



## **ASSESSING ASSESSMENT**

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## ABSTRACT

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The authors draw on their experience as lecturers and course designers for the module "Curriculum Assessment" which is offered to both, traditional full-time undergraduates and part-time professional educators. This paper builds on research described at the 2009 ECER conference, which focused on the introduction of an assessment portfolio that was designed with the aim of promoting a constructivist approach to the development of professional competence among trainee teachers.

This new paper focuses on the next stage of the research and highlights how using multiple 'voices' from the research process one can encourage a sense of professional development from both pre & post-experience learners.

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## *Abstract*

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## INTRODUCTION

Assessment is a powerful driving force behind many forms of learning. Because of its power over learning it is crucial to ensure that assessment promotes rather than hinders learning. Furthermore, learning should continue beyond assessment and it should meet the needs of the present while preparing students to meet their own future learning needs (Boud, 2000, p. 151).

This paper reports on the second year of delivery of a portfolio assessment to replace the summative written exam used in previous years. It reflects on the key findings that arose from the initial analysis, such as the enhancement of professional competence and professional development as well as constructivist learning- and compares the outcomes of the two years of presentation of the module 'Curriculum Assessment'.

Our previous research (Rami & Lorenzi, 2009) had demonstrated that an assessment model that enabled students to make sense of knowledge through reflection, professional decision-making and engagement in its application fostered sustainability of learning. Such a model had helped students to develop a positive attitude towards assessment, initiated a reflective process and equipped students with knowledge transferable to professional contexts of practice.

We now turn our attention to the sustainability of the assessment model and this paper reports on its implementation by a different lecturer and with different cohorts of students. The research for this paper shows that - despite the minor modifications made to the original assessment model, which decreased the duration of the module, the portfolio designed for the module elicited an equally positive response from the students from the second cohort. It also reconfirms that the success of the model is the result of its pedagogical soundness rather than of circumstantial factors.

This new paper focuses on the next stage of the research and highlights how using multiple 'voices' from the research process, one can encourage a sense of professional development from both pre & post-experience learners. It examines both 'functional development and attitudinal development' (Evans, 2002). Through this paper the research highlights how multiple voices within the reflective evaluation process can contribute significantly to the restructuring and development of the future curriculum and assessment method.

## **CONSTRUCTIVIST APPROACHES TO ASSESSMENT TO FOSTER THE DEVELOPMENT OF TEACHERS' COMPETENCE**

The issue of teachers' professional competence can at times be a sensitive one. While often presented in an unproblematic fashion, the concept of competence is closely related to core considerations regarding what the teacher role should and will entail in specific work environments

In a European context, the identification of common professional standards to facilitate work mobility has, to some extent, led to emphasizing more objectively observable and quantifiable characteristics of the teaching profession. This model has been driven by concerns with employability of graduates and visibility of institutions (Lemaitre et al., 2006). It has emphasised the efficient delivery of comparable learning objectives as a means to increase accountability and from the late 1960s and 1970s a competency-based model of teacher training has increasingly gained currency (Van Huizen et al., 2005). Nel Noddings (2004, p. 161) argues that 'it is not the job of teachers simply to secure demonstrable learning on a pre-specified set of objectives' and that the teacher role cannot be reduced merely to a set of skills. If with Schelster (1968) we espouse the view that teaching does require training in the 'manner' in which to teach, but also "intention" and 'reasonableness' we can go beyond the notion of competent teacher as skilled technician and teachers should be enabled to become "competent by virtue of their intelligent application of their knowledge and understanding in effective practice" (Carr, 1993, p. 254).

Within the context of a teacher education programme there is a need for a dual emphasis on both the teaching process and the learning process. Many teacher education programmes in Ireland have an over emphasis on substantial direct instruction in theory and practice, quite often without complementary opportunities for inquiry, discovery, or self-examination. Pre-service teachers should be offered the opportunity to experience professional scenarios that -in addition to the development of specific skills helping them to function effectively in the day to day teaching activities - challenge their perceptions, foster awareness of their own values and cause attitudinal shifts. It is therefore important that pre-service teachers are introduced to scenarios that reproduce real life contexts that allow them to reduce the 'practice shock' (Van Huizen et al., 2005).

Several authors cite the importance of teacher educators' modeling constructivist approaches that engage students in interdisciplinary exploration, collaborative activity, and field-based opportunities for experiential learning, reflection, and self-examination (Kaufman, 1996; pp.40-49 Kroll pp.63-72 & LaBosky, 1996). After all, today's students are tomorrow's teachers. Constructivism is an epistemology, a learning or meaning-making theory, which can pose an explanation of the nature of knowledge and how human beings learn (Cannella & Reiff, 1994: pp.27-38). It maintains that individuals create or construct their own new understandings or knowledge through exploring what they already know and

believe as well the ideas, events, and activities with which they come in contact (Richardson, 1997, pp.3-14). For Dewey (1916, 1938) knowledge emerges only from situations in which learners have to draw them out of meaningful experiences. The obvious implication of Dewey's theory is that students must be engaged in meaningful activities that encourage them to apply the concepts they are trying to learn.

Our preliminary research showed that students often viewed assessment as a necessary experience from a progression aspect rather than a learning one. In 2008 following on from constructivist principles the assessment approach was modified and the method used within the redesigned module was portfolio assessment. The restructuring of the assessment mode for the module helped to create a constructivist-learning environment that allows the lecturer to become a facilitator of learning as well as the leader in the process. The constructivist-learning environment presents the learner with opportunities to help them build on prior knowledge and understand how to construct new knowledge from authentic experience. On this basis the redesign of the assessment for this module needed to be practical and meaningful to all the learners. Conversely the new mode of assessment for the DCU (Dublin City University) module was also about bringing deep and true meaning to the concept of assessment as a learning tool: assessment as learning (Black, William 1998: pp 7-74). In context of constructive alignment (Biggs 1999) the assessment should be at the centre of the experience. Additionally this new dynamic also allows other learning theories to come into play, such as experiential learning, (Kolb 1984, Rogers 1964), freedom to learn (Rogers 1964, 1994), assessment through cooperation, (Vygotsky 1978), deconstruction of learning (Piaget 1972) self directed learning, Andragogy (Knowles 1973: pp.350–352, 386) etc.

Portfolio assessment stems from a constructivist theory of knowledge (Biggs & Tang, 1998) and is based on the premise that meaning cannot be imposed or transmitted by direct teaching but created by the students through their learning activities. Assessment portfolios, provided that they are not constructed simply as a collection of artifacts assembled together (Tisani, 2008), but rather as a *'purposeful collection of student work that tells the story of the student's efforts, progress or achievement in a given area'* (Arter & Spandell 1992, p. 36) may be the most suitable form of assessment to develop knowledge, skills and attitudes progressively and reflectively at the same time (Regehr & Norman, 1996). Portfolios can be thought of as a form of "embedded assessment"; that is, the assessment tasks are a part of instruction. In practice this method allows greater individual learning flexibility but also requires greater management of the process by the assessor / lecturer. Embedded in the constructivist tradition, portfolio assessment also encourages the learner's ability to review, revise and re-do. This process is similar to Kolbs (1984) experiential learning model, and from a research perspective it also resembles Elliotts (1991) Action Research model. Teachers and learners need the time and space to actively reflect upon the content as well as the context. It is this reflective element that allows learners to work at their own pace without the time constraints usually associated with assessment. Reflection in teacher education is important in the development of existing knowledge and as an aid to critical

thinking. As Schön (1983) suggests reflection is key in order to facilitate the improvement of practitioners' professional judgments and their understanding of new situations.

The focus of portfolio assessment is to draw a more reliable and realistic inference regarding the learning process and student achievement. Its emphasis is on using multiple methods of assessment, which often says more about the learning process than the traditional modes have done in the past. As a portfolio grows, it begins to tell a learning story in a particular context. It can authenticate the learning and students can then focus on both the process and product. All too often students are judged on the basis of a single test score from a test of questionable worth (Darling-Hammond & Wise, 1985: pp.315-36, Haney & Madaus, 1989: pp.683-687). Student performance on such tests can show day-to-day variation. However, such scores diminish in importance when contrasted with the multiple measures of assessment that are part of a portfolio. In short portfolios are valid and reliable because of their ability to triangulate learners' evidence.

### **CONTEXT OF THE RESEARCH AND STUDENT PROFILES**

This research is based on a further redesign of the assessment for a module within a teacher education programme at Dublin City University, Ireland. The programme (BSc Education & Training) is delivered on a full and part-time basis. Although same learning outcomes are expected from both the part-time and full-time students, the actual student profiles differ quite considerably. Students studying the full-time programme follow the module as ES204. This programme is designed for learners who wish to work in the field of education and training. They are generally a large group (ranging between 70 to 80 students) of full time students, mostly recent school leavers with and additional 10% mature cohort. These learners have little or no experience of hands-on teaching / training or assessment-design experience. Conversely students studying on the part-time programme follow the same module as ES222 and are generally a smaller group (ranging between 25 to 30 students). These students are often already working as NQTs (Non-Qualified Teachers) a diverse range of educational settings such as adult and continuing education, as trainers in community settings, youth workers or as trainers in business and industry. These students join the course to support their continuing professional development with the provision of knowledge and skills to enhance their professionalism and help them gain a recognised qualification.

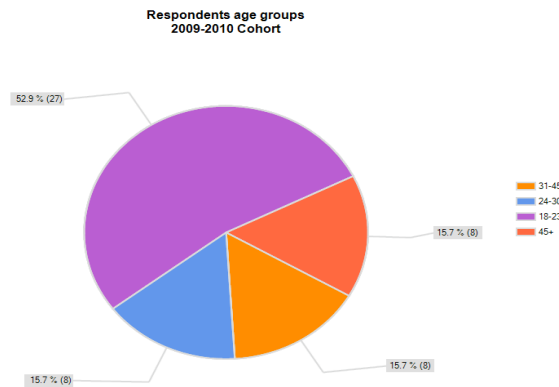
In 2008 the assessment for module 'Curriculum Assessment (ES202/ES222)' was redesigned to replace the final summative written exam with portfolio assessment. Preliminary research by the then module coordinator / lecturer demonstrated that the performance patterns were inconsistent and erratic. Further student evaluation showed that there was little or no deep learning occurring either during or after the module completion. It was at that stage there was a decision by the module coordinator and a new lecturer to introduce a portfolio – assessment which was aimed at helping students to gradually demonstrate their knowledge as they progressed through the module. This phase of the research was carried out during the academic year 2009-2010 and focused on a second cohort of students undertaking the



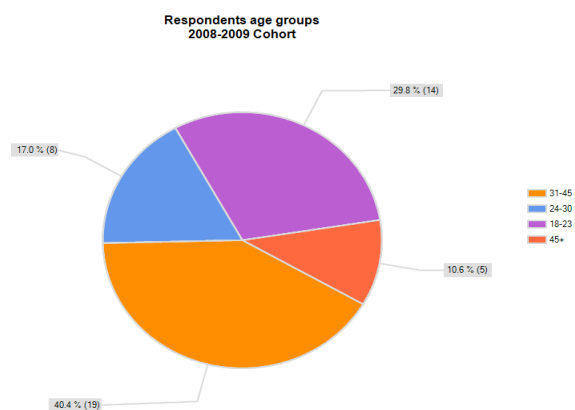
revised assessment model. This paper therefore compares the two years of research with two cohorts of students, with the view to ascertain if the initial success of the model was primarily determined by circumstantial factors or the soundness and sustainability of the model itself, hence making its success less susceptible to circumstantial factors.

**Population**

The analysis is based primarily on performance patterns in terms of student success as well as quantitative and qualitative data based on the views of the respondents by using online questionnaires circulated at the end of the module in both years of presentation. In 2008-2009 there were 48 responses and in 2009-2010 51 responses were received. While in 2008-2009 full-time (53.2%) and part-time (48.8%) responded almost in equal proportion, in 2009-2010 the majority of responses were received from full-time students (70.6%). The full-time group comprises primarily students aged between 18 to 23. Therefore, as shown in Figures 1 & 2, it is not surprising that if compared to the 2008 responses the proportion of younger respondents for the 2009 research is considerably higher.



**Figure 1: 2009-2010 Respondents age profiles**



**Figure 2: 2008-2009 Respondents age profiles**

In 2008-2009 the level of professional experience was approximately 10% higher than in 2009-2010. As shown by Figures 3 & 4, the younger age of the 2009-2010 respondents may explain the lower level of professional experience emerging from the questionnaire. In addition to the age profile economic downturn experienced in Ireland during the past year may also explain the lower percentage of respondents who have gained experience from paid employment and particularly the higher percentage of students in part-time (22.4% in 2009-2010 and 15.2% in 2008-2009) versus full-time employment (6.1% in 2009-2010 and 19.6% in 2008-2009).

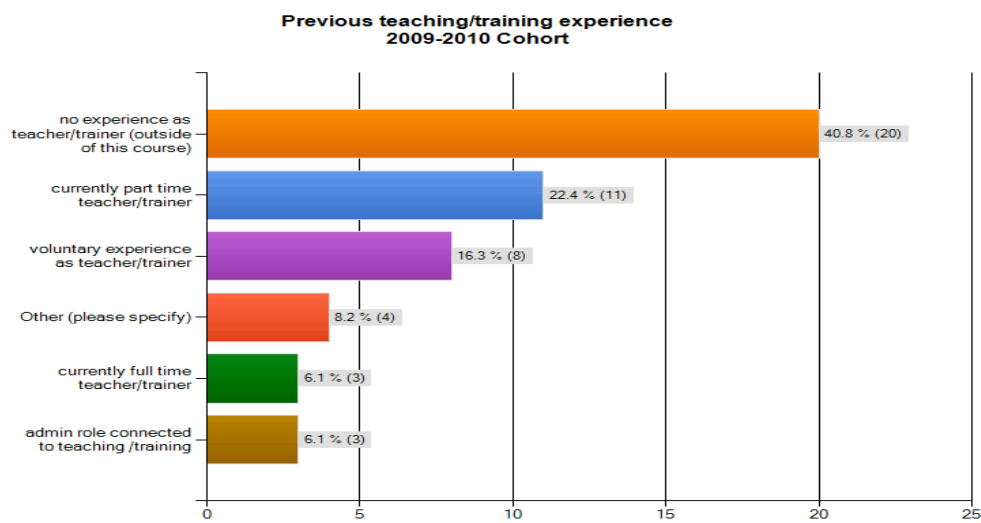


Figure 3:2009-2010 Cohort- Previous teaching and training experience

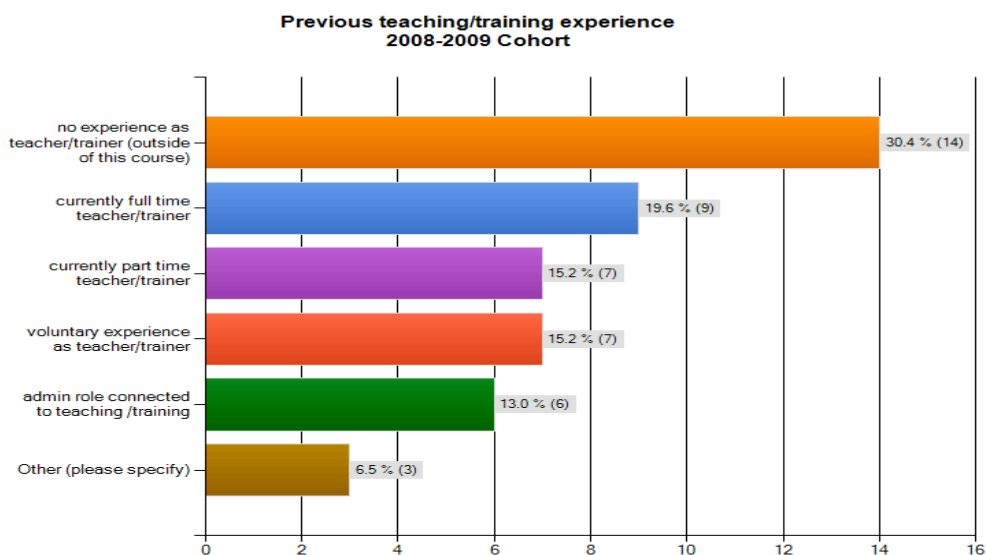


Figure 4:2008-2009 Cohort- Previous teaching- and training experience

However, despite the lower level of teaching/ training experience presented by the 2009-2010 cohorts, Table 1 shows that both cohorts present comparably low levels of experience designing (8.7% in 2008-2009 and 8.2% in 2009-2010) and marking (15.2% in 2008-2009 and 16.3% in 2009-2010).

**Table 1: Comparative assessment experience table**

<b>Experience of Assessment in Education or Training (outside of this course)</b>				
<b>Options</b>	<b>2008- 2009 %</b>	<b>2008- 2009 N</b>	<b>2009- 2010 %</b>	<b>2009- 2010 N</b>
Experience only as a student / trainee undergoing an assessment	47.8%	22	40.8%	20
Experience of designing assessments	8.7%	4	8.2%	4
No experience of assessment in education & training	23.9%	11	24.5%	12
Marking / grading assessments	15.2%	7	16.3%	8
Implementing / overseeing assessments	2.2%	1	6.1%	3
Other (please specify)	2.2%	1	4.1%	2

It can be concluded that while the 2009-2010 cohort of respondents were younger and less experienced there are no considerable differences between the two cohorts in terms of experience designing and marking assessment.

### **THE ASSESSMENT MODEL**

Biggs (1999, p. 40-41) suggests most of university knowledge tends to be declarative knowledge “that refers to knowing about things or knowing-what” whereas it should produce a functional shift, by enabling learners “how” to use and interact with the acquired knowledge. The importance given to meaning making in education influences the level of reflection and active involvement that is required of students. An education that requires only a surface approach is not concerned with meaning making. Conversely education that fosters meaning making processes requires active engagement with the learning content and greater control and ownership over the learning outcomes.

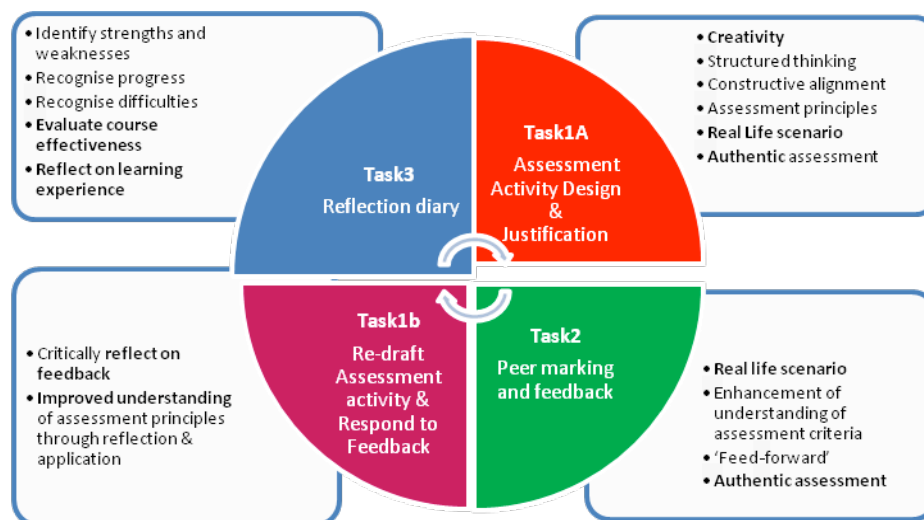
According to Wells (1999), teaching and learning are connected by a process of semiotic mediation, whereby meanings are exchanged and a lowest common denominator is discovered and developed as the starting point for further learning. This is a rather delicate process as meanings are often not just discovered but also imposed. The extent to which education allows for meaning to emerge without imposition is all too rare. If students are not offered the opportunity to contribute to the meaning that is generated through the teaching and learning relationship we can witness a dissociation of meaning from learning. Examples of this can be found in abundance in structured learning environments at all levels. Surface and strategic approaches do not require engagement with meaning, but may still lead to the acquisition of the form of knowledge that is sufficient to satisfy the requirements for passing end-of-year examinations. Whether this type of knowledge has a lasting effect on students may be reasonably questioned and on the whole it raises the more general issue of whether it is possible at all to speak of learning without meaning. In order to learn in a sustainable manner which will permanently impact on students' attitudes and behaviours and beyond the academic context, students need to be enabled to attach meaning to the act of learning. This, therefore, suggests that experiencing professional scenarios and reflection on learning are necessary to foster such sustainability for students aiming to become professional educators.

At the highest point education becomes dialogical. It allows learners to actively engage with their learning and with teachers. With dialogical education the interaction between teachers and students takes the form of a two-way exchange. The students' voice is therefore essential. Such two-way exchange that enables progression in education necessitates that "each step forward makes possible a further step forward" (Lipman, 2003, p.149). Current research on formative assessment (Sadler, 1989; Juwah & al., 2004; Swinthenby & al. 2005; Chanock, 2000) has stressed the importance of incorporating a feedback loop in assessment. If the loop is closed and assessment becomes formative when a circular process from assessment goals to learning goals is established and where feedback helps learners to move from assessment to learning via attending recommendations made through feedback. However, for feedback to work it must connect with students (Higgins, Hartley & Skeleton, 2002) (Hyatt, 2005), and should promote reflection. Students should be enabled to understand and interact with feedback as "it cannot simply be assumed that when students are 'given feedback' they will know what to do with it" (Sadler 1998, p.2).

The assessment model developed for the module 'Curriculum Assessment' builds on these theoretical foundations and pays attention to the need for progressive, reflection-led processes that help students to attach meaning and derive sustainable learning from the educational activity they have been engaged in. The portfolio aims to foster a dialogical relationship between teaching and learning and progressive transfer of responsibility for learning from lecturers to students.

The original portfolio format presented in 2008-2009 consisted of four tasks as shown by Figure 5. The model was designed to experience different elements of assessment from the

perspective of the teacher as well as that of the student. A dialogical cycle between assessment design and improvement of the design via responding to the feedback received informs the design of the portfolio model. The response to feedback is a reflective exercise that encourages the student to critically consider his/her strengths and weaknesses and consider the options for improvement.

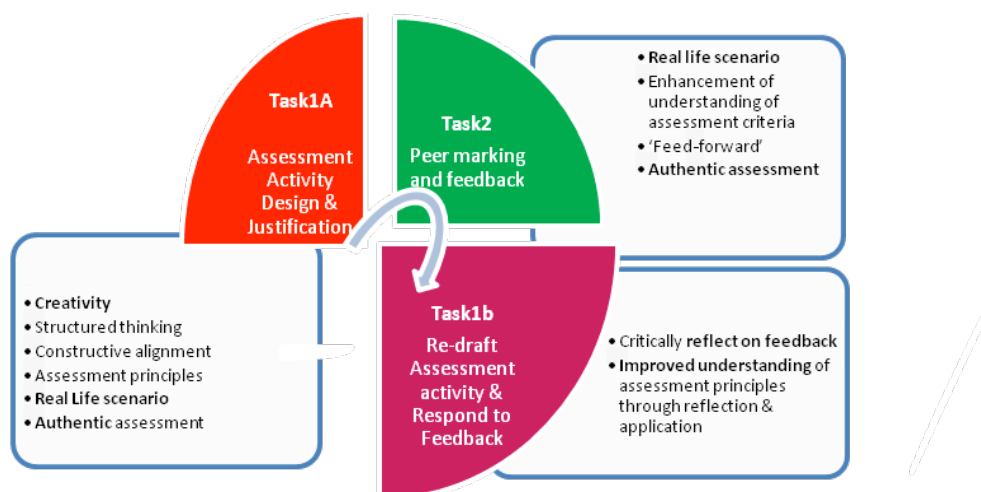


**Figure 5: 2008-2009 Portfolio format**

Task 1 is subdivided into two tasks, Task1a and Task1b. Task1a is the first task students complete and consists of the design of an assessment activity for a syllabus and a potential group of students identified by the students themselves. This task requires students to match the learning objectives for the chosen syllabus with an assessment activity that is suited for the specific group of students. Students are asked to prepare guidelines, design and structure an assessment activity and specify assessment design choices, guided by a specific marking criterion. This task simulates a real life scenario and allows students to express their creativity. It also raises students' awareness of key assessment concepts such as transparency, clarity and fairness and also constructive alignment and validity. By designing an assessment activity these concepts are embedded in practice and the experience gained enables students to transfer the knowledge acquired to current and future professional contexts. Task1B is a re-drafting activity in response to the feedback received from peers as part of Task 2. The redrafting of the assessment activity requires students to react constructively to the feedback received and to reflect on the advice in order to decide what changes should be made to improve the quality of the original assessment design. For Task 2 students mark and provide feedback to peers on their Task1a. They bear the responsibility for giving useful advice and ensuring that their evaluation is fair and transparent. This task enables students to assume a dual role at once: that of teacher and of student. This task in particular appears to cause attitudinal shift and the unease with such shift generally occurs. Students need to be mindful of the wellbeing of their peers while

at the same time ensuring that reliability of marking<sup>1</sup>. Nevertheless marking is a daunting task for many students and since their skills and knowledge are still developing and the quality of feedback they are able to provide is still relatively limited and directly linked to their level of understanding of assessment theory and practice. For this reason Task1b is not a straightforward task. Students receiving feedback advising them on how to redraft their assessment activity are not simply asked to implement the recommendations received, but to first make a decision on the pedagogical soundness of the advice received from peers and then to implement what, on reflection they consider appropriate. The structure is intrinsically dialogical, as it requires active engagement and a critical response to feedback.

Finally Task 3 is a reflection diary in which students are asked to record after the completion of each task their thoughts on what they have learnt from the specific task, what difficulties they have encountered and what aspects of the tasks they felt should be improved for further presentations<sup>2</sup>. As shown by Figure 6, in 2009-2010 due to restrictions imposed by the reduced duration of the module the assessment portfolio had to be modified. It was considered important to maintain the three-step design format (design-feedback-revised design).



**Figure 6: 2009-2010 Portfolio format**

As discussed above an element of reflection is incorporated in the response that students are asked to give to peer feedback. To make up for the absence of task3 further reflection was elicited within the classroom interaction and the opportunity for students to contribute to the evaluation would be maintained through responses to the end of module questionnaire.

<sup>1</sup> In order to ensure marking inter-reliability and fairness lecturers moderate marking and only in cases where the mark is deemed to be inappropriate, it is replaced by a mark given by the lecturer.

<sup>2</sup> It is important to stress that the students are involved in the evaluation of the module and that they are encouraged to contribute to the development of the model. Listening to the students' voice is also one of crucial elements of a dialogical educational model as it fosters a two-way communication between teachers and students.

### THE EVALUATION APPROACH

The original purpose of the research was to analyze the impact of an assessment model in a curriculum in relation to student understanding for the promotion of professional development in trainee teachers. These beginnings were very much steeped in the formative evaluation vein. The research was primarily for purposes of examining the validity of the learning outcomes of the module that already existed. The original research focused on '*determining effectiveness*' (Braden, 1992). Although this may seem like a summative model it was formative in nature as the curriculum and dialogical model would be adapted and changed as and when required. Stevens et al (1997) suggest that evaluations are:

- To determine overall project success.
- To determine whether or not specific goals and objectives were achieved.
- To determine if and how participants benefited from the program.
- To determine which components were most (or least) effective.
- To determine any unanticipated outcomes.
- To determine cost vs. benefits.
- To communicate evaluation findings to stakeholders (*teachers, participants, program designers and developers, funding agency, and superiors.*)

The authors of this paper view research as an integral part of teaching and learning. Therefore a constructivist approach to both teaching and learning and conducting research was essential to them.

This research began as a one-off piece of research looking at a particular aspect of curriculum development. The second phase of the research conducted in 2010 also asks some similar questions as the original research but goes further in trying to identify new obstacles and phenomena as well as using comparative approach to a range of research questions. The researchers focused their research on improving and validating the curriculum programs (research-oriented) as well as for that determining whether or not the module (curriculum) did what was required of it at instructional level.

Cronbach (1975) broadly defines evaluation as '*the collection and use of information to make decisions about an educational program*' (p. 244). In the second year of the research the emphasis has moved from a formative evaluation approach to a more developmental one, which is more in line with Scriven's (1974) goal-free model. The research process began to permit the designers, learners, and instructors to monitor how well the instructional goals and objectives were being met. Its main purpose now was to catch deficiencies so that the proper learning interventions could take place, which in turn would allow the learners to master the required skills and knowledge and thus move towards professional competence.

At first glance this research may seem a little complex due to the range of power stakeholders. Instead of complicating matters it actually simplifies the research process. This is due to the goal-free (Scriven, 1974) nature of this research phase. This process of methodological development or change seemed natural to the researchers. The research went from formative to goal-free from 2008 to 2010. As well as using this research to help

create sustainable dialogical models of engagement, the researchers, Justin Rami and Francesca Lorenzi, also sought to improve their own professional practice by promoting a greater awareness of their own practices as well as improving the instructional delivery and curriculum improvement. The evaluative approach to this process from 2008 to 2010 aims to build a reflective model of improving the module (curriculum) from the 'bottom-up' (Kemmis and McTaggart, 1988). The end result is a dialogical model or curriculum. As Uhlman (1995) points out, students as 'stakeholders' need to be also participating in and transformed by the contextual dialogue of teaching & learning initiated and developed around the teacher's reflective practice and research. In his renowned 1993 book, *The Pedagogy of the Oppressed* Paulo Friere suggests that the starting point in 'education for liberation' is dialogue, as opposed to the 'top-down' hierarchal 'banking education'. He goes on to suggest that dialogue begins with the experiences of learners. Experiential learning means investigating our thinking and asking why we think the way we do. This inevitably leads to the decoding of ideology and the beginning of understanding our relationship with wider social structures (ibid). In this research the dialogue requires a co-equal relationship between teacher and student, in which knowledge is not a commodity to be passed down but is something to be investigated. Dialogue is not just a teaching method. Central to the dialogical model is the transformation of teacher-student relationship and the way we think about knowledge. Whereas 'banking education' posits the learner as an empty vessel to be filled with knowledge, dialogical education investigates the way in which knowledge is socially constructed.

### RESEARCH METHODOLOGY

Using a multi-method research approach the authors' research was conducted using both quantitative and qualitative tools. A primary focus of the research used student feedback (through online surveys) to generate relevant data suitable for triangulation; this was then coupled with behavioural observations of learning patterns, and finally with structured and unstructured questions delivered through questionnaires both generating qualitative and quantitative data. Finally the data was compared between the responses of the 2008-2009 and 2009-2010 students' cohorts/respondents to give a longitudinal perspective.

Mixed methods design excels at bringing insights derived from diverse methods to the analysis of a given phenomenon. In this research, the indicators themselves, such as research diaries, observations and responses to survey questions may be examined and compared across the different respondents thus offering some kind of comparison. Mixed methods are therefore central to the development and testing of theory (Sieber 1973). It is through this mixed method approach that the concept of "triangulation" comes in. Denzin (1978) identified four basic types of triangulation: Data triangulation: involves time, space, and persons, Investigator triangulation: involves multiple researchers in an investigation, Theory triangulation: involves using more than one theoretical scheme in the interpretation of the phenomenon and Methodological triangulation: involves using more than one



method to gather data. In this context, triangulation is the act of combining several research methods to study one area. We have adopted the between-method triangulation that involves contrasting research methods, as in our research questionnaire and observation.

## RESEARCH FINDINGS

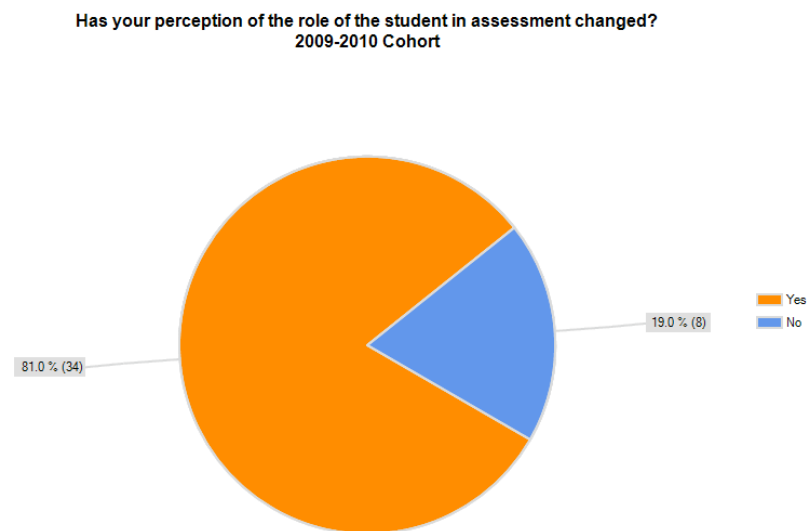
### *Outcomes from previous analysis*

As part of the assessment portfolio for module ES204 (full-time)/ES222 (part-time) students were required to complete a reflection diary. After each task students were asked to reflect on the difficulties they had encountered, on their strengths and on what they had learned from preparing the specific task. At the end of the module they were also asked to reflect on the module as a whole and to offer advice on improving its structure and design. Considering that the reflections were contributing to the overall module mark, the reliability of the information collected from this source was questioned. Reflection diaries are often filled in an either perfunctory or compliant fashion when their scope and value is not fully appreciated by students. Yet, the overall picture that emerges from the reflective diaries of both groups is that of an honest, albeit mostly emotional, response to a challenging learning process. On the whole the data collected from reflection diaries, which represented the opinions of student respondents, reconfirmed the positive view expressed in relation to the learning experience in the online questionnaire. The most significant reflection outcome that emerged was the attitudinal changes in both groups. The portfolio tasks required students to embrace the teacher and student roles at the same time and the comments confirmed that engagement with both roles did happen and did cause attitudinal change. Interestingly the comments by full-time students denoted a greater awareness of the complexity of the teacher's role as planner, assessor and mentor providing constructive criticism and support. Part-time students questioned their beliefs in relation to the role of assessment and how it impacts on students. This is possibly because of their already lived-experiences of poor assessment practices in their own work places. In relation to the course delivery and structure, both groups had signaled a feeling of being overwhelmed by the quantity of work involved and the complexity of the structuring assessment. However the puzzling complexity that could have resulted in a great level of unpredictability and confusion for both students and lecturer (Biggs, 1999) did not prevent the majority of students (94.7% of full time students and 89.2% of part-time students) from successfully completing and passing all the portfolio activities. The lecturers/researchers acknowledge that this was a challenging assessment format for most students, but the picture that emerged from the overall evaluation of the module was extremely positive and encouraged the researchers to maintain and further develop the format.

### ***Outcomes from current analysis***

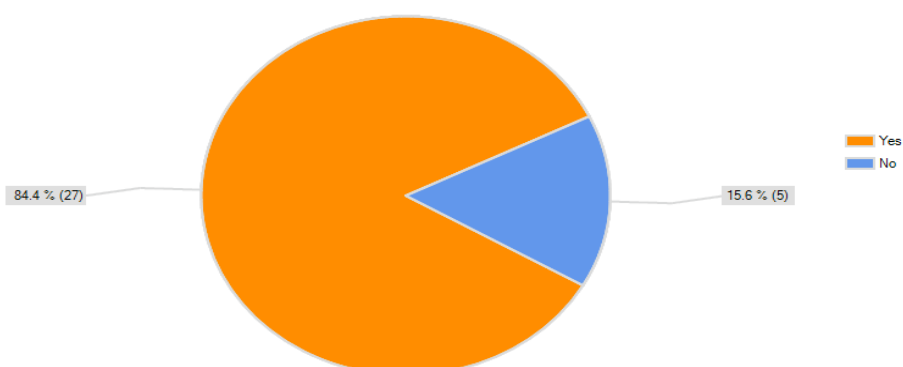
As for the previous presentation of the module, students from the 2009-2010 cohorts were also asked to complete an online questionnaire. The questionnaire included a combination of multiple choice and open-ended questions in order to ensure both breadth and depth of information collected. The analysis of the information from the 2009-2010 questionnaires is presented comparatively and in relation to the outcomes of the previous presentation.

On the whole the questionnaire shows comparable levels of satisfaction with the module and a positive reaction to the assessment structure and delivery of the content. As shown by Figures 5, the students' responses at the end of both years of presentation indicate that the module format has succeeded - in comparable terms- in changing students' perception of assessment.



***Figure 7 :2009-2010 Cohort- Perception of the role of assessment***

Has your perception and attitude towards assessment changed as a result of undertaking this module?  
2008-2009 Cohort



**Figure 8 :2009-2010 Cohort- Perception of the role of assessment**

The change in perception of assessment is one of the key objectives of the module. The module aims to foster greater awareness of the formative value of assessment and encourage course participants to design and implement learner-centred approaches. The importance of the role of the learner in the assessment process appears to have been understood and captured by students as it emerges from the answers summarised in table 2.

**Table 2: Perspectives on the role of the learner in assessment**

Have your views on the role of the learner in the assessment process changed as a result of undertaking this module?	2009-2010 %	2009-2010 N	2008-2009 %	2008-2009 N
Through feedback learners have more control and motivation	29.17	7	11.77	2
More focus on diverse learners' needs & views	29.17	7	41.18	7
Clearer assessment criteria empower learners	8.33	2	5.88	1
Greater communication and empathy between assessor and learner	4.17	1	11.76	2
Learners should be enabled to showcase their learning	8.33	2	17.65	3
No answer	20.83	5	11.76	2
<b>Total answers</b>	<b>100</b>	<b>24</b>	<b>100</b>	<b>17</b>

The table shows a consistent pattern in terms of values expressed by the students who rate the focus on diverse needs and empowerment and motivation through feedback among the most important aspects of assessment for learners.

While the open-ended questions reconfirm the overall consistency of the pattern, they also highlight some differences worth noting. The two lecturers who delivered the content placed emphasis of different aspects of assessment. This could be down to the diversity of their specific research interests on their teaching or simply based on different perceptions of subject importance. The answers provided by students seem to indicate that the different emphasis has had a noticeable impact on their behaviour and responses.

In 2008-2009 greater emphasis was placed on the value of formative feedback and fair and transparent communication on assessment matters with the students. In 2009-2010, greater emphasis was placed on the theory and practice of learning outcomes and assessment design. Table 3 shows evidence of the influence of the teaching approach on students' perceptions and contribution to the learning experience. Notably, students acknowledge greater emphasis on feedback theory and practice in 2008-2009 and the importance of design and marking guidelines emerges from the answers of students from the 2009-2010 cohort.

**Table 3: contribution to the learning experience**

Has your perception and attitude towards assessment changed as a result of undertaking this module?	2009-2010 %	2009-2010 N	2008-2009 %	2008-2009 N
Better understanding of the importance of formative assessment	3.45	1	0	0
Importance of clear guidelines and marking criteria	<b>13.79</b>	4	5	1
I appreciate and understand more the importance of assessment	<b>41.38</b>	12	10	2
I can be more creative in designing assessment	3.45	1	5	1
I understand the effect that assessment has on learning	<b>10.34</b>	3	<b>20</b>	4
I have learnt about constructive feedback	0	0	<b>20</b>	4
I have realised the amount of work and responsibility that teachers have to put in assessment	10.34	3	15	3
I am no longer scared of assessment	0	0	5	1
Importance of constructive alignment	0	0	<b>20</b>	4
I understand the terminology better	3.45	1	0	0
It has given me practical experience to design assessment	6.9	2	0	0
It has had an impact on my practice	3.45	1	0	0
No answer	3.45	1	0	0
<b>Total answers</b>	<b>100</b>	<b>29</b>	<b>100</b>	<b>20</b>

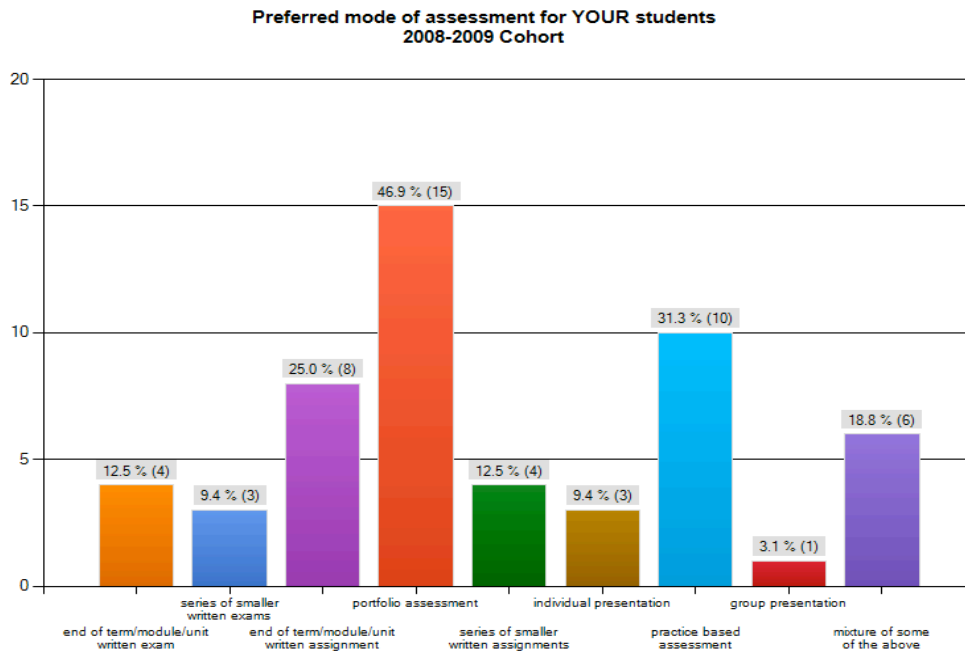
The link between the emphasis on different assessment topics and students' perceptions is further exemplified by Table 4, which summarises the level of student satisfaction with the portfolio's individual tasks. While the majority (72.3%) of students in 2008-2009 considered tasks 2 either extremely useful or very useful a similar (72%) level of satisfaction was recorded for task 1 in 2009-2010. Generally the second year of the new assessment design shows an overall increase in the level of student satisfaction.

**Table 4: Tasks usefulness comparative table**

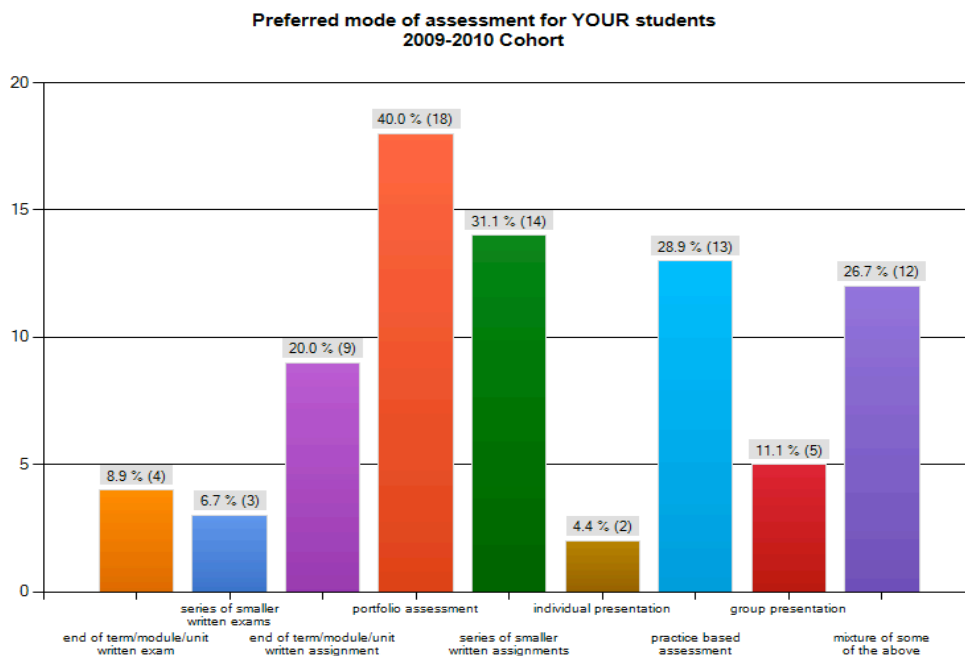
Answer Options	Year	Extremely useful	Very useful	Useful	Not very useful	Not useful at all	Response Count	Ex. & very useful
Task 1 - Design an Assessment Activity	2009-2010	15 34.9%	16 37.2%	8 18.6%	3 7%	1 2 3%	43	72%
	2008-2009	7 21.9%	14 4 3.8%	9 28.1%	2 6.3%	0	32	65.7%
Task 2 - Mark & provide Feedback to fellow student	2009-2010	17 40.7%	10 24%	11 26.2%	2 4.8%	2 4.8%	42	64%
	2008-2009	11 34.8%	12 37.5%	4 12.5%	4 12.5%	1 3.1%	32	72.3%
Task 3 - Re-design and assessment activity and report on the changes	2009-2010	16 39%	13 31.7%	8 19.5%	3 7.3%	1 2.4%	41	70.7%
	2008-2009	11 34.4%	9 28.1%	7 21.9%	5 15.6%	0	32	62.5%

The assessment terminology used by the two lecturers also appears to have had an impact on students' perceptions. While the lecturer for the first presentation made clear reference to portfolio assessment throughout the module, the second lecturer referred to the tasks in more generic terms as 'small written assessments'. The decision to use different terminology was not simply the expression of a different semantic choice. Some modification had been introduced which warranted the more generic terminology. While the nature of the activities students were carrying out was not significantly different in the two presentations, in 2009-2010, task 3 had been removed from the assessment. The module, which had originally been presented over a 12-week period, had now been restricted to 6 weeks and the module code was now shared with 'Curriculum Evaluation' components, which were also assessed. The module mark was no longer the outcome of the portfolio assessment alone, but it was a combined mark resulting from both the assessment of 'Curriculum Assessment' and 'Curriculum Evaluation' components. Figures 9 and 10 show that students in identifying the assessment method they wish to use with their own students tend to be

influenced by their personal experience to make decisions on choice of assessment, particularly if they have had a positive experience. While both cohorts express a preference for portfolio assessment, ‘smaller written assignments’ score a much higher the 2009-2010 students’ responses.



**Figure 9 :2008-2009 Cohort- Preferred mode of assessment with your students**



**Figure 10 :2009-2010 Cohort- Preferred mode of assessment with your students**

Finally students were asked to identify aspects of the assessment format in need of improvement. While on the whole the level of satisfaction with the format has increased (from 18.18% in 2009-2010 to 25% in 2009-2010) in the most recent presentation, Table 5 shows that similar concerns are expressed by students of the two cohorts.

**Table 5: Comparative table – Students’ suggestions for improvement**

Suggestions from students	2009-2010 %	2009-2010 N	2008-2009 %	2008-2009 N
More practice	8.33	2	4.55	1
More clarity	<b>29.17</b>	7	<b>22.73</b>	5
More time	<b>16.67</b>	4	<b>27.28</b>	6
Happy with it - no change needed	<b>25</b>	6	<b>18.18</b>	4
Feedback from lecturer preferable	12.5	3	13.63	3
No answers	8.33	2	13.63	3
<b>Total answers</b>	<b>100</b>	<b>24</b>	<b>100</b>	<b>22</b>

In 2009 students had signalled that the workload for the module was too heavy and that had impacted on the students’ ability to focus also on other modules.

A 2008-2009 student commented:

*‘I think the portfolio was a good method of assessment but I felt it was very time consuming and didn't leave much time for other modules.’*

And similarly a 2009-2010 comments on the shorter duration of the module and the workload:

*‘Just in relation to the module itself I feel it would be more beneficial to the learner if this module was conducted over the 12 weeks separate from the section on evaluation. I feel there is a lot of take in and comprehend and then critically apply in the space of six weeks. I felt the atmosphere of the class towards this was exactly that of there was so much to*

*take and do, it was argued among a few of the point of this module if everything was crammed in the six weeks, and not allow for more time to personally comprehend this information for their own particular benefit. I would be of this opinion too'*

While it was the intention of the lecturers to radically simplify and clarify the guidance given in an assessment guidelines booklet given to the students, the editing was not sufficiently effective and comments offered by students in the later presentation reconfirm issues raised for the earlier presentation.

*'While there were pages and pages of instructions on what to do. Quite often I was confused as to what was being asked of me.'* (2008-2009 Student)

*'I think the brief should be changed as it was very hard to understand. Maybe for each section of the portfolio give out the brief. That way students would have a better understanding of each task rather than been totally confused on the first day'* (2009-2010 Student)

On the whole the questionnaire shows consistent patterns of satisfaction and advancement of knowledge across different years of presentation, in response to different teaching approaches and despite modifications dictated by external constraints. Therefore the outcomes emerging from the questionnaires appear to offer evidence of the sustainability of the pedagogical soundness of the assessment model devised for this module, albeit with some clearly identified areas in need of improvement.



## CONCLUSION

The authors of this paper view research as an integral part of teaching and learning. Therefore a constructivist approach to both teaching and learning and conducting research was essential to them. This research began as a one-off piece of research looking a particular aspect of curriculum development. The findings of this phase proved that by creating a feedback loop within the curriculum process learners were more able to control their own learning. The research also demonstrated that a learner centered approach in the constructivist mode through experiential tools such as portfolios allowed the learners to engage with the material at their own pace. Furthermore the research proved that the dialogical constructivist approach did in fact help develop professional competence of trainee teachers as well as improved the professional development in current teachers.

The second phase of the research conducted in 2010 also asks some similar questions as the original research but goes further in trying to indentify new obstacles and phenomena as well as using comparative approach to a range of research questions. This phase of the research confirmed some of the findings from the previous year such as the strength of the intervention is based on the construction of a solid sustainable curriculum model and not of content inputs or lecturing styles and knowledge emphasis. The focus of this research was on sustainability as well as examining the concept of a dialogical model. Again, the learners expressed satisfaction in regard to the learning, and again they also highlighted issues around assessment guidelines and workload. These details will again be brought into the planning of the next delivery of the module(s) in 2010-2011. Once again the researches will look for ways to improve the student experience of this module as well as the vocational impact of it in the context of teacher education. The original purpose of the research was to analyze the impact of an assessment model in a curriculum in relation to student understanding for the promotion of professional development in trainee teachers. These beginnings were very much steeped in the formative evaluation vein. As this research has continued for almost three years the research process itself has highlighted issues relating to the researcher – respondent/student relationship. In this research the dialogue requires a symmetrical relationship between teacher and student and between teaching and learning, in which knowledge is not a commodity to be passed down but is something to be investigated. Dialogue is not just a teaching method. Central to the dialogical model is the transformation of teacher-student relationship and the way we think about knowledge. The data demonstrates that that satisfaction, completion, and improvements rates are very high and the learners gain both professionally and personally which embraces the aspirational life long learning model.

The next phase of the research should examine how the researchers can improved the delivery of this model from an administrative and pedagogical perspective without increasing student or assessor/lecturer workloads. Secondly the researcher aim to look at how this model could be adapted and transferred to other modules within teacher training and outside of professional and vocational development settings

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