## Learning through reflection as part of a DPS programme

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Reflection is what allows us to learn from our experiences: it is an assessment of where we have been and where we want to go next.

Kenneth Wolf

#### 1. Introduction and a framework for reflective learning

#### 1.1. Introduction

This paper describes the benefits of reflective learning as part of a work-based doctorate study programme. The paper is presented in two sections: The first provides an extended framework for reflective learning. The second is an account of my own reflective learning based within my academic context as work-based doctorate student and my professional context as a creator and writer of the New English Placement Test Online for Intercollege, a private tertiary educational institution where I work.

### 1.2. Changes in higher education

Traditionally universities have been the places for research and the creation of knowledge (Angelides and Vrasidas 2003). In recent years, however, considerable discussions occurred among academics regarding the nature of knowledge, the kind of research that creates it, and the relations between theory and practice (Anderson & Herr 1999, Metz & Page 2002, Robinson 1998). In current times when globalisation is extensively discussed and continuous changes occur in all domains of life, including that of education, and more particularly that of higher education, the nature of the traditional university is inevitably changing. Universities are gradually transforming in such a way as to be able to respond to the new and different needs of today's society. As a result, more and more emphasis is given on distance education and lifelong learning.

## 1.3. Higher Education programme types

There are different types of Academic Learning. These are influenced by the way universities structure and regulate their course delivery, validation of programmes, and

quality systems. In general, there are two main tendencies, the curriculum based and the work based models of learning:

Traditionally, universities are viewed to conduct research to build up a body of knowledge that is then taught as a 'truth'. In this model, the subject matter knowledge is the defining characteristic. Students follow an existing curriculum. The content is fixed and determined. The methodologies used are disciplinary. The learning is individual. Problem solving is academic and timeless. The workload is uniform and fixed by the university. Learners attend an educational institution on a regular basis or study from home. They sit examinations or complete set assignments. Reflection on learning occurs unintentionally and non systematic. According to Costley (2000), this model has been questioned for some time. Work-based learning represents a relatively new way of organising and learning in the academy. It does not arise directly from the disciplinary frameworks in which knowledge has been traditionally ordered within the university, and in many instances it exemplifies more local knowledge, flowing from the particular spatial and temporal circumstances of work contexts and situations (Boud 2001). The content is flexible and individually determined. Knowledge is derived through a multidimensional, interprofessional, work-based frame of reference. It is constructing not absorbing knowledge (Lester 1996, Costley 2000). Work-based learning is concerned with the knowledge gained by doing work and aims to be developmental for the practitioner, purposeful for the community of practice and useful in its contribution to academic learning and the knowledge stored in higher education. Work-based pedagogies focus on the creativity and reflexivity of individuals within a work based context (Costley 2000) (rather than the learning of a set syllabus). Reflection is an integral part of higher education work-based learning programmes (Solomon & Gustavs 2004). Work-based learning involves Accreditation of Prior Experiential Learning. The methodologies used are transdisciplinary, applied and exploratory research methodologies (Boud & Solomon 2001). They are influenced by contextual factors, the individual or community of practitioners who undertake practitioner research and development in organisation learning (Costley 2000).

#### 1.4. What is Reflective Learning?

Students in higher education are responsible for their own progress as independent learners. They take notice of and act upon formal feedback from their lecturers of course, but it is

also important that they themselves think about (or reflect on) their learning. Numerous learning theories emphasise reflection as a key element of the learning process (Kolb 1984, Honey & Mumford 1986, Boud 1987, Stewart 2001). Increasingly, programmes of study explicitly require students to do this. Reflective learning is an integral part of work-based learning. In simple terms, reflection can be seen as 'consciously thinking about and analysing what one has done (or is doing). It is a structured way to reflect upon one's learning, to understand one's learning processes, and thus allow becoming more autonomous. It is exploring one's experiences of learning to better understand how they learn with a view ultimately to improve their further learning. During reflection-on-action (after you have done it) the learner looks back over an experience and reviews what was learnt. Reflection-in-action (while doing something) involves understanding of new concepts through improvisation and experimentation during an exercise or experience.

Learners can develop into reflective learners by using the following methods:

- Create a learning diary or portfolio
- Keep reflective notes
- Make constructive use of feedback from advisors, consultants, examiners, etc.
- Not be hard on themselves or underestimate their skills, but be honest. They should think positively about moving themselves and their skills forward. (Cottrell 2003a, 2003b)

Reflective learners continually reflect on what and how they are learning, how they are using what they are learning, what their strengths and weaknesses in learning are, what their learning priorities are, how they can improve and build upon their learning process, and how well they are working towards their short-, medium- and long-term goals.

Reflective learners consider their motivation, their attitudes and ideas, and changes in these, the skills they need for different components of their study and learning, what may be blocking their learning and any gaps in their knowledge and skills, and how they might best work towards filling them.

Reflective learning is important in many ways: Thinking about learning and writing things down helps to clarify thoughts and emotions. Notes become a record of progress throughout one's study. Reflection also helps to focus on development as an effective independent learner, and on the strategies one uses to work towards this. Reflective practice is critical in providing opportunities for the learner to identify areas for practice

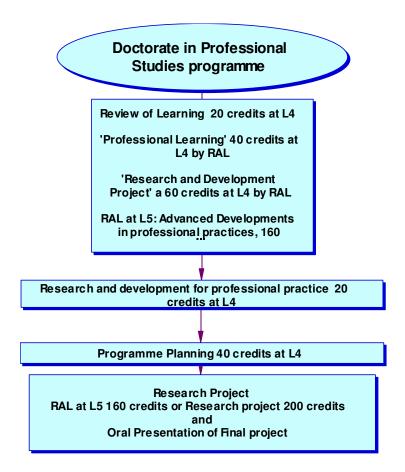
improvement and analyse their in-practice decision making processes. It also bridges the gap between theory and practice. In addition, it encourages students to look beyond their academic accomplishments and to recognise the depth and range of other transferable skills learnt. Engaging in reflective learning allows analysis of one's experiences and facilitates learning from this experience. It encourages critical thinking, and a questioning attitude and it promotes professional competences by encouraging recognition of mistakes and weaknesses.

# 2. Account of my Reflective Learning based within my academic and professional context

## 2.1. Doctorate in Professional Studies Programme requirements

I first engaged myself in reflective learning in a systematic way when I became a work based learner in January 2003 at the National Centre for Work Based Learning Partnerships of Middlesex University. I had just come from Australia to Cyprus after twenty three years of working and studying in Australia in the area of Applied Linguistics. I had worked in both secondary and tertiary sectors and had been involved both academically and professionally in second language teaching, teacher training, both on campus and online, curriculum development and testing, both printed and electronic, and Computer Assisted Language Learning. In Cyprus, I started working in the language department of a private tertiary institution. I was involved in language teaching, teacher training and testing. At this institution, at the time, there was an urgent need to bring changes and improvement in the English Placement Testing programme. Because of my background, I was asked to lead this project. I decided to take advantage of the Intercollege / Middlesex University agreement which enabled Intercollege lecturers without doctoral qualifications to pursue doctoral studies, and I embarked on the Doctorate in Professional Studies offered by Middlesex University. My work based research area was the review of the existing English Placement Practices of my institution, and the development of a New English Placement Test, informed by current theories and practices in language placement testing, including the use of New Technologies.

The Doctorate in Professional studies involves the following areas of study (Portwood, Doncaster, Thorne, Armsby, & Costley 2002, Portwood, Doncaster, Thorne, Armsby, Costley & Garnett, 2002):



If one would compare the areas of learning of a traditional doctorate with a work based doctorate such as the one above, they would discover the following benefits of work based research:

(a) The traditional doctorate (the PhD) is first and foremost a research based qualification, with the PhD by publication and the 'Taught Doctorate' as its variants. The Professional Doctorate is a further development of the taught doctorate. In structural terms, it is effectively a form of taught doctorate, but the field of study is that of a professional discipline. The work based doctorate came out of the need of a doctorate different to the PhD. The extensive recruitment of PhD holders into industrial and commercial employment indicated that the PhD was seen as too academic and having insufficient focus on the ability to apply knowledge and skills outside the field of academic research. The alternative forms of doctoral education, of which Professional Doctorates are one example, have been developed as a positive response to an identified need, whether of industry and commerce, or the public sector (Professional Doctorates 2002).

- (b) Traditional doctorates aim to create new knowledge where as work based doctorates aim to create and apply new knowledge (Brennan 2005). As emphasised by Solomon and Gustavs (2004), the learning outcomes for a work-based learning programme operate at a number of different yet interrelated levels knowledge, understanding, application, analysis, synthesis, evaluation and abstraction.
- (c) Work based learning is context bound, driven by specific and immediate work requirements, emphasises learning over teaching or training, depends on the responsibility for learning being spread between a number of people within the workplace, is consistent with new learning concepts such as learning networks, learning organisation and communities of practice, and recognises the workplace as a site of knowledge production (Brennan 2005, Chappell, Hawke, Rhodes, & Solomon 2003)
- (d) In traditional doctorates, previous studies and achievements at Master level are considered as a pre-requisite to acceptance for doctorate studies. In work based doctorates, not only a master is required as a pre-requisite to doctorate study entry, attention is also given to the nature of the projects undertaken in a master course and to the knowledge, skills, competences and experiences gained (Doncaster et al. 2003). These are considered as solid background basis leading to the proposed doctorate project.
- (e) In traditional doctorates, literature review is mainly conducted, whereas in work based doctorates, there is also a review of learning, in relation to the intended project (Doncaster & Lester 2002). Unlike in a traditional doctorate, reflection on learning occurs intentionally and systematic as an integral and important part of all aspects of the studies (Costley 2000).
- (f) In work based projects, project planning or project proposal outlines the theoretical as well as the practical aspects of the project. The doctorate project has to be based on solid theory but has to be applicable and serve a need in a professional setting. (Portwood et al. 2002).
- (g) The expected outcome of the work based research does not only include the research dissertation or report. It also has to be accompanied by the evidence, a product that can be directly useful to the project stakeholders (Portwood et al. 2002).

- (h) Traditional doctorates mainly aim at young school leavers. Work based learning is especially beneficial for mature learners who want to combine higher education with professional development. It is seen as means by which to support the personal and professional development of students who are already in work and the focus of the learning and development tends to be on the student's workplace activities (Brennan and Little, 2006).
- (i) Work-based pedagogical approaches emphasise process curriculum which is strongly student-centred (rather than content-driven and pre-set curricula derived); these include a self-directed approach to learning (learn how to learn, Raelin 2000), experiential, and reflective learning (Nixon, Smith, Stafford, & Camm 2006, Solomon and Gustavs 2004), the main focus of this article.

#### 2.2. Doctorate in Professional Studies and Reflection

The Doctorate in Professional Studies requires that candidates engage in reflective and planning activities explicitly during the early stages of their programmes through a review of their previous learning (which also includes Recognition and Accreditation of previous Learning), and the development of a detailed Programme Plan. These provide a foundation for the professional projects that candidates go on to undertake and engenders a critically reflective stance from the outset. The candidates on the programme are senior professionals and the demand that they 'reflect' and 'plan' is to foreground how the opportunity of designing a customised doctoral programme must involve both in-depth and critical review of their own professional context, authority and resources, and also a multifaceted planning process which takes account of the interests of all the stakeholders in their proposed doctoral research. This explicit reflection-on-action (Schon 1983) enables future action to be undertaken more strategically. Recognition of Accreditation of Learning which constitutes part of the review of previous learning is used as a bridge between existing and future learning (Doncaster 2000). Its claim process demands the use of critical evaluation and reflection skills, both very valuable in a climate where learner managed learning and lifelong learning are becoming increasingly important. This preparation process is completed by the construction of a 'Learning Agreement'. This builds on both the research capability that the candidates by this time must have demonstrated and on the professional expertise they have reflected on in the 'Review of Previous Learning'

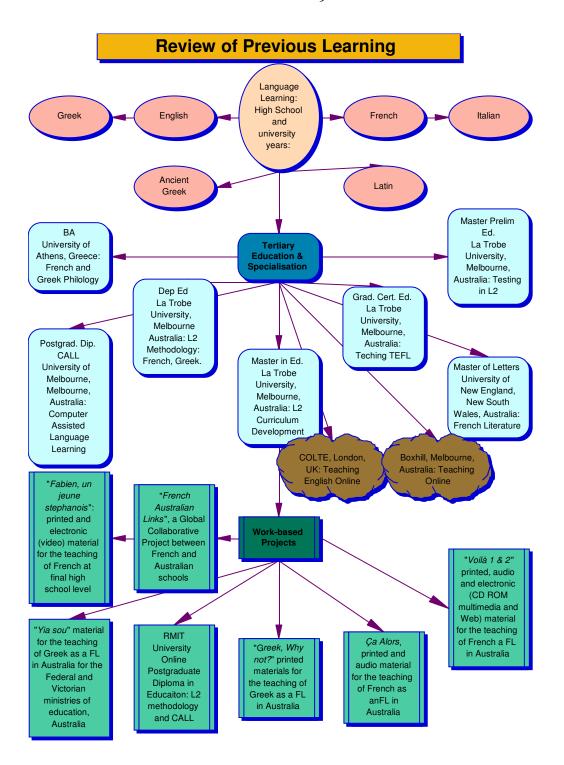
(Doncaster & Thorne 2000). In order to compile the 'Learning Agreement', the candidates must critically reflect and show how their proposed original project work is intended to achieve major organisational change and / or excellence in professional practices. The detailed presentation of the methods to be used in the proposed project work, the selection of data collection and analysis tools need to be analysed as part of this reflective approach. Reflection on candidate learning also continuous during the whole research project as a reflection-in-action, and prepares students to continue to engage in reflective learning, in their lifelong learning.

## 2.3. Reflective Review of my Previous Learning

When I was first asked to systematically undergo a reflective review of my previous learning as a work-based learner, I felt uncomfortable in doing so, I even felt it was irrelevant to what I intended to do in my studies, and I started reluctantly to firstly describe and record my previous learning. I gradually started to identify knowledge I have acquired during the years, skills, abilities and competencies. I learned to analyse, synthesise and evaluate them. The results were amazing and truly surprising to me. Although I knew I had worked and studied consistently all my life, I had never really realised what and how much I had done, had learned, and had developed in being able to do. I found it hard at the beginning to present all these in a comprehensive and cogently argued way, but by doing so, I gained this skill too. When I went through my previous learning and I recorded what I had previously done, what I have gained in terms of knowledge, skills, experiences, and capabilities, what I have accomplished, it was only then that I realised how that formed a solid background for my doctoral research studies and project, and it was only then that I realised the benefit of such an activity.

The following diagram indicates my life-long learning stages:

- (a) Language learning at secondary and tertiary level;
- (b) L2 methodology learning, including L2 assessment and the Use of Technologies in L2;
- (c) Work-based research and projects, in the areas above.



Critically analysing all these helped me shape my previous knowledge, skills and capabilities, and contributed to their evolution (Papadima-Sophocleous, 2003).

Part of reviewing previous learning was also to reflect and identify areas I could claim for Recognition and Accreditation of previous Learning. This was yet again another challenge to identify the range and depth of my existing professional knowledge and capabilities,

analyse and synthesise them in their operational context and establish how this work I already undertook was relevant to both the level and proposed project of my doctoral work. I reflected on key learning points in my career: previous studies and twenty-three years of experience in languages teaching, teacher training, curriculum development (both printed and electronic) and evaluation, and testing, and involvement in various projects (collaborative online project between a French and an Australian school, curriculum and material development for teaching and testing Greek and French as foreign language in Australia and for testing English in Cyprus, curriculum development and delivery of second language teacher training: Greek, English, and French). From this, I identified areas of prior learning. I evaluated how I managed that learning, solved problems and undertook leadership and project management responsibilities, commanded resources and managed relationships I had with other stakeholders. I was able to then communicate all this at the appropriate level in a comprehensive and coherent way and as a result I successfully made a claim for recognition and accreditation at both Level 4 and 5.

## 2.4. Research and Development for Professional Practice

As a candidate on the Doctorate in Professional Studies, I also undertook a module on research and development for professional practices. This also involved reflective learning and a presentation of a Research Portfolio. During this module, I had to keep a learning diary as an ongoing record of the insights I gained in research, and write an overall reflection and evaluation of my learning at the end. The module involved understanding of the philosophical and theoretical issues in professional, practitioner-led research, knowledge of appropriate methods, and their limitations and uses. It also included sessions aiming to enable all candidates to design and undertake research at doctoral level, devise and use appropriate research instruments, critically understand ethical issues in a range of contexts and be able to appropriately use approaches and tools in these contexts. I reviewed, evaluated and critiqued research approaches and methods in various contexts and selected and justified my selection of qualitative and quantitative methods for my project work. I had to consider how to present and discuss research findings, and undertake implications of project work on the practices and / or beliefs of myself and others. I had to link all of that with where I have been, where I was at the time and where I wanted to go in my doctorate research work. My learning diary notes helped me keep a record of this learning, and the reflection of my learning helped my analyse and synthesise all that with

what I intended to do in my work based research project. It provided me with a solid link from my previous learning, to the learning of research methodologies which led to the planning of my doctorate project (Papadima-Sophocleous, 2004).

#### 2.5. Programme Planning

I continued to reflect on my learning during my programme planning as well. I identified the overall direction of the programme and the topic for my work based project. I justified the relevance of both my own interests and those of my organisation, and professional field. I evaluated the ethical implications of my proposed project. I described and justified my choice of approach and methods for data collection and analysis. I justified the feasibility of the project, indicated how the project was to be led and managed, and provided a realistic action plan for it. I produced a project proposal which took account of relevant professional and organisation issues (financial, human, etc.) necessary to complete the work based project. I identified, and gained authority to use the resources necessary to complete the work based project. I wrote a coherent learning agreement, which contained a summary of all components of the intended programme and a detailed project proposal and gave a successful oral presentation of it to the Programme Approval Panel. I explained the leadership role I intended to fulfil in the proposed project. Reflection on and in action became a continuous valuable tool in this process. It made things clearer and pulled things together in a logical manner. It also drew my attention to the possible difficulties I would face during my research project and made me start thinking about possible ways to address them (Papadima-Sophocleous, 2004).

### 2.6. Research project

My research project involved:

- (a) Research in Current theories and Practices in Online Language Testing, including existing practices at my institution
- (b) Development of the Test Specifications (content and online delivery tool)
- (c) Test Implementation: test item writing, moderation, item analysis, pen & paper field testing, online trial
- (d) Test Evaluation: validity, reliability

During my research project I continued to keep a record of my reflective learning. I used the following methods:

(a) I kept notes during the project

- (b) I included reflective components in each chapter of my project report, taking into consideration the project expected outcomes and the formal programme criteria
- (c) I made constructive use of feedback from my advisor, consultant, examiners, and stakeholders.

## 2.7. Reflection on Research Project

Thinking back, I realised the following: Middlesex University work based programme provided me with the opportunity to learn, as a lifelong learner, through equal and open access to high quality learning opportunities, in line with the European Council "Lisbon strategy" (2000). Through the work based learning, required by the nature of the Doctorate of Professional Studies programme, as a way of university-level learning in the workplace, I was given the opportunity (a) to pursue academic study grounded within a work context and (b) to enhance the effectiveness of the Intercollege English placement testing programme. I had the opportunity to be researcher of my practice (Usher 1996). As an insider researcher, I learned to manage work and learning. I combined the work based learning philosophy with that of applied linguistics research discipline in the area of L2 testing online. I established the needs of Intercollege in English language placement testing, and developed an English placement test online, a research product, which was greatly needed by my workplace and constituted the evidence of my work based learning. As a result, I gained knowledge, skills, abilities and experience in:

- (a) Reviewing the existing English placement test practices and establishing needs,
- (b) Developing a test design and test specifications (content and online delivery tool), tailored to Intercollege needs,
- (c) Implementing the test: test item writing, item bank creation, test item moderation, and item analysis (establishing each item's facility value and discrimination index), pen & paper field testing, online test trial,
- (d) Evaluating the test: testing its validity and reliability,
- (e) Extending second language expertise and research skills: online testing development processes, quantitative analysis, use of data analysis and presentation software programmes.

At the same time, I also gained knowledge, skills and abilities in how to lead a project of more than 2200 participants (test-takers, faculty, experts, information technology personnel, and administrators), deal with unexpected complications of the project, find

solutions to problems, make decisions, take responsibilities, negotiate, present and discuss the project progress and results. I learned to capitalise on the breadth of knowledge within my work environment and the inter disciplinarity of my workplace. I learned to combine independent and team work and work cooperatively with a large number of stakeholders. I learned to lead a team and work as part of a team. I learned to be patient, diplomatic, and balance different opinions. I developed the ability to accept other peoples' styles and work flexibly in different styles. I learned to accept peoples' varied understanding of phenomena (administrators, testees, colleagues, etc.), their difficulty in understanding and their difficulty in accepting something they are not used to. I also learned to accept that some people are not prepared to accept something that does not suit them at the time, and as a result they can be difficult to work with. This can be very disheartening to continue working on a research project and with such people. I learned to accept ignorance and try to 'educate' stakeholders gradually and as much as they allow this. I learned to accept that people find it harder to accept novelty in a research and practical area than people that are not affected by it and are interested in it either from a research point of view or because they are looking for similar solutions to their own problems. I learned to accept that work based research is a hard environment to work in because researchers have to prove themselves to many different people (colleagues, students, fellow researchers, conference participants, journal editorial committees, promotion committed). Despite all that, I learned that at the same time work based research is meaningful, motivating, challenging and worthwhile. In the reflective section of each chapter of my research project report, I reflected on the project's development and achievements. This critical reflection on my practice and that of team practice and development enabled me to clearly identify achievements and strengths, recognise areas of weakness and make improvements (Papadima-Sophocleous, 2004). It helped me develop a more systematic awareness of all these. I learned to be responsible of my own learning, be autonomous, and practice continuous reflection on my learning experiences.

#### 2.8. Reflective Conclusions

I can note two major contributions of this research project: to research in general and to my work organisation in particular.

In theory, it offered new knowledge:

(a) An alternative slide paradigm for test item randomisation and presentation

- (b) An alternative paradigm for arriving at cut-off points
- (c) An alternative paradigm for test item analysis and other statistical analysis
- (d) An in-house developed online L2 testing environment design
- (e) A new English placement Test online paradigm: I studied the advantages and disadvantages of language computer based tests and computer adaptive tests and suggested a new test paradigm, a hybrid of a computer based test and of a computer adaptive test which addressed some of those disadvantages, taking at the same time into consideration the specific needs and constraints of the institution.
- (f) A case study of applied linguistics research conducted by an insider, work based researcher

In practice, it provided change and improvement in the existing Intercollege English placement practices by developing and implementing a New English Placement Test Online.

## 2.9. Reflection two years after completing my work based doctorate studies

I have completed my studies two years ago. Thinking back now, I feel that I have not only gained knowledge, skills, experiences and capabilities before and during my studies, but I have also continued to do so in these last two years. Through continuous work, improvement and implementation of the NEPTON test, through the feedback I keep receiving from stakeholders and researchers overseas, and through continued presentations and publications of various aspects of my research, I continue to gain deeper knowledge in language online testing, in research presentation skills and styles, in capabilities to collaborate with colleagues, and in experience as a worker-researcher and reflective learner. I continue to practice reflective learning in everything I do, in both my professional and personal lifelong learning.

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