016) Scholarship of Teaching and Learning Research Ethics Manuals https://ahrecs.com/previous-projects/sotl-resource-booklets/

*Defining and supporting the scholarship of teaching and learning (SoTL): A sector-wide study. Literature review*. York: Higher Education Academy (Fanghanel, J., et al., 2015) https://www.academia.edu/19942913/Defining_and_Supporting_the_Scholarship_of_Teaching_and_Learning_A_literature_review

Illinois Scholarship of Teaching and Learning site includes useful list of resources https://sotl.illinoisstate.edu/resources/materials/

International Society for the Scholarship of Teaching and Learning (ISSOTL) www.issotl.com

Minocha, S. (2021) Scholarship of Teaching and Learning in STEM https://www.open.edu/openlearn/science-maths-technology/scholarship-teaching-and-learning-stem/content-section-overview.

Minocha, S. (2023) Impact of Scholarship of Teaching and Learning. Blog April 19, 2023. Provides links to Open University guide, case studies and workbooks of an Impact Evaluation Initiative of SoTL https://www.shaileyminocha.info/blog/2023/4/19/impact-of-scholarship-of-teaching-and-learning

Nelson, C. E. 2000 How to find out more about college teaching and its scholarship: A not too brief, very selective hyperlinked list http://php.indiana.edu/~nelson1/TCHNGBKS.html

Scholarship of Teaching and Learning: Annotated Literature Database - For a Canadian annotated list of references on detailed list of SoTL topics see: https://sotlannotations.com/

*The SoTL Guide*. University of Calgary. http://sotl.ucalgaryblogs.ca. Prepared by Nancy Chick (2015).

**Higher Education Academy Subject Network**

Subject Centres representing every discipline lasted in UK form 2000-2011. The archived sites contain many useful materials. Unfortunately, many of links are no longer working. **For the latest links** see: Subject Centres 2011 Archived Websites https://www.healeyheconsultants.co.uk/resources

**SoTL Journals**

Teaching Journals Directory https://cetl.kennesaw.edu/teaching-journals-directory (regularly updated)

***Selected open access SoTL Journals***

*Asian Journal of the Scholarship of Teaching and Learning* http://www.ajsotl.edu.sg/

*The Canadian Journal for the Scholarship of Teaching and Learning* (CJSoTL) http://www.cjsotl-rcacea.ca/

*International Journal for Students as Partners* (IJSaP) https://mulpress.mcmaster.ca/ijsap

* *International Journal for the Scholarship of Teaching & Learning* (IJ-SoTL) http://www.georgiasouthern.edu/ijsotl/ published by the Center for Excellence in Teaching at Georgia Southern University (Statesboro, Georgia, USA)

*International Journal of Teaching and Learning in Higher Education* (IJTLHE) http://www.isetl.org/ijtlhe/

*The Journal of Scholarship of Teaching and Learning (JoSoTL)* Published by Indiana University. Available at: http://www.iupui.edu/~josotl/

*Open Scholarship of Teaching and Learning (OSOTL)* https://osotl.org/index.php/osotl

*Practice and Evidence of Scholarship of Teaching and Learning in Higher Education* http://community.dur.ac.uk/pestlhe.learning/index.php/pestlhe/index

*SoTL in the South* http://sotl-south-journal.net/?journal=sotls

* *Teaching and Learning Inquiry* (TLI) ISSoTL Journal http://tlijournal.com/

*Transformative Dialogues: Teaching and Learning Journal* http://kwantlen.ca/TD.html

**National Teaching Fellows Directory** - https://www.heacademy.ac.uk/individuals/national-teaching-fellowship-scheme/NTF/Directory; **Association of NTFs** http://ntf-association.com/ includes Fellows' finder

**SoTL Videos**

***ISSoTL12***

Students as change agents plenary http://www.youtube.com/watch?feature=player_embedded&v=ywydKn4MeOY

***ISSoTL13***

Key characteristics of SoTL http://www.youtube.com/watch?v=yvDKHHyx7YY
Why Integrate Student Voices in SoTL? http://www.youtube.com/watch?v=4LbKSkqr06Y
Student Voices Projects - Why Faculty Get Involved http://www.youtube.com/watch?v=ozoEwJOcbKk
What is transfer http://www.youtube.com/watch?v=JQ9150hgnEI
Reading Recommendations for New SoTL Scholars http://www.youtube.com/watch?v=7m4aEF96LQs
History of the Scholarship of Teaching and Learning http://www.youtube.com/watch?v=gYiyxQGa480
Examples of SoTL Projects http://www.youtube.com/watch?v=LogmkiN6utk
Taxonomy of Questions from Introduction to Opening Lines http://www.youtube.com/watch?v=JCxPttq_e_Y
Scholarship of Teaching and Learning vs. Scholarly Teaching http://www.youtube.com/watch?v=eedxoj1CPnk

***Elon University***

For a series of videos which continually added to see: http://www.centerforengagedlearning.org/

***Mount Royal University***

For a set of 6 short videos on Developing a SoTL Research Question (2013) see:
http://www.youtube.com/watch?v=aCu8SnbPRKs

**Gary Poole SoTL videos on YouTube**

Interviewed by Nicola Simmons - https://www.youtube.com/playlist?list=PLzaRCoTTuIlUZokjzkFa-lGl1sAF-Oo2_ Animation by Monica Louie

**SoTL: What Works?**
https://youtu.be/hOeNMtETMAg
**SoTL: Words of Wisdom to Those Starting Out**
https://youtu.be/-P_uA_SNjJk
**SoTL: Processes vs Outcomes**
https://youtu.be/pCEKJqtKjzk
**SoTL: Institutional Recognition**
https://youtu.be/8EehFAaPLeg
**SoTL: Growth in Canada**
https://youtu.be/p3Z7e9MZbTs
**SoTL: Grand Challenges**
https://www.youtube.com/watch?v=HhQfX8iKrU4
**SoTL: Educating Funding Agencies**
https://youtu.be/QiY7tmEbJZE
**SoTL: Microscopic vs Macroscopic**
https://youtu.be/2xrXir-mAkQ
**SoTL: Why Care?**
https://youtu.be/k9MoXxmxysE

## SoTL courses

**Scholarship of Teaching and Learning in STEM** https://www.open.edu/openlearn/science-maths-technology/scholarship-teaching-and-learning-stem/content-section-overview. A free Open Learn course from the Open University launched in 2021 written by Shailey Minocha.

**Contemporary approaches to university teaching** https://www.caullt.edu.au/project-resources/olt-fellowship-and-mooc-available/ A free MOOC originally developed by Kym Fraser, which runs annually