

TEACHING FOR UNDERSTANDING FOR LECTURERS: TOWARDS A SCHOLARSHIP OF TEACHING AND LEARNING

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Introduction

This chapter reviews the introduction of Teaching for Understanding (TfU) to lecturers taking the Postgraduate Certificate in Teaching and Learning in Higher Education (PGCTLHE) at University College Cork (UCC) in 2006–07.

TfU is a pedagogical framework that focuses on helping teachers understand what students need to understand. We have introduced TfU at UCC as a means of engaging lecturers as teachers in the process of reviewing their own teaching practice, a process for which TfU provides a lens. TfU also has the potential to address some of the challenges facing lecturers in the planning and teaching of courses, such as:

- coverage and detailed planning (goal setting, learning outcomes)
- engaging students in learning
- continuing and formative assessment.

Finally, TfU can provide lecturers with a vocabulary and a way of thinking, a process of opening up and interrogating practice. This process helps the documentation of practice and hence the movement towards approaching teaching as research (Brew, 2006) – in short, towards a Scholarship of Teaching and Learning (SoTL). My chapter in *Emerging Issues 1* was based on conceptualising SoTL and framing its first steps in UCC. It is therefore fitting that in this volume I should build on that foundation and indicate in more detail how SoTL plays out in practice in UCC and how TfU is a useful theoretical and practical framework in mapping out that journey.

This chapter begins with an introduction to the research work of Project Zero at the Harvard Graduate School of Education, out of which the TfU Project emerged. It goes on to provide an overview of understanding and the performance view of understanding at the heart of the TfU model. An exploration of the dimensions of understanding identified in each discipline then follows. The key elements of TfU are then explored. The chapter subsequently focuses on how third-level teachers have benefited from this framework, through a study of some themes and insights emerging from the course portfolio work of participants on the Postgraduate Certificate in Teaching and Learning in Higher Education (PGCTLHE) in the 2006–07 academic year. The chapter concludes with the idea that the TfU framework has much to offer third-level teachers in the 21st century, where accountability and transparency are at a premium, but where disciplinary understanding and student learning must also hold equal sway and act as our compass in guiding teaching as research.

Project Zero and TfU: Background

Project Zero (PZ) is a research group based at the Harvard Graduate School of Education (Hetland, 2002, p. 1–5). For over 30 years, and through dozens of research projects, PZ has investigated the development of learning processes in children and adults. PZ was founded in 1967 by the philosopher Nelson Goodman, to study cognition and development in the arts. Goodman believed that arts learning should be studied as a serious cognitive activity but that close to “zero” had been firmly established about the field, hence the project’s name.

Having worked with Nelson Goodman from PZ's inception, Howard Gardner and David Perkins became co-directors of the project in the early 1970s. In 2000, Steve Seidel became the director of PZ. The organisation has expanded its concerns from education in the arts to education across all disciplines and in a variety of contexts, including classrooms, schools, and other educational and cultural organisations.

Although research is a central part of PZ's purpose, the organisation also engages seriously in developing collaborations with educators, offering annual summer institutes and online courses and creating websites and publications. In all these forms, PZ continues to support the creation of communities of reflective learners, encourage the pursuit of deep understanding within and across disciplines, and promote critical and creative thinking. It is in this context that the TfU approach emerged.

The Emergence of the TfU Project

The TfU framework grew out of a sustained collaborative research project, conducted by PZ researchers between 1989 and 1997, with groups of effective teachers working in a range of subject areas and school contexts. According to Wiske (2005, p. 4), the purpose of this project was to clarify the nature of understanding and then to define features of educational practices that helped students develop deep and flexible understanding. The TfU framework emerged as the researchers and teachers analysed case studies of effective teaching practices in relation to current theories of cognition and instruction. As a leading authority on TfU, Wiske (2005) is confident of its influence:

In the years since the TfU project published its findings and framework, this educational model has served as a structure for designing educational materials and activities in a wide variety of locations and types of settings throughout the United States and around the world: preschools, elementary and secondary schools, universities and professional development programs (p. 4).

It is in the context of its application to university teaching that I wish to examine the concept and framework of TfU.

What is Understanding?

Having reviewed both educational research and the effective practices of teachers, the project defined understanding a topic as the ability:

to perform flexibly with the topic – to explain, justify, extrapolate, relate and apply in ways that go beyond knowledge and routine skill. Understanding is a matter of being able to think and act flexibly with what you know (Perkins, 1998, p. 42).

Perkins (1998) uses the metaphor of jazz playing to highlight the nature of learning for understanding:

To put it another way, an understanding of a topic is a “flexible performance capability” with emphasis on the flexibility. In keeping with this, learning for understanding is like learning a flexible performance – more like learning to improvise jazz or hold a good conversation or rock climb than learning the multiplication tables.... Learning facts can be a crucial backdrop to learning for understanding, but learning facts is not learning for understanding (p. 40).

Perkins' argument hinges on a *performance view* of understanding, which foregrounds the application of intelligence in a real context. It is about an active approach to understanding, where students are engaged in their learning and invited to work things out for themselves. It suggests that understanding is in doing and that lecturers need to ask: What do I want my students to be able to understand by the end of this course/session, and what do I want them to do to get that understanding? In this view of understanding, teachers design, scaffold and facilitate learning. Learning does not happen haphazardly, nor does it emerge from textbook recitation. Rather, it is a very real process that requires lecturers to ask some probing questions (see the key elements of the framework below) and to design, teach and assess the course accordingly.

The performance view contrasts with the *representational view* of understanding, which claims that there is a definite representation of understanding, which teachers transmit, and which learners do or do not possess. As Perkins (1998, p. 47) points out, the problem with this possessive view of understanding is that it does not allow for learners who do not "get" or "have" the picture. Neither does it allow much for teacher intervention, other than that of a didactic kind, whereby teachers try to transmit their understanding.

The performance view of understanding is much more open and flexible, suggesting an incremental and transformational view of learning as that which is acquired over time, through what Perkins (1998, p. 42) terms "understanding performances" or "performances of understanding". By definition, these are activities that go beyond rote and routine and challenge learners to demonstrate their understanding. Indeed, these performances are learning outcomes in action – after all, learning outcomes indicate what students should be able to do by the end of a course (Kennedy, 2007).

At this point, it is helpful to distinguish between the expectations of "entity" learners and "incremental" learners in order to highlight the attitude and commitment necessary to pursue understanding (Hetland, 2002, p. 26; these terms were originally coined by Carol Dweck and her colleagues at the University of Illinois). *Entity learners* are more at home in the representational model of understanding, because they expect that they should "get it", that learning is about taking in an entire entity at once, and that the role of teachers is to supply this product, in the form of "the notes" or "set answers". *Incremental learners*, on the other hand, come gradually to understand by performing, doing, or engaging in activities that are real within the world that is to be understood. Incremental learners believe that learning requires persistence, that understanding is won through continued effort, and that mastery is acquired in steps. The TfU model is a good fit for these learners and their characteristically interactive, experiential and dynamic methods of learning; this kind of learning also forms the base for the TfU model's account of the disciplines and disciplinary understanding.

The Dimensions of Understanding and Their Role in the Disciplines

As university lecturers, we come to the classroom as specialists in a discipline, as well as teachers of that discipline; this is a key aspect of TfU, which is based on the solid foundation of disciplinary understanding. It is also a key aspect of the Scholarship of Teaching and Learning (SoTL), which acknowledges that our disciplines inform our pedagogy and affect and, indeed, effect teaching and learning (Huber and Morreale (eds), 2002; Huber, 2006). Disciplinary understanding implies that we need to teach students how to think in the discipline and to act as experts in the field. For us as lecturers, disciplinary understanding

implies that we model what it is like to think in and work in the discipline and that we involve our students in this process.

TfU proposes that embedded in each discipline are the following four dimensions of understanding, which we should bear in mind when planning classes and teaching:

- knowledge of important concepts in the discipline (What is the knowledge base?)
 - methods of disciplined reasoning and inquiry (How is knowledge created?)
 - purposes of the discipline (What drives inquiry in the discipline?)
 - forms of expressing understanding (How is knowledge communicated?)
- (These dimensions are explained more fully in Boix and Gardner, 1998).

An awareness of the dimensions of understanding embedded in each discipline and their implications for how and what we might teach is a central aspect of a TfU approach and a necessary element in helping lecturers to critique the conventional lecture, which for various reasons is still a primary teaching method for many lecturers. It is my contention that the conventional lecture has in many cases decontextualised knowledge and disconnected the various dimensions of understanding from each other, rendering students passive absorbers of knowledge and throwing them back on rote learning in an attempt to make sense.

In contrast, the TfU model proposes vital connections between the four dimensions. The *knowledge* dimension, for example, focuses on declarative knowledge and describes the quality and sophistication of how we recognise and use facts, names and rules; it is best seen holistically in the context of the other dimensions. Without disciplinary *methods* (how we learn to build knowledge in the discipline), disciplinary *purposes* (why this knowledge has significance for us and how we own and make sense of it) and disciplinary *forms* (the various representations we give to knowledge in making it our own and sharing it), knowledge is inert and without context. Until students are engaged in the learning from a personal perspective (purpose) and given the opportunity to build knowledge as part of the lecture (methods) and to share and represent their understanding of what is being taught (forms), Bligh's (1972, 1998) critique of lectures as too passive will hold sway for many years to come. Lectures in the 21st century should represent only a small subset of the teaching repertoire; they require significant pedagogical framing (as opposed to presentational packaging) and must rise to the challenge of prioritising student understanding, or become outmoded.

The dimensions of understanding are important because they remind lecturers that theirs is a double-edged sword, at once disciplinary and pedagogical: as lecturers, we must both advance the discipline and engage our students. In SoTL terms, we must be acutely aware of our disciplinary stance, but we must also be equally aware of developing "pedagogical content knowledge" (Shulman, 1987) and of documenting our evidence for student learning. An appreciation of the dimensions of understanding helps us to bridge the gap between the discipline and the classroom; with such an appreciation, we can examine the nature of each dimension of the discipline and then allow that to inform how we plan and teach, so that our students will learn.

Key Elements of the TfU Framework

Wiske (2005) defines the goal of education as the cultivation of a "flexible capability to think and apply one's knowledge" (p. 4). This has significant implications for the process of learning and teaching and is certainly a challenge for third-level teachers. If understanding

is demonstrated by performance, it follows that understanding is also developed by performances of understanding. According to Wiske (2005), "Such performances require learners to stretch their minds, to think using what they have learned, and to apply their knowledge creatively and appropriately in a range of circumstances" (p.5). Therefore, the TfU project made "performances of understanding" the centrepiece of its model and provided teachers with a theoretical and practical framework in which to ground and map active learning.

The TfU framework poses four questions, which are designed to elicit understanding (Wiske, 1998):

1. What topics are worth understanding?
2. What is it in these topics that needs to be understood?
3. How can we foster understanding?
4. How can we tell what students understand?

What topics are worth understanding?

In the TfU framework, the topics worth understanding are known as *generative topics*, because they generate the knowledge that forms the basis of the course to be taught. This question challenges teachers to choose a topic that is central to the discipline, interesting to students and teachers, accessible to students, relevant to our students' lives and learning experiences, and that provides opportunities for multiple connections with other topics on the course. When teachers choose generative topics appropriately, they teach for understanding and not for coverage. They must be selective and justify the topic's centrality and necessity. Generativity begets passion and motivation and is much prized in Boyer's (1990) concept of scholarship.

What is it in these topics that needs to be understood?

The TfU framework proposes that this question can be answered by identifying *overarching goals* (long-term goals), also known as *throughlines*, and *unit-long understanding goals* (short-term goals) for the course under consideration. These goals take the form of questions or statements that express what is most important for students to understand in a course. Planning is central to this activity. These goals must be made public and accessible to students. This aspect of the TfU framework implies that we must be accountable to our students and that our course outlines must be clear, stable and accessible. In this respect, the framework is also consistent with the Bologna agreement's emphasis on the importance of learning outcomes: TfU goals and learning outcomes both articulate what we want students to understand and be able to do by the end of the module (Kennedy, 2007).

By grounding learning outcomes in a TfU framework, lecturers can maximize the use of Bloom's Taxonomy within a constructivist context. That is, some lecturers worry that learning outcomes may be narrow or inflexible. But the TfU framework is holistic, dialogical and flexible, because it focuses on active learning via performances of understanding, as well as the constant assessment and adaptation of those performances in relation to the goals of the course and the generativity of the module. Lecturers might also bear in mind that Bloom's taxonomy is a flexible tool that has survived the test of time (Anderson and Krathwohl, 2001) and that its revision "emphasises the use of the taxonomy in course planning, instruction and assessment" (Moseley *et al*, 2005, p. 103). Because TfU is also designed to maximise course planning, instruction and assessment, Kennedy's (2007) point that there is a process of "dynamic equilibrium" between TfU and learning outcomes is well

taken. It is the concept of a performance view of understanding that facilitates such equilibrium, since it focuses on what we want the students to do in order that they might understand. In a TfU model then, the concept of learning outcomes is already in-built.

How can we foster understanding?

This question invites us to think of our learning and teaching methodologies not as ends in themselves, but as ways of developing understanding and ways of demonstrating it – that is, ways of facilitating performances of understanding. As already discussed, these performances are activities that both develop and demonstrate students' comprehension of the understanding goals in question, by requiring students to use what they know in new ways. Such performances provide a real context for active learning in the university classroom. Students are given focused tasks/performances that are integral to the key goals and outcomes of the course and that challenge their thinking and assumptions. In line with the dimensions of understanding, performances are devised with the methodologies of the discipline in mind, so that pedagogical and disciplinary methods intersect and interact. In relation to learning outcomes, the performances of understanding undertaken by the students already beget these.

How can we tell what students understand?

We can tell what students understand by designing *ongoing assessments* that elicit and support students' incremental understanding. Importantly, these assessments are the means by which students gain continual feedback about their performances of understanding as the basis for improving them. In this framework, then, assessment is not the tail that wags the dog; rather it is a formative, diagnostic tool that helps students to build confidence as they grow into the methods and thinking of the discipline they are studying. Embedding learning outcomes in a TfU approach provides the constructive alignment necessary between the lecturer's goals and the students' learning. Within the TfU model, the learning outcomes are not an appendage, but an intrinsic part of the process of learning and feedback.

Teaching for Understanding in the PGCTLHE (2006-07)

My evidence regarding how lecturers approach TfU is derived from a series of course portfolios that lecturers produced as part of the Postgraduate Certificate in Teaching and Learning in Higher Education (PGCTLHE) in May 2007. For full details of the portfolio assignment on this course, see the Appendix. Lecturers were asked to take a TfU approach to the teaching of a course or module and to document this in a course portfolio.

The portfolio is an important vehicle for documenting and developing practice (Hutchings 1998). It encourages lecturers to focus on the design of the course they are teaching, its enactment – that is, how it plays out in daily teaching and interaction – and finally on its results – that is, its student learning. At the same time, lecturers must adopt a reflective stance as they present and critique their practice. It includes a creative element insofar as lecturers are invited to tell the story of the course from several perspectives.

In the PGCTLHE, the course portfolio also gave participants a chance to engage in SoTL by making their practice publicly available, open to critique and capable of being built on by others (Shulman, 1993). In this case, participants had two opportunities to present their portfolios. In the first term (TL4000), they presented a first draft of their work. In the second term (TL4001), they were asked to review the portfolio in the light of their progress and of feedback given. Note that for the final reflection (see the Appendix) they were asked

to consider in what ways (if any) they found the TfU framework useful for documenting their teaching and enquiring into student learning.

The following section presents the reflections of participants on the course, all of whom are colleagues across all faculties of UCC. I have organised this material in relation to common themes that emerged during my research, and which provide several perspectives on TfU.

TfU: A Vehicle for Professional Development

Many lecturers take the PGCTLHE because it is an opportunity for them to stand back from practice and explore the role of teachers as researchers of student learning. The reflections below discuss the lecturer as learner and highlight one of the fundamental insights often gained as a result of a TfU and SoTL to academic development – that teaching is about learning.

*The TfU framework confirmed that I was doing many things right, but that there was room for improvement.
(Lecturer A, Department of Government)*

*Approaching my role from the TfU framework has allowed me to take myself off the hook and focus my energy on designing, delivering and assessing courses to facilitate students learning, rather than proving my own knowledge. I felt liberated.
(Lecturer B, Department of Food Business and Development)*

*Up to starting this course, I had been overly concerned with the quality of presentation of my information. While I realise that this is still important, [I have] moved from looking solely at me as a teacher to looking at my students, their level of understanding and how I may help them develop their understanding of Humanities Computing.
(Lecturer C, Department of History)*

*In terms of my career as a university teacher, I have generally found myself having to get on with the practice of teaching, with little chance to consider why I was doing what I was doing.
(Lecturer D, Department of Applied Social Studies)*

*This framework has caused me to reflect on my teaching practice and question my role. I now see my role as facilitator of student enquiry rather than transmitter of information.
(Lecturer E, Department of Nursing and Midwifery)*

*I am reminded of Schön's idea of reflection in action where we think as we act, enabling us to understand what it is to think clearly about something. Jazz musicians think on their feet when improvising, taking a musical idea and creating a unique musical expression running over an idea until one can say "that's it". I think we, as a class, probably did the same. Certainly my journey from generic to singular presentation of the TfU theme was an illustration of Schön's idea of reflection-in-action.
(Lecturer F, Department of Economics)*

TfU: A Structure for Planning and Reflection on Student Learning

These reflections underline the systematic and holistic nature of the TfU framework. As such, it facilitates the examination and redesigning of courses and provides a clear structure that allows for critical reflection.

It (TfU) has given me an incentive to explicitly question what it is I want my students to know and understand, which has led to an explicit and formal statement of the desired learning outcomes for the module. In essence, applying the TfU framework has facilitated attainment of these learning outcomes. In their turn, they have encouraged me to examine and redesign my teaching plans to ensure that learners are supported and empowered in reaching these important skill levels. With its emphasis on generative topics, understanding goals, performances of understanding, the TfU approach has encouraged me to place student understanding at the centre of my teaching design and has allowed me to shed my prior concern with coverage and to incorporate a focus on uncovering those key questions that I consider it crucial that my students appreciate and understand.

(Lecturer G, Department of Accounting, Finance and Information Systems)

It (TfU) is a systematic framework – we move from throughlines to generative topics to understanding goals and performances and back again. The framework enables a relative transparency to the teaching process that should be accessible to other teachers and students.

(Lecturer D, Department of Applied Social Studies)

TfU provided a local theory of educational practice or a framework for structuring reflection that facilitated a more systematic and critical reflection of my teaching practice than I had previously undertaken. TfU provided a number of layers of inquiry and within each of these layers a number of techniques for design and development.

(Lecturer H, Department of Applied Psychology)

TfU forces one to look more scientifically at the approach to teaching and learning. The important thing is not what we want to teach but how we can help the student learn to engage in various activities linked to this. The important thing is to empower students.

(Lecturer I, Department of Applied Social Studies)

TfU: The Development of a New Vocabulary

TfU gives lecturers a new discourse that allows them – and their students – to name the parts of their practice and therefore to reflect on and discuss pedagogy.

The new course design, aided by the TfU framework, provides students with a greater understanding of what is expected of them. They now have the tools and vocabulary of reflection. As a result, the standard of placement work has increased significantly.

(Lecturer A, Department of Government)

I felt unsatisfied with many aspects of my teaching, but I did not have a vocabulary that would allow me to express the reservations I had, nor did I have a way to systematically analyse the purpose of what I was teaching in terms of

student learning. I felt that the dimensions of understanding framework was especially helpful in that it allowed me to systematically analyse what I was teaching and why I was teaching it. It also helped me to develop a vocabulary to express what I was doing and this has allowed me to engage in meaningful conversations with colleagues.
(Lecturer C, Department of History)

TfU: Active Learning and Performances of Understanding

These quotations focus on TfU as a way of facilitating active learning and performances of understanding that are about learning how to learn.

As a result (of TfU) in delivering my masters course on intellectual property law, I now incorporate student-led teaching as a key aspect of my teaching approach and already I can identify a fresher and more engaging group of students who seem somewhat less intimidated by the notion of speaking up and certainly might feel somewhat responsible for the success of the seminar.
(Lecturer J, Department of Law)

One of the revelations of both modules is that we should not just be teaching students information or knowledge (facts, figures, theories) but how to be active learners (that is, learning how to learn) a necessary skill which reaches beyond the higher education setting.
(Lecturer D, Department of Applied Social Studies)

I strongly feel that course success can be attributed to whether the students embrace the subject area through participation in class and group discussions and of course whether they are open to trying new learning techniques.
(Lecturer K, Department of Accounting, Finance and Information Systems).

Conclusion

This chapter set out to contextualise TfU, to outline its framework and its theoretical underpinnings, and to give readers some idea of how lecturers experienced working with TfU. Unfortunately, it is beyond the scope of this chapter to provide detailed exemplars of the TfU framework in its application to at least 50 contexts across all faculties during 2006–07. The individual course portfolios testify, however, to the flexibility of the framework in accommodating different disciplines and to its power in revealing the deep structure and unfolding of a particular course. One of the most important points to emerge about TfU is that it is:

a continual process, not a method that teachers perfect and implement once and for all. The process is part of an ongoing inquiry that professionals carry out as they focus on research-based principles of good practice, apply these principles to design and modify their own practice, and study the results of these efforts to make further improvements (Wiske, 2005, p. 9).

The TfU framework is worth considering at university level because it is based firmly on the promotion of disciplinary understanding. In terms of SoTL, it supports a process of enquiry that invites third-level teachers to reflect rigorously on teaching and learning; define goals; design new practices; assess how they work; and then reconsider both the practices and the guiding principles (Wiske, 2005). This cyclical and dynamic process aligns well with Schön's (1995) vision of how SoTL plays out as a new epistemology, as "a kind of action research".

Indeed, based on their sustained use of the TfU approach, the PGCTLHE class of 2006–07 produced a series of posters for an international conference held in UCC in November 2007, International Perspectives on Teaching and Learning in Higher Education. The published proceedings (Ryan, 2008) include the posters and TfU designs discussed above.

The TfU approach has done much in the certificated courses in UCC to open up new ways of thinking about teaching and learning. It structures a powerful curriculum development process at the same time as it encourages teachers to reflect on and make public their practice. Thus it moves us further along the road to a scholarship of teaching and learning – in short, towards a view of teaching as an intrinsic part of research.

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Appendix 1

ASSESSMENT GUIDELINES FOR POSTGRADUATE CERTIFICATE IN TEACHING AND LEARNING IN HIGHER EDUCATION 2006–07: TL 4000 AND TL 4001

PGCTLHE Module 1: Theories of Teaching, Learning and Assessment (TL 4000) Assessment Guidelines (Extracts relate to Course Portfolio Guidelines)

1. Create a course portfolio of teaching, which will contain a series of entries based on the lecturer's work in a particular course. The three central entries should be no longer than eight pages each of typed script (2000 words each, 12-point, double spacing). The introduction and conclusion should be a maximum of three pages each of typed script (750 words, 12-point, double spacing).
(Portfolio submission date: 29 January 07)

Guidelines for creating and developing your course portfolio

The course portfolio should be structured as follows:

- Introduction: Present your teaching context and beliefs about teaching and learning.
- Entry 1: Create/review the design/structure of your course, using a TFU approach.
- Entry 2: Investigate a student-centred strategy implemented in teaching the course.
- Entry 3: Analyse what students have learnt as a result of the course/key session.
- Conclusion: Write a reflection drawing the portfolio strands together.

Introduction (three pages max)

Give the context in which you teach and explore why you want to look in particular at the course you have chosen. Develop your introduction by focusing on your own teaching philosophy, and the theories of teaching and learning that you embrace and that underpin the course you are designing. Use your understanding of and reflections on the teaching and learning theories discussed in the PGCTLHE course thus far to frame/guide your introduction.

Entry 1: Design: Creating and planning the course (eight pages max)

Use the Teaching for Understanding (TfU) framework to revisit/create your course plan. Design the course using the four key elements of TFU: Generative topic; Understanding goals; Performances of understanding; and Ongoing assessment. Present your course as concisely as possible so that it could be shared/taken up by colleagues. Reflect on the elements of the course in the light of the role they play in engaging students and promoting their learning.

Entry 2: Enactment: Teaching the course (eight pages max)

Investigate one student centred-strategy you used in teaching the course. In terms of TfU, focus on one key performance of understanding and on how you developed this to involve students and facilitate their learning.

Entry 3: Results: Assessing student learning (eight pages max)

Analyse what students have learned as a result of this intervention/performance. How do you know what your students know and understand from this performance of understanding? What ongoing assessment strategies have you put in place to harness their learning? What criteria are there to assess this performance?

Conclusion: Overall reflection and implications for future practice (three pages max)

What have you learned as a result of this course portfolio process? In what way/s does the course need to be reviewed/redesigned? Review the key elements of the course from a TfU perspective, focusing on what you would change in the light of experience and student learning/feedback.

Note: If you have not yet had the opportunity to teach the course, focus in your entries on potential preconceptions, misconceptions, rigid practice and lack of skills that students might have, which are informing your decisions/design of the course. Relate to your own learning in the discipline to help anticipate students' bottlenecks.

*PGCTLHE Module 2: Practice Approaches to Teaching, Learning and Assessment (TL4001)
Assessment Guidelines (Extract relates to Course Portfolio and TfU)*

1. Development of the course portfolio from Term 1: Submission of full portfolio: Friday, 4 May, 2007. (Note dates below for individual entries. These are necessary deadlines if you are to make the most of ongoing feedback for your final draft.)

The course portfolio should be developed as follows:

1. **Design of your chosen course/module:** Your first entry should be refined in the light of feedback and in line with the TfU model. For example, you must present an outline of your module using the four elements of TfU.
2. **Teaching/enactment:** Present a second entry on your teaching practice as follows: Make a 10–15 minute video of your own practice and critique this in line with the observation schedule guidelines presented in Peer Review sessions. Include details about the time and date you recorded the class and provide details/context of the class. Critique your practice using any three of the following: action sequence; learning environment; discourse analysis; movement; cultural context. Then use the TfU questions in the schedule to draw your critique together. You can work alone or with a colleague to complete this assignment. If you are including the perspective of a peer/colleague, you need to reflect on this critique. (900 words max; submission Friday, 30 March, 2007).
3. **Assessment/results:** A second entry to be added. Write the learning outcomes for your chosen course and align these with an ongoing assessment approach in keeping with the TfU framework. (900 words max; submission Monday, 12 March, 2007)
4. **Final Reflection:** Before presenting the final draft of your portfolio for 4 May 2007, you need to take into account the feedback presented on all assignments. In drawing your portfolio together, answer question 1 and either 2 or 3 below:
 - i. In what ways, if any, did you find the TfU framework useful in documenting and enquiring into your teaching and student learning?
 - ii. What have you learned from your portfolio about your teaching and student learning? What are the implications of this portfolio for your future planning and teaching of your chosen course?
 - iii. How did the course portfolio help you as a way of enquiring into and documenting your teaching and student learning?

