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ADVANCING THE SCHOLARSHIP OF TEACHING AND LEARNING: REFLECTIVE PORTFOLIO INQUIRY IN HIGHER EDUCATION - A CASE STUDY OF ONE INSTITUTION

Nona Lyons

Abstract

At a time of intense interest in third level teaching in the Ireland, the UK, and the US, this paper describes an effort underway at University College Cork (UCC) to foster a new kind of scholarship, a scholarship of *teaching and learning*. Although impelled by the announcement in 2001 of an award for Excellence in Teaching at UCC, the project was framed by ideas first outlined by Ernest Boyer (1990) in his provocative book, *Scholarship Reconsidered.* This paper describes how Boyer's concept of a "scholarship of teaching" was implemented at UCC through a reflective portfolio inquiry process; presents the value and meanings staff say they find in engaging in a portfolio process; and, concludes with a consideration of the sometimes sobering institutional implications of this work. This case study of an institutions experience is one contribution to an evolving genre currently being invented: a new way of capturing and conveying the knowledge of teaching.

Introduction

When Ernest Boyer published his book, *Scholarship Reconsidered: Priorities of the Professoriate* (1990), he effectively carried an argument for supporting research on teaching at third level into the heart of academia. Boyer made a bold assertion. Calling for the radical re-consideration of scholarship within the academy, Boyer argued that colleges and universities needed new forms of scholarship beyond the traditional research model, what he termed the *scholarship of discovery*. He called for three additional forms: a *scholarship of integration* that would go across disciplines to capture and interpret work at their intersections; a *scholarship of application* that would address real, consequential problems of people and institutions; and, a

scholarship of teaching that would not only contribute to knowledge but transform and extend it.

Boyer's work launched a series of investigations into college teaching and such questions as: What is the scholarship of teaching? How can it be documented, represented? It was Schön who saw that if such an idea were to be taken seriously it must "produce knowledge that is testably valid, and [such] claims ... must lend themselves to intellectual debate within academic communities of inquiry" (Schön, 1995, p.27). For Schön, the new scholarship of teaching implies a kind of action research, planned and conducted by teachers/lecturers themselves, not by some outside, objective observer of standard scientific inquiry. But how? And with what consequences? For even though we are in the midst of a radical transformation of the relation between the researcher and the researched, practitioner research still raises questions about who creates this new knowledge and about the validity of the knowledge uncovered (Anderson and Herr, 1999).

This paper takes up these issues. It focuses on an initiative on the scholarship of teaching presently going on at UCC. It first presents the institutional context and describes how the "scholarship of teaching" became an important rationale for the project; it then outlines how historically the portfolio has evolved from a means of assessing teachers to one in support of deliberative inquiries into practice, cast *both* as a mode of reflective inquiry into teaching and as way to document and represent it; and, finally, it provides results of the project, indicating what UCC staff from across different disciplines say they find in a portfolio inquiry process, offering some descriptions of their portfolio experiences and their reflections on their own learning. The paper concludes with a consideration of the larger institutional implications and consequences of this work to ask: Can it be sustained institutionally? Advanced? What might stand in its way?

It is useful to note that portfolio projects are fast being undertaken at many third level institutions in the US, the UK, Ireland, and elsewhere especially with students in teacher education or other practice-based professions, such as social work and nursing. Portfolio explorations are being carried out as well with second level students in Ireland (e.g. Leaving Certificate Applied [LCA]). However, the UCC Scholarship of Teaching project, like similar projects beginning to proliferate in the US and the UK, is directed to college teachers themselves and their own inquiries into teaching practices and student learning. In Ireland, such projects are going on at University College

Dublin, the Dublin Institute of Technology, and are being discussed at other institutions. Although comparisons across the UCC project and other portfolio efforts at third level institutions would be useful, the purpose of this paper is directed to a more focused goal: to present one case study of how an institution went about defining and carrying-out an effort to contribute to a scholarship of teaching.

Data discussed here are drawn from forty UCC staff presentations made at an ongoing weekly "Portfolio Seminar" in which faculty shared potential portfolio entries during the 2001-2002 academic year; and, from research interviews conducted with sixteen of twenty three staff who prepared and submitted a Teaching or Course Portfolio in 2002. In all, approximately 250 staff participated in the seminars over two years. In the Spring of 2001, while a Visiting Research Scholar at UCC, I was invited to introduce the portfolio idea and to serve as the facilitator of the project. In January 2002, I returned to Cork to help facilitate the on-going seminars and document this work, conducting research interviews with staff who submitted portfolios for the 2002 awards. The Portfolio Seminars continued over the 2002-2003 academic year. I draw the reader's attention to, *Advancing the Scholarship of Teaching and Learning Through a Reflective Portfolio Process* (N. Lyons, A. Hyland, and N. Ryan, [eds] 2002), containing a sampler of portfolio entries from staff who applied for the 2002 awards.

As a case study of one institution's experience, this paper invites consideration of larger questions about a reflective portfolio inquiry process in the service of a scholarship of teaching:

- How does a portfolio process serve as a scaffold, a structure for inquiring into teaching/ learning?
- What is necessary for the process? What is valuable about it? What is validated through it?
- What may stand in the way?

Here, I open this discussion with the context of the project and its beginnings.

Institutional context and organizing concepts: a scholarship of teaching

Prompted by the initiation of Awards for Excellence in Teaching at UCC as well as by such questions as: How do we know what our students know and understand and how can we find out? Or, Why are

some things hard for students to learn?, this scholarship of teaching project was designed to foster inquiries by practitioners across the arts and sciences, law, engineering, and medical faculties into issues of teaching and learning. Drawing on Boyer's work, the concept of a scholarship of teaching was presented to some sixty staff at the introductory series of seminars held in Spring 2001. The goal was to provide a forum for faculty to explore: What is the evidence of a scholarship of teaching? How can it be inquired-into? And, how should it be documented and assessed? What options does a portfolio inquiry process offer?

In his book, Boyer had made his case persuasively saying he believed that "the time has come to move beyond the tired old "teaching versus research" debate and give the familiar and honorable term "scholarship" a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work" (Boyer, 1990, p. 16). Boyer wanted to affirm as fundamental the idea of scholarship as including original research. But, he (1990, p. 16) argued:

> ... the work of the scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to students. Specifically, we conclude that the work of the professoriate might be thought of as having four separate, yet overlapping, functions: the scholarship of discovery; the scholarship of integration; the scholarship of application; and, the scholarship of teaching.

Boyer believed that teaching makes consequential the work of the lecturer, professor, or tutor, that is, when is it understood by others. It begins with what the teacher knows. But it is also, as Boyer argues (1990, pp. 23-24), a

> ... dynamic endeavor involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning....all too often, teachers transmit information that students are expected to memorize and then, perhaps, recall ... but teaching at its best means not only transmitting knowledge, but transforming and extending it as well.

Schön (1995) emphasized the fundamental feature for a new scholarship of teaching: active inquiry into it by academic staff

themselves. Shulman (1998a, p. 7) extended these arguments. He saw that it would be necessary to remove teaching from its classic isolation in a classroom, to make it public, and that would need for a new kind of documentation:

> My argument is that until we find ways of publicly displaying, examining, archiving, and referencing teaching as a form of scholarship and investigation, our pedagogical knowledge and know-how will never serve us as scholars in the ways our research does. The archival functions of research scaffold our frailties of memory, and we need something comparable for the scholarship of teaching.

It was from Shulman's work, along with that of colleagues at the American Association for Higher Education (AAHE), that the idea of a portfolio emerged as a candidate for representing teaching for a new scholarship of teaching. But over time the portfolio was to become something more.

The portfolio in historical perspective

Why Portfolios? A brief review of the history of the portfolio in teaching and teacher education details how it came into teacher education, initially as a means for assessing teachers and documenting their practice, and simultaneously as part of a larger search for alternative method of validating research on teaching. But an examination of portfolio development since that beginning reveals a subtle shift in emphasis, from the portfolio as means and document of assessment to the portfolio as a deliberate and intentional method for scaffolding practitioner inquiries into a range of issues. Portfolios have a long and valued tradition with many professionals - writers, artists, photographers, and architects, for example. They keep copies of their work to chart how over time it has changed. Some include only their best work: Others include a range of work. But portfolio uses in teaching and teacher education are only a recent phenomenon.

Portfolios came into teaching, in one form through teacher education in the 1980s and early 1990s, on the second wave of school reform in the USA (Lyons, 1998). Then, reformers finally recognized that there would never be any lasting reform of education unless competent and caring teachers were at its center. How would such teachers be identified? Certified? If competent teaching is a complex, uncertain and often messy activity, it could not easily be documented

or assessed. Traditional ways of credentialing teachers - by courses completed, degrees, or an acceptable grade on a National Teachers Exam - seemed inadequate to capture teaching's dynamics or dimensions. Portfolios emerged as a more possible medium (Bird, 1990). Life in classrooms, teachers at work could be caught through a portfolio with its entries and evidence of work over time. It could document how a teacher and his or her students were progressing, recording lessons taught, assessments made. It could carry a syllabus, a course plan, and ample samples of student work, revealing levels of student understanding--including student portfolios. Shulman (1998b, pp. 24-25) argues that portfolio-making is far from a casual activity. It is, he claims, a theoretical act noting that:

> ... it is important to keep in mind that the portfolio is a broad metaphor that comes alive as you begin to formulate the theoretical orientation to teaching that is most valuable to you ... . Your theory of teaching will determine a reasonable portfolio entry. What is worth documenting, worth reflecting on, what is deemed to be portfolio worthy is a theoretical act.

Elements of a portfolio structure - a scaffold

Several elements of a portfolio inquiry process emerge in the act of creating this kind of documentary history of learning to teach, especially for purposes of assessment within a teacher education program. It is these elements that create the critical structure of the portfolio process:

- the collaborative process of mentoring portfolio development, an activity taking place over time through critical conversations with mentors and peers, usually over a semester or year or, in some cases more, of a teacher education program;
- some set of goals or standards held up to a portfolio maker describing what teachers today's complex classrooms should know and be able to demonstrate;
- the collection of a body of portfolio evidence--portfolio entries, what some call artifacts - of learning about teaching and student learning, such as videos of classes, student portfolios or other work, curriculum units, lessons that succeeded or failed, etc; or evidence exploring some puzzling aspect of teaching or of student learning (Dewey, 1933);

- a set of critical reflections or interrogations that accompany each entry articulating what was learned about teaching and learning; and, summarize a portfolio as a whole; and,
- a public presentation of the portfolio evidence and documentation narrated to a community of colleagues, cooperating teachers, and teacher educators.

Typically, a completed portfolio: begins with an introduction, a statement of one's teaching philosophy, followed by a set of entries and evidence, each entry labeled with a title, accompanied by a rationale for its inclusion and a reflection. It concludes with a final reflection.

The centrality of reflection

Importantly, in this process each portfolio entry carries a crucial element: that is, a *reflection.* Here reflection is defined an intentional act of mind, engaging a person alone or especially in collaboration with others in interrogating one's teaching, especially a compelling or puzzling situation of teaching or learning to construct some understanding of it (Lyons, 2002, p. 99). Through reflections, a teacher revisits and inquires into his/her own teaching, assessing what succeeded or failed and why. In this process, teachers uncover the meanings, and interpretations they make of their own practice, their refinements of theories, their understandings of what students know and understand, and how they as teachers need to change or try-out new ways of teaching (Dewey, 1933; LaBoskey, 1994; Schön, 1983). This reflective interrogation, then, looks both ways: to past experience and forward to future ones. Most portfolio makers claim reflection is the core of the process, essential to bringing new knowledge to consciousness, making it available to themselves and others.

The work of Shulman and the adoption of the portfolio by the National Board for Professional Teaching Standards as its primary means of assessing experienced teacher candidates for Board certification proved pivotal to reflective portfolio development. That work garnered national recognition in the US and support for portfolio assessment and for reflective portfolio-making as a critical experience in the education of teachers. This early portfolio history, then, emphasized portfolios for assessment of teaching. But portfolios were simultaneously used to document professional development, and some portfolio-makers quickly saw their utility as a showcase for

employment. Thus, the portfolio straddled sometimes nearly antithetical purposes.

Recent history of the portfolio in teaching and teacher education highlights an important development: the subtle shift from the portfolio as a mode of representation and documentation for the assessment of teaching to the portfolio as a more deliberate method for reflective inquiry into teaching. This development underscores, too, a dramatic and fundamental shift to a view of teaching as a kind of scholarly activity. Boyer (1990) helped to precipitate this development, challenging the academy to advance a scholarship of teaching, and effectively carried the argument into US higher education, mobilizing discussion about how teaching could be considered a form of scholarship.

For an activity to be designated as scholarship, the American Association for Higher Education (AAHE) suggests that three characteristics are needed: 1) It should be public; 2) It should be susceptible to critical review and evaluation; and, 3) It should be accessible for exchange and use by other members of one's community (Shulman, 1998a, p. 5).

Portfolio models for a scholarship of teaching

To AAHE, two portfolio models offer the possibility of meeting these goals: the Teaching Portfolio and the Course Portfolio. The *Teaching Portfolio* can be defined as a set of accomplishments of teaching, usually including samples of student work and accompanied by reflective writing and serious conversations with colleagues (Shulman, 1998b, p. 3). While there may or may not be a set of specified entries for a teaching portfolio, it usually is thought of as comprised of a range of evidence of one's teaching. For example, there might be a statement of one's teaching philosophy or beliefs, a syllabus, a video of a class, sample assessments used to determine what students know and understand, etc.

The *Course Portfolio* focuses more specifically on a single course (Hutchings, 1998a). Creating a course portfolio is or can be inherently an investigation for, as Shulman (1998a, p. 5) suggests, it depicts a "journey motivated by purpose and beset by uncertainty. A course, therefore, in its design, enactment, and analysis, is as much as act of inquiry and invention as any other activity more traditionally called research or the scholarship of teaching".

The course portfolio by its conceptual framework very specifically highlights outcomes, that is, student learning. But, I believe, so too should a teaching portfolio include a substantial look at student learning. All portfolio types, including team portfolios, department portfolios, etc. - incorporate evidence of student learning and as such may be said to share certain purposes for a portfolio-maker: To engage in the systematic inquiry into and documenting of teaching; to highlight the evidence of student understanding and learning; to articulate and make public the knowledge of teaching and learning; and, to foster dialogue with colleagues about reflective teaching and its scholarship.

Portfolio entries: a theoretical activity

Portfolios are constructed through their entries. Each entry is a significant piece of evidence that creates a portfolio maker's vision of teaching and learning. It is a professional undertaking - what Shulman calls a theoretical activity. Each entry usually includes some artifact, that is, some piece of evidence related to the entry, such as, a syllabus, a contract between practitioners in training, samples of student work, etc. Portfolio entries vary with the purpose of the portfolio, whether a teaching, course portfolio, etc. The portfolio usually opens with a statement of its purpose along with such basics as a table of contents. It may have an organizing theme. Most portfolios that document teaching, supervision or mentoring can be organized around design, enactment, and results - a set of ideas first put forward by the American Association of Higher Education (Hutchings, 1998b) for constructing a course portfolio. But this set of ideas seems useful for several kinds of portfolios.

Design of Teaching: possible evidence includes: all the ideas and documents that set forth the course of study and the expected performance of the student, such as, the plan for the program, assignments, syllabi, contracts.

Enactment of Teaching: how the course is enacted, brought to life. Entries could include a learning log or journal, observations, diaries, hard copies of electronic exchanges, videos of performance teaching and/or videos of students at work, etc.

Results of Teaching: Entries focus on evidence of students' work, performance, and understandings, including quizzes, projects - even student portfolios! Alternative assessments, a student's reflective journal, all are useful. Interviews or surveys of student understandings

also offer insights into what exactly students have learned, know, and the meaning they find in their learning.

Five elements usually accompany each entry and its evidence:

- A Label or Name for the Entry.
- The Context: Provides information about the context and purpose of the entry, the setting, students involved, subject, etc.
- The Rationale: Explains why the entry is included and why the portfolio-maker is interested in this entry and its inquiry.
- The Reflection: This is the critical heart of the entry. It is where a portfolio-maker interrogates what is learned from the experience the entry represents. Usually it is a robust account of several pages and includes how this entry changed the portfolio-maker's practice or how it might, or whether aspects of the original puzzle remain.
- Implications for Practice: The conclusion may be thought of as a new hypothesis about teaching and learning that emerges from the investigation, one that might shape future teaching/mentoring and one's own on-going learning (Lyons, 2001).

Table 1. Suggested elements and their evidence for a portfolio

- Introduction: Statement of Purpose for the Portfolio
- The Context/Setting; and other relevant information
- Professional history or other professional activities
- Content:
  - Statement of Teaching/Supervising Philosophy
  - Design of Supervision/Teaching/Mentoring: i.e. syllabus, plans for teaching, contract, etc.
  - Enactment of Supervising/Teaching: evidence such as logs Situations arising from support, administration, and classroom teaching
  - Results: Student Learning and Understandings: How do you know what your student knows and understands? Assessments, etc.
  - Final Reflection: What would you say you have learned about supervision and learning from this supervising experience? (Lyons, 2002b)

Portfolios ought to be formally and publicly presented to colleagues, peers, etc. (Lyons, 2002a; Lyons and LaBoskey, 2002). They need,

too, to be scaffolded, that is, supported in their development. In the UCC project, one scaffold was provided by the weekly Portfolio Seminar presentations by lecturers, who presented samples of their own potential portfolio entries. Over the course of 2001 and the Autumn of 2002, each week UCC staff members were invited to continue meeting together to share their teaching experiences as potential portfolio entries. In all, some 250 staff attended seminars and forty-five presented portfolio entries based on their own teaching or course portfolio.

The UCC experience: scaffolding the process of inquiring into teaching and learning - what was learned from the process?

> We close the classroom door and experience pedagogical solitude, whereas in our life as scholars, we are members of active communities: communities of conversation, communities of evaluation, communities in which we gather with others in our invisible colleges to exchange our findings, our methods, and our excuses. I now believe that the reason teaching is not more valued in the academy is because the way we treat teaching removes it from the community of scholars (Shulman, 1993, pp. 6-7).

In the Law Faculty building, Áras na Laoi, some forty members of the staff gathered, on a sunny May morning in 2001, to find out about portfolios and to consider how they might begin creating entries and evidence for their own teaching portfolios. Two members of the medical faculty who team-teach a course in Epidemiology were among the first to volunteer to present a potential entry for a teaching portfolio. It was the end of the school year and staff members were fresh from reading exam scripts, reviewing student projects/assignments and other documentation of their teaching and their students' learning. "We decided to look at some evidence from one of our courses that we find puzzling," the two began (Lyons, 2002b).

Describing two assignments given to their students, each designed to examine and analyse epidemiological data, these teachers discussed how they had found one assignment successful with their students and the other clearly not - and this was the second year in a row that they had assessed this result. They described the situation of the one assignment as "disastrous". What followed was a discussion,

not only about inquiring into why one assignment did not work, but why this pair of teachers had continued with something they had reason to believe was a failure with their students. The idea that faculty could continue to pursue something problematic opened the discussion to what it is that people continue to struggle with and what that might indicate: potentially something held as valuable, in spite of its difficulties. How to uncover and correct these difficulties, make it possible for students to experience the kind or learning faculty envisioned, opened a critical question that came to be considered the heart of the interrogation and the seminar discussions: *How do we know what our students know and understand and how can we find out?* That question engaged and held staff interest that was to continue over the course of the following school year. These interrogations in the end yielded important learning for staff and what some call new knowledge about teaching and learning. I next take up: What was it that staff found in the process?

When, week after week, staff volunteered to present aspects of their courses and their teaching, they acknowledged a kind of culture shift, an introduction of a new UCC norm to share teaching with other colleagues. When Autumn came and the new school year opened, the Portfolio Seminars continued. In all, a range of topics - entries for teaching or course portfolios - was presented and discussed. Here, I first review a sampler portfolio entry titles presented at the Portfolio Seminars to give a sense of the kinds of presentations made; then, I turn to data from sixteen staff interviews in which the 2002 portfolio makers discussed what they found as valuable in the reflective portfolio process; and, finally I report on a discussion held at the final 2001-02 Portfolio Seminar in which a six portfolio makers discussed their feelings about the value of the process.

The following titles of faculty presentations provide a sampling:

- "The archeology of a course: The history of revising a course in biochemistry".
- "How I went from a reluctant social work lecturer to an eager enthusiastic teacher; or going from twelve theories to three to help students *use* theory in their practice".
- "Web-based learning: A bridge too far?"
- "Designing a new-infant resuscitation education program".
- "Using an expert student group in problem-based medical case study discussion".

- "Fostering student understanding in studying Dante".
- "Using drama to teach German".

Results: what UCC staff say they learned

The basic goals of this project might be said to have been achieved, when in January 2002, twenty-three portfolios were submitted for the 2002 Awards for Excellence in Teaching at UCC. Five awards were made, as originally intended. Yet, some acknowledged, at least twice as many should have been awarded. Several portfolio-makers and some faculty portfolio presenters offered their views on their experience of the portfolio process and shared them in a last seminar of the year. Their comments reveal the meanings they found in the process. But they also point to some larger implications of this work, if it is to survive and thrive within an institution and advance a scholarship of teaching.

That final seminar opened with six portfolio makers discussing the question: "Looking back over the experience of creating a portfolio, what stands out for you?" This question was also asked in interviews with those staff who completed and submitted a portfolio for the university awards. Here I report on some responses—twenty respondents from both groups—as they cluster around similar issues (Lyons, 2002b). While most staff acknowledge that the portfolio development process was very hard work, more time-consuming than they ever realized it might be—they also acknowledge that the hard work had brought about a reflective process that gave them new knowledge. That seemed to happen through emerging consciousness that had, at least, four dimensions and in the end leads to changes in teaching practices (see Zeichner and Wray, 2001)

Becoming more consciously aware of teaching through critical reflection

Almost all participants of the portfolio inquiry process comment on how it has made them more consciously aware of their own teaching practices, of their beliefs about teaching, and of the importance of their day-to-day teaching. Some are surprised at seeing exactly how the elements of their practice fit together. Some are surprised at the gaps they find in such a critical review. Others see connections and become more aware of certain aspects - things they say they may even have been doing or acting on but not explicitly aware-of. As one lecturer commented (Lyons, 2002b):

> I was putting together two courses for a teaching portfolio. And in doing that, I suddenly realized the connections between the two ... . I was not aware of the connections. Like someone said at the last seminar, suddenly they discovered that they had a teaching philosophy. Similarly, I had not been conscious of these connections. Now this reflective process makes that possible. In the future, I will be more conscious of the connections - that's part of the reward of this reflective process

This may not be surprising. As Bruner (1996, p. 10) reports reflection is "a process of sense making, of going 'meta', turning around on what one has learned through bare experience, thinking about thinking".

This idea of a new consciousness has at least three other components: (1) *Making goals, concepts, and organizing ideas of learning more explicit to oneself and one's students.* One staff member identified a new "explicitness" as a result of the reflective portfolio process, "... it was very interesting to put in writing explicitly what I wanted to put into the course, what I wanted students to do, what I wanted students to learn." This lecturer has decided that next Autumn he will give his students this rationale for his course. He wants to see what difference it might make to their learning. This finding fits with the work of such researchers as Gardner (1999) and others who today argue that teaching for student understanding requires a level of explicitness in organizing questions, concepts, and content as well as a focus on student engagement and performance. (2) *Becoming aware of students needs as learners, coming to know what they know and understand of the concepts and content under study.* Almost all UCC portfolio makers comment on their increased awareness of students, their motivation, how they know what students know and how they need to find out. Staff members report greater experimentation with continuous assessment in their search for new ways to do that. (3) *Changing one's teaching practices, continuing investigations.* A third clear feature of this kind of reflective consciousness is that faculty report changing their practices, of experimenting with new ways of doing things, and of actively committing themselves to their own on-going professional development. Thus, there is revealed here - at least in this sample of portfolio inquirers-- that a reflective inquiry process leads them to new, usable knowledge of one's teaching practices and of new ideas

and hypotheses about what may be important changes to pursue in their practice.

Building a forum for critical discourse about teaching and learning across disciplines.

Almost all twenty staff respondents commented on the fact that the portfolio seminars were initiating a new norm at UCC, that is, a forum for staff to engage in a discourse about teaching and learning across disciplines.

Linking the needs of learners and the advances in one's disciplines to forge new responses

Finding a pedagogical challenge when his students came to class weak in Maths and Chemistry and turned-off by difficult physical concepts, one lecturer of Biochemistry decided to use a non-mathematical way to present critical concepts in his course and increasingly became creative with computer-based approaches and other audio visual aids. In addition, he describes how changes in his discipline itself have shaped his practice. Recognizing that in the future three dimensional data display for proteins with the special folding inward problems of their structures will be important to help student understanding, this innovative teacher devised a special computer program that allows students to manipulate and investigate proteins and their properties. Later this same teacher realized how his innovations in teaching were leading him to more effective presentations of his own research.

Identifying how a discipline shapes teaching

Some staff commented on how their disciplines differed and how that made their documentation of teaching different. For example, staff members in the Faculty of Medicine commented on how their courses are usually delivered by a team of staff and thus no single staff member is responsible for a Course Portfolio. The impact that different disciplines might have on developing a scholarship of teaching emerged as an important theme. It deserves serious attention.

Identifying the need to extend systematically opportunities for faculty to gain knowledge about teaching and learning

One significant discovery of this work already mentioned is how little prepared staff are for third level teaching (Huber, 1998), and how

eager some are to increase their knowledge and understanding of teaching and learning. Again and again in interviews and in public, faculty described how they came into teaching at third level, were handed a syllabus and told to teach. Most relied on how they had been taught—largely through lecture format. Many had searched on their own for assistance, taking courses in a surprising range of places and valuing what they learned about their daily work. One woman shared a discovery she found (Lyons, *et al*, 2002): "I've learned a kind of language that people in education talk. I didn't know what all of these things meant before - such as active learning, or objectives, goals, aims. Now that I [do] ... I am wanting to re-write all of my courses". Such comments cry out for systematic delivery of a program about teaching and learning for staff.

> *Exploring the evidence of student learning: What do students understand and know how to do?*

One question, How do we know what students know and understand and how can we find out?, sustained staff interest all through the seminars. The question forces consideration of exactly what students learn from courses. Staff realized how little of student learning was ever tapped by the standard course evaluation questionnaire. Staff need to continue to explore this question and share their efforts as they gain strategies to uncover student learning.

> *Making the evidence of teaching excellence and its scholarship public and open to investigation*

In the last portfolio seminar, faculty came back to the question: What is a scholarship of teaching? A vigorous dialogue emerged. The academic who began the discussion said (Lyons, 2002b):

> What I have learned is that learning is an on-going process. When I was doing the portfolio I came across a number of quotes. The assumption of some was that if you had a PhD it would immediately guarantee that you would be a good teacher. Then I asked: what is excellence in teaching? I [now] see that excellence is not a state: it is a process. Excellent teachers are engaged in a process of development. Then I asked: What is a scholarship of teaching? What does it mean? Does it mean doing research and publishing? I think it does mean reading other people's research. But what else does it mean?

Other staff joined in. One person commented that they have found that some faculty objected to the term, rejected it outright, saying that teaching is never a form of scholarship. Another person then commented:

> It is a great question. I think that we are all saying that teaching is very important for the whole university, for us, and for our students. Anything important has to be documented. In doing research, I start by writing. And I think it is the same for teaching. We must start with that idea that teaching is very important. Scholarship is very important. I find that I have thought more about this course from this experience with reflective writing than ever before. Excellence in teaching is a process. You have to change things around, experiment. I discovered that you must think about your courses.

Another added:

> I feel very strongly that a lot of the process is an investment and a journey of self-discovery, a journey of discovering your own involvement - your own learning. New knowledge comes from this process. Syntheses happen. And that, and that knowledge uncovered, fall within the definition of scholarship. Like we could say: Why another critique of Finnegan's Wake? Or of Dante's Purgatorio?

Drawing on my own writing, I added a concluding reflection to this conversation:

> I think a scholarship of teaching also must involve students. It is not done alone - only in relation to the self. It is simply not self-referential. It creates a discourse about students and their learning - that is part of the scholarship of teaching. It creates a discourse and invites people to join in this community of discourse (Lyons, 2002b).

Implications

The implications of this work on advancing a scholarship of teaching immediately suggest important questions: How can this work be

sustained? At what level? With what resources? By whom? Considering:

- At what level should a discourse on teaching be introduced in the academy? How? How should it be sustained? Through what forums?
- Should the idea of engaging in a reflective inquiry and documenting one's teaching and presenting it to colleagues be built into permanent structures of the university, to the structures of promotion and rewards? How? Which promotions?
- How can faculty be sustained in their efforts to deepen their knowledge and understanding of teaching and learning? How? By degree or certificate programs? Offered in the evenings for practicing faculty?
- How can on going dialogues about teaching and learning, about what students know and understand and how faculty can find-out?
- What research ought to be undertaken about third level teaching? About what constitutes good teaching within the institution? About teaching across disciplines? About a scholarship of teaching? By whom?

I respectfully invite the readers of this journal to respond, to offer their insights, observations, and concerns about the possibilities of advancing a scholarship of teaching, extending this dialogue.

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REFERENCES

Anderson, G. and Herr, K. (1999) The New Paradigm Wars, *Educational Researcher, Vol.* 28, No. 5, pp.12-21.

Bird, T. (1990) The Schoolteacher's Portfolio: An Essay on Possibilities in Millman, J. and Darling-Hammond, L. (eds) *The New Handbook of Teacher Evaluation: Assessing Elementary and Secondary Teachers* (2nd ed.) Newbury Park, CA: Sage.

Boyer, E. (1990) *Scholarship Reconsidered: Priorities of the Professoriate*, Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Bruner, J. (1996) *The Culture of Education,* Cambridge, MA: Harvard University Press.

Dewey, J. (1933/63) *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*, New York: Houghton Mifflin Co.

Gardner, H. (1999) *The Discipline Mind: What All Students Should Understand,* New York: Basic Books.

Huber, M. T. (1998) Why now? Course portfolios in context, in Hutchings, P. (ed.) *The Course Portfolio,* Washington, DC: American Association for Higher Education.

Hutchings, P. (1998a) *The Course Portfolio,* Washington, DC: The American Association for Higher Education.

Hutchings, P. (1998b) Defining Features and Significant Functions of the Course Portfolio, in Hutchings, P. (ed.) *The Course Portfolio*, Washington, DC: The American Association for Higher Education.

LaBoskey, V. (1994) *Development of Reflective Practice*, NY: Teachers College Press.

Lyons, N. (2002a) The Personal Self in a Public Story, in Lyons, N. and LaBoskey, V. (eds) *Narrative Inquiry in Practice: Advancing the Knowledge of Teaching*, NY: Teachers College Press.

Lyons, N. (2002 b) The Scholarship of Teaching Research Project, unpublished research interviews, University College Cork.

Lyons, N. (2001) Interrogating, Documenting, and Representing the Scholarship of Teaching: I, Portfolio Options, unpublished pamphlet created for the Scholarship of Teaching Project, University College Cork.

Lyons, N. (1998) *With Portfolio in Hand: Validating the New Teacher Professionalism,* New York: Teachers College Press.

Lyons, N. and LaBoskey, V. (2002) *Narrative Inquiry in Practice: Advancing the Knowledge of Teaching*, NY: Teachers College Press.

Lyons, N., Hyland, A., and Ryan, N. (2002) *Advancing the Scholarship of Teaching and Learning Through a Reflective Portfolio Process: The University College Cork Experience*, Cork: UCC, available at: http://www.ucc.ie/publications/scholarship/

Schön, D. (1995) The New Scholarship Requires a New Epistemology, *Change*, Vol. 25, No. 6, pp. 6-34.

Schön, D. (1983) *The Reflective Practitioner*, NY: Basic Books.

Shulman, L. (1998a) Course anatomy: The dissection and analysis of knowledge through teaching, in Hutchings, P. (ed.) *The Course Portfolio,* Washington, DC: The American Association for Higher Education

Shulman, L. (1998b) Teaching Portfolios: A theoretical activity, in Lyons, N. (ed.) *With Portfolio in Hand*, NY: Teachers College Press.

Shulman, L. (1993) Teaching as Community Property: Putting an End to Pedagogical Solitude, *Change,* Vol. 25, No. 6, pp. 6-7.

Zeichner, K. and Wray, S. (2001) The Teacher Portfolio in the U.S. Teacher Education Programs, *Teaching and Teacher Education*, Vol. 17, No. 5, pp. 613-621.