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Evaluating how engaging in Professional Development impacts on Assessment Practice: A Proposed Framework.

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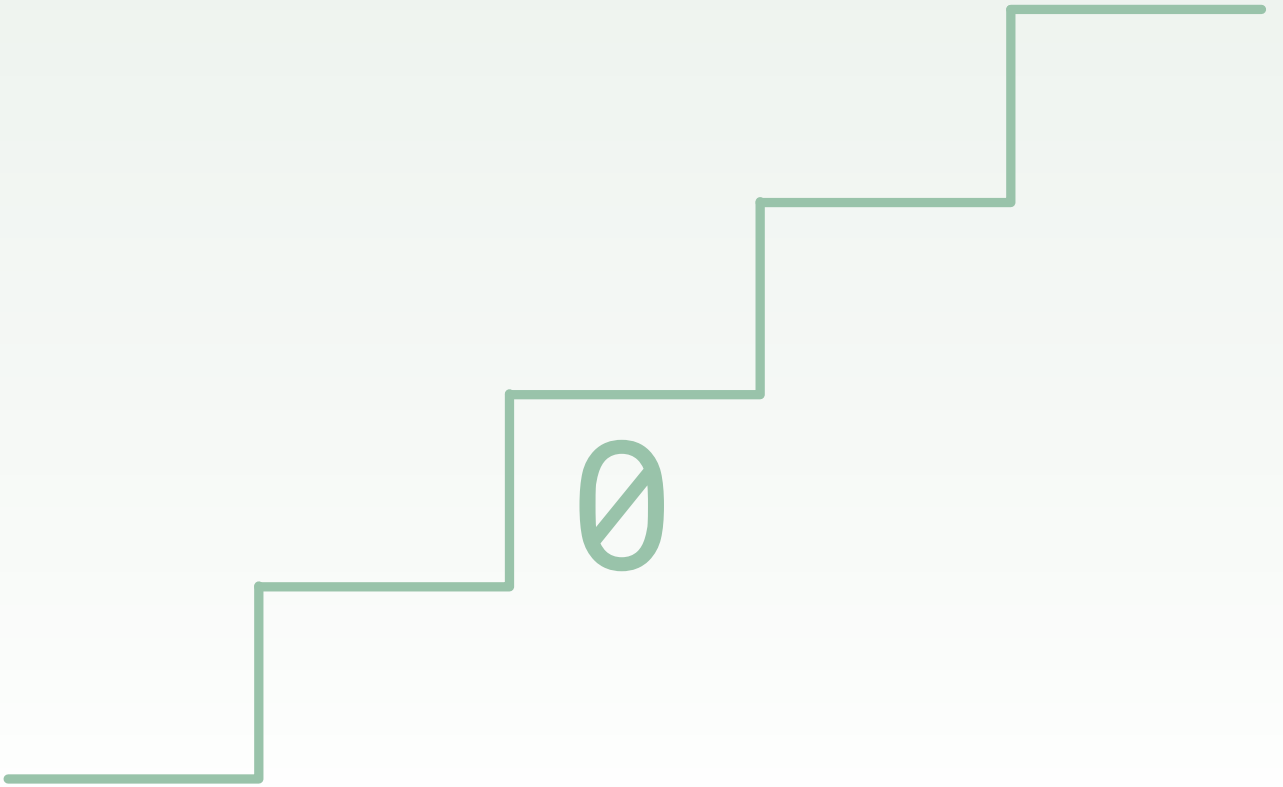
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CHAPTER

Evaluating how engaging in Professional Development impacts on Assessment Practice: A Proposed Framework

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Introduction

In the higher education context, the concept and implementation of measuring impact on practice of participation on academic professional development programmes has not been fully explored. More specifically, there is a lack of consideration for how assessment practices in particular have been impacted by engagement on such programmes. Generally, measuring impact is key for understanding how best to provide a coherent student experience, and academic developers are often drawn upon to support programme teams in this activity. This chapter provides guidance and direction to both academics teaching in higher education and academic developers charged with their support by discussing the key issues around how participation on professional development (PD) programmes and initiatives can impact (individual) assessment practice.

This work builds on a previous in-house study (McAvinia, Donnelly, Hanratty & Harvey, 2015) and a large scale UK Higher Education Academy (HEA) review by Parsons Hill, Holland and Willis (2012). The former examined the extent to which we can assess whether accredited professional development programmes for academics have improved teaching and students' learning in higher education. The latter explored the strengths and merits of the available evidence of impact assessment, opportunities for improvement of impact evidence of teaching development programmes, and practical challenges evident from impact assessment and evaluation. A more recent HEA study was conducted by the University of Plymouth (Kneale, 2015) with an aim to bring the discussion forward from this point by creating state of the art knowledge and understanding relating to how the impact of CPD schemes on the student learning experience can be measured. Within Australian higher education, there is further notable review work by Chalmers, Stoney, Goody, Goerke, and Gardiner (2013) and Chalmers and Gardiner (2015), which includes the development of an evaluation tool; both argue that the extent and longevity of the impact of teacher development programmes on the culture of the discipline and the institutions are less well researched and evidenced. Taken together these previous studies have identified issues with how impact is measured, with respect to content and methodology.

As a result of this, they believe that there is clearly a need for ongoing and rigorous research on the impact of teacher development programmes that looks deeper and beyond the measurements of satisfaction of academics who participate in the programmes; this is a welcome shift in focus to now exploring changes to thinking and practice which develop over time, the impact they have on students, colleagues and institutional ways of working.

Chapter Objectives

Given that there are increasingly expectations that higher education institutions today address the dual agenda of assuring the quality of teaching and providing value for money, teaching staff will increasingly be required to pr mmes. This leads to questions on the effectiveness of professional development programmes and calls for Academic Development Centres to demonstrate that their programmes are not only linked with their HEI's strategic initiatives, but that they have resulted in improved longer term teaching and assessment practices and student learning experiences and outcomes. This chapter explores a number of objectives:

- What tools, frameworks, benchmarks, guidelines currently exist in this field?
How could we better measure the impact and outcome of assessment practices arising from professional programmes?
- How do academic developers currently measure the impact and outcome of professional programmes/PD?
- Does academics' participation in PD affect their assessment practice?
If so, how?
- How does participation in PD contribute to lasting improvements in assessment practice?

Throughout this chapter, we also identify examples of good or innovative assessment practice as a result of participation in PD as well as examples where PD may have contributed to changes to an individual's practice and/or changes to the way assessment is undertaken either by a programme team or individual. Equally it is important to highlight examples of barriers encountered by individuals or programme teams when implementing assessment strategies as a result of participation in CPD and how these barriers were overcome.

What is meant by Impact on Professional Practice?

A key dimension to the chapter is the exploration and clarification of what is meant by 'impact' in this context; there can be confusion among educators about this, and currently there exists a lack of structure and consensus around evaluating the broader personal, professional and practice impacts of academic professional programmes. Much debate has surrounded the definition of impact and its measurement, which can range from among others, measurable pedagogical publications, developing (online) instructional resources, assessments, student development and teaching grants to epistemological and ontological changes in academics. Increasingly measuring an output from our academic study or work is one of the dominant conversations in the literature. From an academic professional development perspective, if one's accredited programmes are effective, then what changes might be measurable in academic staff or student behaviour?

Some examples from the LTTC: we have three accredited postgraduate programmes for academic staff. One of the goals for the MSc Applied eLearning is to provide programme participants with instruction on the pedagogy and potential of current learning technologies. If that instruction is effective, then participants should become more comfortable and confident with and proficient in using these technologies, and students should report that their lecturers use technology more frequently and more effectively in their classes.

MSc projects that have been developed in recent years and published are indicative of the learning from the programme transforming individual's professional practice:

- *The effectiveness of online formative feedback for Optometry students on work placement*
- *E-xperience Erasmus: Online Journaling as a tool to enhance student's learning experiences of their study visits abroad*
- *A walk down the red carpet: students as producers of digital video-based knowledge* (Ryan, 2013).
- *Analysing the Impact of Digital Photography Projects on Student Engagement and Performance in a Higher Education Engineering Discipline* (Gleeson, 2014)
- *Can the Use of Online Learning and Reflective Journals improve Students' Performance for a practically taught Timber Jointing Module?* (Byrne, 2014)

One of the aims of the MA in Higher Education is to equip participants to undertake educational research using traditional and emerging research designs informed by a critical awareness of developments at the forefront of policy and practice in higher education. If this is achieved, they should have an opportunity to explore how aspects of their practice, which could include assessment, impact on learner motivation, performance, attitudes etc. Areas that have been explored include the relationship between approaches to learning and student performance (Moore, 2015) as well as effective constructive alignment for problem based learning assignments and strategies to develop higher order critical thinking in reflective blogs (Dunne, 2015).

The Postgraduate Diploma in Third Level Learning and Teaching focuses on curriculum design and assessment, in addition to practical techniques for student-centred teaching. There is further discussion of this programme presented later in this Chapter, where we focus particularly on its outcomes as a key strategic PD initiative at our Institute.

While there is definite value in knowing information on the volume of activities in which one is engaged, it provides no direct indication of its worth to participants, nor any indication that change of any sort happened as a result of that activity. Outcomes-based evaluations, on the other hand, assess changes in the behaviour or attitudes of the participants themselves.

What is self-evaluation?

Planning and reviewing the impact of continuous professional development based on rigorous self-evaluation processes is an integral part of professional learning. But why is it important to develop a thorough knowledge of the self? This provides an opportunity for academics to engage in critically reflective dialogue about their professional learning, drawing on evidence of impact. Self-evaluation should involve asking deep and searching questions about one's professional knowledge, understanding, skills and practice. As part of this process, self-evaluation should be supported by evidence from a range of sources drawn from everyday learning and teaching. However, a crucial question here is - what do we mean by evidence? What can be considered as evidence? When and why is evidence important? When one engages in self-evaluation and reflects on practice, one's professional learning (plans for or impact of), or students' learning, it should be informed by some form of evidence. We would suggest that the following questions are an important part of this process:

- Why am I doing what I am doing?
- How do I know this is important/ worthwhile for my practice and my students' learning?
- What difference is it making for my practice and my students' learning?
- How do I know this?

There should be a triad of outcomes from self-evaluation: firstly, evidence of impact should help academics develop knowledge and understanding of practice and their students' learning; secondly it should be about a genuine reflection and analysis of their thinking, practice and professional actions; and thirdly, this process should allow academics to think about themselves and their learning, as well as their practice and student learning. A key part of this process is to consistently ask: "What have I learned?"

I have collected data on my practice - now what?

There is an argument that self-evaluation can be nothing more than introspection or navel-gazing. To counter this, it is important to move from collecting data about one's professional practice to examining the evidence; and this is where the importance of analysis appears. Evidence-based practice relies on robust, reliable and relevant evidence that should come from a wide range of sources and does not always need to be a written record. While a variety of research skills and tools is needed to gather robust evidence, it is vital that ethical guidelines need to be followed when gathering evidence (BERA, 2011). Although one can argue that data is everywhere, for it to be evidence it must meet the following conditions:

- Be relevant and meaningful for your purposes. What is it you need to know? Why is this the most useful/meaningful source of information for you?
- Asking the 'right' questions of the data and being critical.
- Be analysed and reflected on. What does the data tell you? What does that mean for you and your practice? How does it relate to other knowledge/information (policy, other practice, literature, research)?

Examples of Evidence

- Reflections on professional dialogue with peers, colleagues and learners
- Individual critical reflections on practice, including reflective journals
- Analysis of student work, individual or group focused
- Analysed teacher talk (from audio and/or video recording)
- Analysed student talk (individual, group and pair)
- Analysis of surveys taking account the views of students, colleagues and other stakeholders in higher education
- Reflection on and analysis of lectures/tutorials/seminars/laboratories and/ or discussions with students
- Analysis of visual data, artefacts
- Analysed student interviews/ group discussion
- Analysed quantitative or statistical data sets/data analytics
- Analysed institutional and programme data reports, grant reports, publications, focus groups, case study methodology.

Undoubtedly challenges exist in how impact can be measured in the context of this topic. It is very difficult to show a direct (statistically reliable and meaningful) correlation between faculty development activities and improved student learning. Kelley (2014) suggests trying to establish measures that are as valid as possible, and then accept the fact that much of your data will be quite “messy” from a statistical standpoint. It is important to understand what each of your evaluation tools measures. There are a variety of tools available to us as educators to ‘measure’ impact; one example is ‘The IDEA Form’ [Individual Development and Educational Assessment (IDEA) instrument] (www.idea.ksu.edu) which provides powerful data, but it measures only student perceptions. To speak convincingly about the value of the programmes being taught, it is better to think about the data you collect to intentionally guide strategic planning. Based on the data you have generated, what areas or supports might you improve and what elements of your practice have you established are effective?

To develop the topic further, examples from our own practice are used throughout the remainder of the chapter to illustrate the arguments on impact. In 2006, Pickering concluded that investigating the impact of these programmes on the practices and beliefs held by academics is not simple or even feasible. Indeed, quantitatively it is difficult to demonstrate the relationship between participation in CPD and the impact on practice; there are difficulties in objectively assessing the impact of CPD on practice as there are many other variables which could account for variations in practice.

How to measure Impact on Assessment Practice?

Academic Development Centres are under increasing scrutiny to demonstrate value for money and a return upon investment. Professional development opportunities can be seen to serve a number of purposes: maintaining standards (up-skilling staff, new lecturers, exchanging effective practice) helping to address current challenges (poor ratings, evaluations, student retention) or as proactive forward thinking strategic approaches (responding to changing/anticipated needs) integrated within long term institutional planning processes.

Whether the opportunities have fulfilled their purpose is generally routinely evaluated in terms of participant questionnaires and institutional QA processes. Measuring longer term impact of specific PD activities poses more of a challenge given the changing context in which these activities are offered, the challenge of linking a specific intervention with a specific outcome and the likelihood of various stakeholders having different interests and concerns regarding impact measures e.g. potential employers might value greater authenticity or development of graduate attributes whereas students might see issues around fairness and consistency as a priority (Su, 2014).

Impact upon Assessment Design

One measurable outcome could relate to subsequent assessment design – evaluating whether assessments have changed to become effective/ efficient in the way they are designed. ‘Are assessment methods or assessment strategies fit for purpose?’ (Brown & Glaser, 2002). For example, are assessments valid measures of whether learning has taken place, an effective means of supporting learning process and/or assisting students to become autonomous, self-directed learners (Bloxham & Boyd, 2007)? Does an assessment strategy across a module/ programme reflect the nature of the programme? If not what changes are required in order that they might better achieve its intended purpose? Will employers and students be able to identify what is important and valued across a programme and what learners are expected to study and how this will be measured (Gibbs & Simpson, 2004). How might or can evidence be gathered to support these arguments?

Impact upon Assessment Outcomes

Assessment has been shown to have an influential role in learning, determining on how and what is learned and the quality of learning achieved (Boud, 1988) Measuring these changes is dependent upon the kind of evidence needed to demonstrate this learning and a shift towards a particular theoretical stance on learning (e.g. mental representations vs behaviours). As a result there is perhaps a tendency to adopt easy to measure quantitative measures e.g. assessment marks, levels of engagement, student retention and equating these with assessment redesigns rather than exploring more qualitative evidence around attitudinal changes or different ways of thinking. In addition, it can also be problematic to separate out the resultant effects of an intervention with those arising from the investigation itself (Hawthorne Effect) This is further complicated by observable changes not necessarily being immediately apparent but part of a slower more gradual process. Cilliers and Herman (2010) have evidenced changes in practices up to seven years after participant involvement in educational development activities.

Equating Impact with Changes in Practice

Assessment is integral within curriculum and as such needs to be viewed within context in which it is situated. Gibbs and Dunbar-Goddet (2007) study of nine different institutional practices found a wide variation in the ‘assessment environments’ that students encountered. Within these settings, a broad variation existed in the diversity of assessment and feedback methods used across programmes as well as levels of support for what might be considered as ‘non-traditional’ assessment methods. Furthermore, Schools or Department could be perceived as supportive or discouraging of staff considering changes in their practice.

In recent years, institutions in the UK such as Sheffield Hallam, Bradford Universities and in Ireland e.g. TCD and UCD have adopted strategic approaches to curriculum reform as a way to integrate changes in assessment practices at institutional level as part of a structured

implementation process. Combining successful policy, process and practice approaches to systemic change, these often resource intensive campaigns involve pre-implementation extensive institutional consultations in the development of agreed shared curriculum frameworks. Such approaches can in turn enable appropriately aligned professional development opportunities to be designed to encourage the desired assessment changes across each programme (Holden 2010; Duffy 2013).

Determining Impact of Different PD Interventions on Assessment

The Irish Conceptual Model for the Professional Development of those who teach in Irish Higher Education (NFETL, 2015) has identified a range of different types of non-formal, informal and formal professional development opportunities available within Higher Education Institutions. In recent years there has been a shift towards Third Level lecturers having appropriate pedagogical training as a part of an ongoing professional development processes (European Commission, 2013; DES, 2011) Interestingly however, research has demonstrated (Rust, 1998) workshops in themselves can elicit changes in practice. As well as providing an opportunity to develop new skills, they build confidence and reassure staff in making changes or provide encouragement through sharing of personal practice associated with being part of group of learners with a shared interest. Informal intentional learning within PD activity associated communities of practice has been shown to be one of the most valued aspects of participating within PD activities (McAvinia, *et al.*, 2015).

There can be an overreliance on standardised institutional forms to evaluate participant satisfaction or to follow up on perceived usefulness of with non-accredited PD (Keane & Mac Labhrainn 2005). Evaluative models such as the Kirkpatrick model (1994) are helpful in providing structure with which to review the impact of different professional development activities. The Kirkpatrick model has been used as a foundation by a number educational researchers to gather evidence, e.g. Rathbun, Leatherman and Jensen (2016); Kreber and Brooke (2001); Stes, Clement and Petegem (2007), with which to identify four levels of impact of training:

1. Reaction - what participants thought and felt about the training
2. Learning - the resulting increase in knowledge and/or skills, and change in attitudes
3. Behaviour - (change in job behaviour due to training)
4. Results - the final results (can be monetary, performance-based, institutional level).

Kreber and Brooke (2001) have added a further complexity to this model in order that it can be used as a tool within a professional development context in order to recognise impact upon individual belief about teaching and learning, changes in student perceptions of teaching performance, student learning, and the culture of institution.

A valuable and practical analytical framework has been developed by Guskey (2000). This model has particular relevance to this topic since it suggested impact from teacher development programmes would be at five different levels: academic reactions; participants' conceptual change (teaching knowledge, beliefs and perceptions); participants' behavioural change (changing practice and use of skills/techniques and different learning strategies); development and change in organisational support for teacher development; changes to student learning and performance.

The methodological framework of realistic evaluation (Pawson & Tilley, 1997) focuses on both the object of the research and also the context within which it operates, to provide a rich picture of what works, for whom, and why (or why not); taking into account the different institutional settings, different specialities and teams to understand the impact of CPD on performance and practice.

A recent study of impact of professional development on teaching and assessment practice by Derting, Ebert-May, Henkel, Maher, Arnold and Passmore (2016) showed that, although teaching practice was more learning-centred, assessment practice did not change as a result. They contend that aligning learning objectives and assessments is challenging and that assessment design needs to be focussed on within professional development programmes.

Postgraduate accredited programmes e.g. the LTTC Postgraduate Diploma in Third Level Learning and Teaching are generally recognised as the main way by which staff can develop skills required to be a lecturer in Higher Education (NFETL, 2015; McAvinia *et al.*, 2015). This can be considered as a substantial investment in staff for each institution. DIT remains the only Irish HEI with the requirement that all new staff should complete their PG Diploma within the first two years of commencing employment with the Institution. Such a strategy not only provides the opportunity for institutions to ensure a baseline level of skills for their staff but could also provide the opportunity to promote or encourage a particular pedagogical approach to teaching. At the least, there is an opportunity to broaden out the range of options from which academics might be able to make a selection of assessment methods. For most Academic Development programmes, formal support is combined with associated support for academics to become reflective practitioners and to be able to make decisions informed by appropriate educational research and personal reflective judgments Jones *et al.* (2016).

If PD is to be evaluated in terms of impact on assessment practice, it is perhaps worth revisiting the original aims of the PD activities. Are the aims institutionally led in order that staff have essential skills and knowledge to reach a baseline level or standard e.g. staff agree (change) and use an agreed set assessment protocols etc. Is there an externally driven need for change to address a particular challenge or particular need (poor student ratings, change in student composition etc.) or is there a developmental focus on participants, their approach to learning and their potential and confidence to be able to make changes in an informed way into the future.

Recognising the potential impact of assessment and feedback on the quality of student learning and (Gibbs, 1999; Boud; 1988), then perhaps the aim of PD design and the nature of these activities becomes more important. Is there a theoretical or applied approach e.g. do they explore educational research related to a particular method and/or how this might be applied in practice? Do they propose a change in assessment design and/or do they report upon their implementation of their design? Do they reflect upon their experience and then propose how they would undertake the same task differently next time?

Finally, if the intention is for PD to impact upon assessment practices then staff will need to be incentivised to make changes and for any changes seen to be formally recognised. Changes in practice need to be done in a way that any proposed changes are aligned with and help to achieve specific institutional strategic goals. Sustainable change is only likely to be achieved where there are opportunities to build confidence and exchange ideas with a structured supportive learning community that is working towards a shared goal. Impact

measures see e.g. Stes *et al.* (2007) might include higher rates of receipts of teaching awards, increased student rates of satisfaction, before and after programme etc.

The Emerging Framework

Based on the range of examples discussed below, we offer a Framework (Figure 1) to capture perceived impact on assessment practice which can be attributed to participation and engagement on professional development programmes/CPD. This framework is intended as an easy-to-use guide for programme teams and academic developers who want to explore if participation in professional development produced worthwhile results. As discussed earlier in the chapter, trying to link professional development with change in academics' assessment practice and resulting improvement in student achievement is very challenging because of the number of intervening variables.

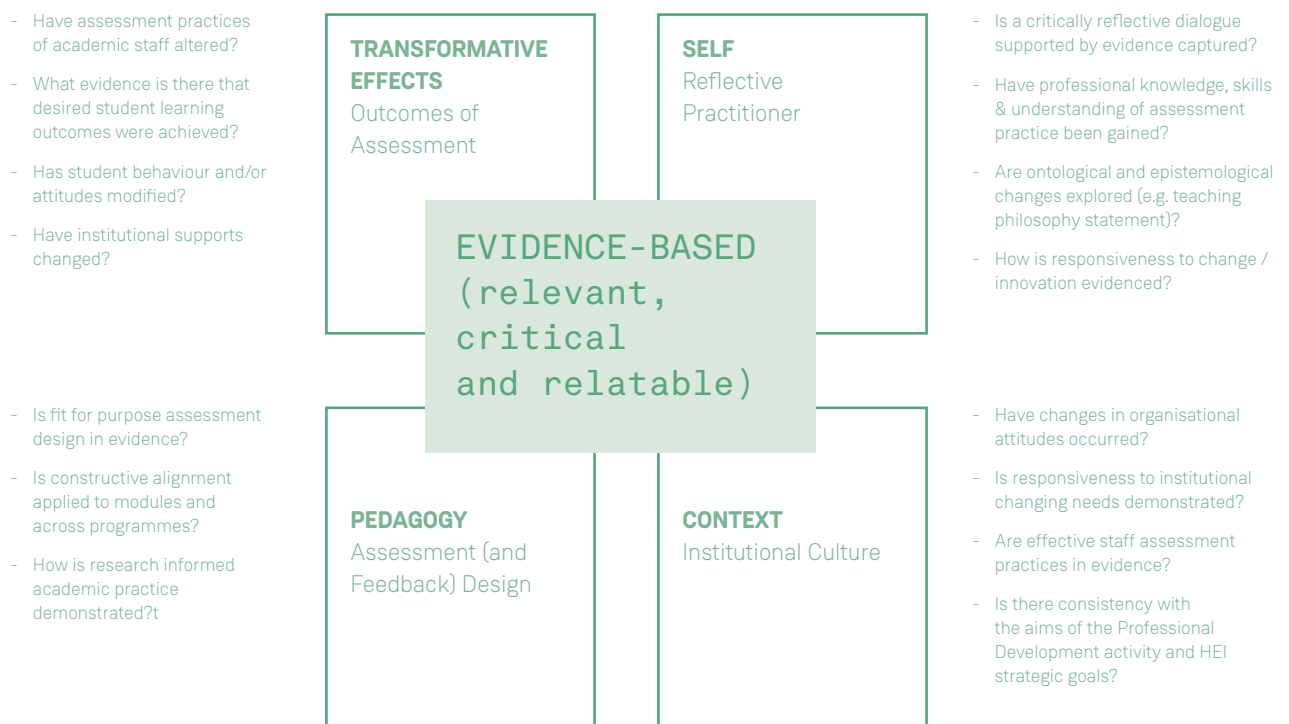


Figure 1
Exploratory Framework for Measuring Impact of Academic Professional Development on Assessment Change

This framework has emerged from our practice in the LTTC of delivering a number of postgraduate professional development programmes since 2001, and can be used to measure the impact of professional learning on teacher behaviour and student learning. The framework is divided into a series of overlapping quadrants. All four aspects are essential and interdependent: The SELF as a reflective practitioner; CONTEXT of the institutional culture; PEDAGOGY of Assessment Design; and TRANSFORMATIVE EFFECTS of the outcomes of assessment. At the centre of the framework is the need to collate and select EVIDENCE to support each of the phases. The framework includes a four-step process for engaging stakeholders with the use of evaluation questions in each phase. These questions are intended to shape decisions about the depth, breadth, and rigor of measurement of assessment practice. Use the trigger questions, which focus on the initial and intermediate outcomes and the programme's goals and objectives. By asking questions about results (e.g., did participants use the assessment strategies? did their student work demonstrate evidence of participant's application of the assessment strategies?) – doing this allows you to measure impact rather than programme delivery.

The key elements of the Self phase are based on achieving a change agent position as a result of engaging in professional development. As a reflective practitioner, the participant looks back at their work done on the professional development programme and identifies their strengths and areas for continued refinement and growth in relation to their current and future assessment practice.

The Context of the institutional culture plays a key role in the framework; this involves having an awareness of disciplinary, institutional, national and perhaps international contexts, and acknowledging the diversity of contexts and the significance of this for teachers' implementation of assessment strategies within professional development learning.

Pedagogy of Assessment Design requires examining the assessment design developed by CPD participants to determine its likelihood of producing the intended results (is it fit for purpose and constructively aligned?). This involves scrutinizing the programme's goals, objectives, standards of success, indicators of success, and theory of change and exploring the programme's clarity, feasibility, strength, and value for practice.

For the phase Transformative Effects of the outcomes of assessment, we are proposing that ongoing PD sessions of learning, collaboration, and application, accompanied by Faculty/School/Department and classroom-based support, over a suitably sustained time period are necessary to incorporate new behaviours and thinking fully into a teacher's repertoire. If the design of professional development is sufficiently robust and long enough to promote deep changes, it can be possible to measure the impact of professional development on student learning.

Finally, Evidence is a key aspect of the whole process of measuring impact of professional development engagement on assessment practice; the framework encourages educators to build pathways with evidence to measure the impact of professional development on teacher classroom behaviour and student learning. You need to determine what evidence to collect, from whom or what sources to collect the evidence, how to collect the evidence, and how to analyze and interpret the evidence. This is an important step and interpreting the data to make sense of it involves drawing conclusions, assigning meaning, and formulating recommendations.

We now provide a worked example to show the framework in use; Figure 2 depicts the four interdependent phases illustrated through the example of the PG Diploma in Third Level Learning and Teaching, as a professional development programme that might be regarded as ‘typical’ in the sector. The emphasis on the development of the individual as a reflective practitioner is captured in the key reflective tasks in the Self quadrant, such as the drafting of a Teaching Philosophy Statement, and the analysis of a significant incident in teaching. The Context quadrant reflects the relationship of this programme to the institutional Learning, Teaching and Assessment Strategy (with external participants addressing the equivalent strategies and policies in their own institutions). This is captured particularly in the module redesign process, whereby institutional templates and policies must be addressed, along with the requirements of any disciplinary professional bodies. The Pedagogy quadrant shows the emphasis within the Diploma as a postgraduate qualification at Level 9 on engagement with the scholarship of teaching and learning, and the integration of literature across the portfolios. In particular, this is expected as part of the curriculum design project and practitioner research project undertaken in Module Two. Finally, we anticipate and seek to promote Transformative Effects for graduates of the programme, their Schools/departments, and ultimately their institutions. In terms of assessment and feedback practices, these effects arise from the assessment and feedback practices within the PD programme in the first instance, and from their own enhanced practices following graduation. Transformative effects are shown through graduates’ participation in informal pedagogical special interest groups within their own teams or departments; their engagement individually or with groups of colleagues in funding calls for Fellowships, technology-enhanced learning projects or National Forum initiatives; and their broader impact on the development of assessment and feedback practices within their institutions. The portfolios form the evidence of impact on the assessment practices of the participating academics in professional development programmes such as the Diploma.

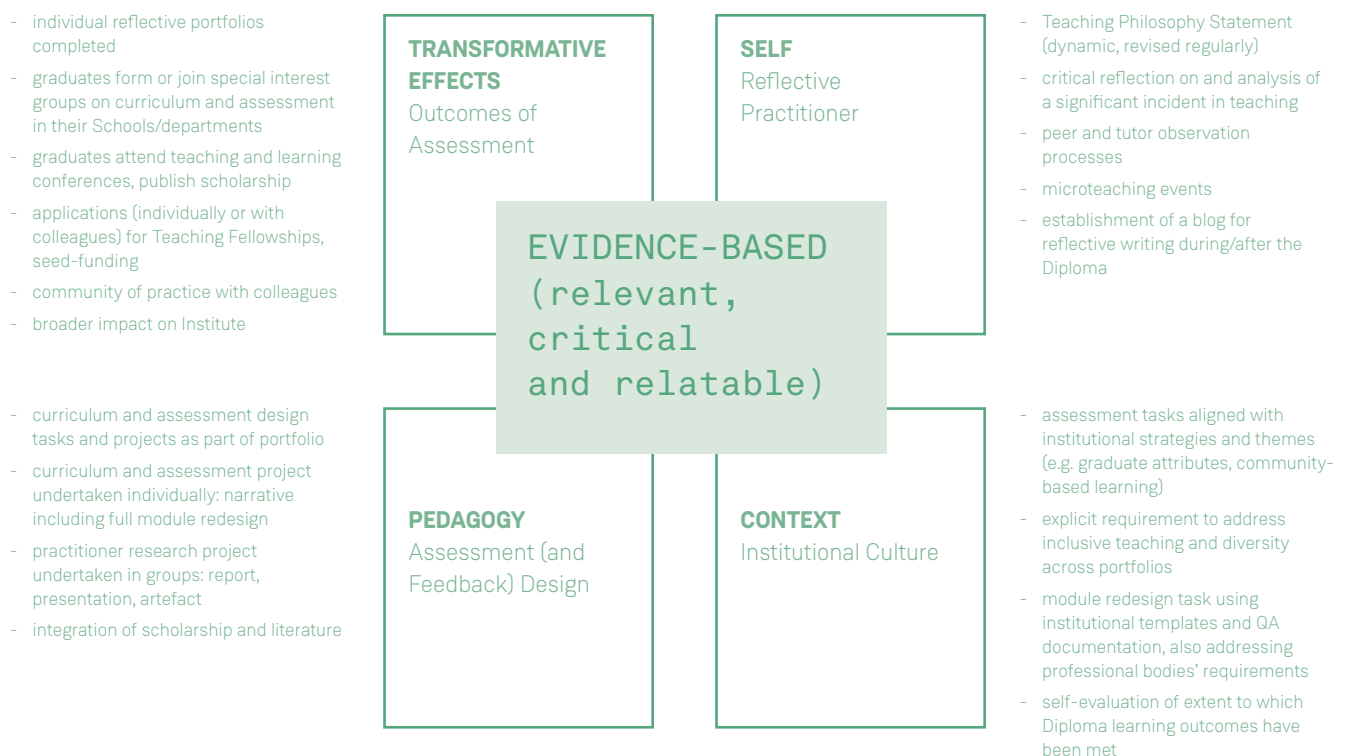


Figure 2:
Worked example of the Framework for Measuring Impact of Academic Professional Development on Assessment Change applied to the Postgraduate Diploma in Third Level Learning and Teaching

We intend to continue work on this framework in order for it to be used as an interactive tool to assist educators to plan, measure and improve how they deliver their assessment practice and develop a series of worksheets to facilitate the planning and implementation of a stakeholder engagement process using the framework.

A range of examples of assessment practice are also shared in this section, including group projects from recent cohorts in the PG Diploma in Third Level Learning and Teaching; the DIT REAP Project; and a range of assessment strategies in LTTC Masters programmes.

Case Study - Postgraduate Diploma in Third Level Learning and Teaching

The Diploma, originally a Postgraduate Certificate qualification, has been offered at DIT since 1999-2000. Participants are teaching staff within and outside the DIT, and they have come from universities, Institutes of Technology, private colleges and industry. The nature of the programme is reflexive and its purpose is to develop reflective practice in participants, enabling them to continue developing their teaching after graduation and throughout their careers. Teaching, learning and assessment methods used all align with this aim.

The assessment strategy of the programme is designed first to support the development of reflective practice, and second to extend practice through independent research. A reflective portfolio in two parts is created by each individual participant, with submissions and assessment on a Pass/Fail basis at the end of each of the two Diploma modules. The portfolio shows a range of examples and evidence from practice, demonstrating the development of that practice through analysis and critical reflection. It should be noted that there are similar examples in accredited PD programmes around the Irish higher education sector (O'Farrell, 2005).

As part of the second module of the Diploma, participants are required to undertake a short independent research project in a topic of their choosing related to teaching and learning in higher education. This originated as an individual project assessed by a report and presentation. In 2015, the decision was taken by the programme team to reorient this component to become a group project. The group practitioner research project would provide participants with an opportunity to undertake group work more akin to that used with their own students, and distinct from teamwork or collaborative research projects undertaken in their professional roles. The original assessed components of a report and presentation have been retained, but are undertaken collaboratively: the report is jointly authored, and all members of the group are involved in making the presentation. In addition, each individual participant's portfolio must also include an individual critical reflection on the experience of group work as a student, and how it will influence their own use of groupwork in teaching in the future.

A challenge to students undertaking practitioner research in the context of a short, intensive programme such as the Postgraduate Diploma has been the importance of ethical procedures in data collection. The timescale in which the practitioner research should be undertaken does not match well with the development of a proposal, submission to, and approval from, institutional fora responsible for ethical clearance. In re-orienting the project towards groupwork, we also agreed to delimit the project to desk-based study and literature review, moving away from data collection and fieldwork. However, participants are invited to frame actions for further research leading out of the projects: this sets up the possibility that they can undertake fieldwork with their students after graduation, with more time to prepare formal proposals and submissions to their institutional ethics committees.

As a final outcome of the research, groups produce a simple “artefact” or resource informed by their review of literature. The brief for the artefact is broad: it can be an infographic, diagram, poster, flow chart, video clip, other interactive material or paper-based guide. Groups are invited to exhibit these resources and present their projects at the Annual Showcase of Learning Innovations, alongside presentations from participants on our Master’s programmes. The resources are shortly to be disseminated via our institutional repository, Arrow (www.dit.ie/arrow) and are designed to be used by colleagues in any discipline. Titles of the most recent artefacts are:

- Gamification to improve first year engagement
- Peer mentoring for international students
- In-class evaluation tools
- Authentic Assessment
- Facilitating Group Work: A Guide to Good Practice

In addition to these projects, a module redesign activity in Module Two of the programme provides excellent insights into cases where participants had already implemented some aspects of assessment strategy change or incorporated their assessment changes as part of a local review – e.g. case study analysis, community based learning, staged formative assessment, and group assessment incorporating self and peer assessment. Sarovan and Trigwell (2015) have recommended that changes in student learning outcomes are a significant aspect of the impact of professional development that should be examined. This argument further supports the importance of module redesigns as outputs because they involve an explicit evaluation of modifications to learning outcomes.

A 5 ECTS credit Assessment and Feedback module has run in the LTTC in 2014-15 and again in 2015-16. One of its goals is that participants develop skills to enable them to reflect upon their current assessment and feedback practice and to undertake a module assessment strategy redesign. There are three assignment tasks; a critical evaluation of a module or programme redesign, an assessment and feedback case study based on a short interview with a colleague and a short reflective piece. Impact on assessment practice is therefore designed in as an inherent outcome of the module. The option to make the case study available through the online Resources for Assessment and Feedback Toolkit (<http://www.dit.ie/teaching/assessment/>) allows for further potential impact. Examples of changes being introduced included case studies integrated across several subjects, reflective journals or blogs, and problem based learning incorporating peer assessment. Evaluation of the module by surveying participants afterwards also provided evidence of the impact on assessment practice that resulted: *‘I have been able to bring back aspects from both the guest lecturer workshop and the technology supports into my current role.’ ‘The practical work in class during the module was a very useful example of how to involve students in the process of learning.’*

An effective approach used throughout all programmes and modules offered by the LTTC is to allow participants to experience assessment and feedback methods as a learner (e.g. online reflective blogs, group assignments incorporating wikis and other collaborative technology and critical reflection) so that they have an opportunity to evaluate them for implementation in their own practice. Audio and screencast feedback on draft assignments have been implemented in four modules and across all three programmes and about 50% of those who responded to module evaluation surveys indicated that they were interested in implementing this method themselves (McDonnell, Donnelly & McAvinia, 2015).

Conclusion and Recommendations

While the idea of evidencing impact is not necessarily a new phenomenon for the third level education sector, research on impact measurement from Academic Development programmes is still at an early stage. This chapter has explored how impact measurement in general, and on assessment practice in particular, has become an increasingly important activity for the third level education sector in Ireland and elsewhere in recent years; yet impact – and how to measure it – remain contested issues in policy, research and practice. We have offered a proposed framework for measuring what impact engagement on professional development programmes can have on academics' assessment practice; this is our contribution to the ongoing discussion and debate about whether, and how, such programmes should measure their impact.

An important aspect of the professional development opportunities discussed in this chapter is that outcomes that lead to an effect on assessment practice are explicitly designed and integrated to professional development programmes. Examples from our own practice in the LTTC such as module redesigns and teaching portfolios have been discussed here.

Key questions that can continue to be explored centre on how impact and its measurement is understood in existing research, policy and practice? What is known about who is undertaking impact measurement in the sector? Why are Academic Development Centres measuring their programmes' impact? What practices and approaches are Academic Development Centres using to measure impact? What are the key challenges and implications of impact measurement on assessment practice for the sector?

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