Diverse And Innovative Assessment At Masters Level: Alternatives To Conventional Written Assignments

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Abstract

Effective and authentic assessment at Masters level can be advantageous to students, employers, funding bodies and other stakeholders where it helps to demonstrate capabilities and competencies as well as academic knowledge. This paper outlines some of the findings of a UK Higher Education Academy (HEA)-funded National teaching Fellowship Scheme (NTFS) project which explored innovative approaches to traditional written assignments at this level, particularly those that demonstrated creativity and employability.
1. Introduction

Universities offering Masters programmes in the second decade of the twenty first century face challenges not previously experienced, in that global competition is fiercer than ever before, with mobile English-speaking students able to study in many nations including a number in continental Europe where English-medium teaching is becoming the norm. For those students unable or unwilling to study away from home, the ready availability of Masters programmes by distance learning offers them wider choice than previously (Casey, 2002, Nunan, 2002).

At the same time, just as students at undergraduate level are being encouraged by national student surveys (in the UK, in Ireland, in Australia and many more nations) to adopt a more discriminating approach to choosing their study locations than previously and regularly see themselves as customers rather than subjects in the learning process, so also are Masters students exercising more rigorous choices nowadays, considering carefully the kinds of learning and assessment experiences they are likely to have.

Higher education institutions therefore need to review the kinds of opportunities they can offer to potential Masters students ensuring they provide up-to-date and engaging curricula, and in particular, ensuring that assessment of such programmes is fit-for-purpose, authentic and fully integrated within the learning process, as well as being reliable, valid and manageable (Brown and Knight, 1994). Quality assurance agencies and Professional and Subject bodies are also frequently interrogating how programmes prepare Masters students for their roles in professions and employment, with the focus frequently falling on how effective assessment processes are at assuring outcomes and standards. Furthermore, in the UK, Ireland, and Australasia there is increasingly a focus on clarifying and demonstrating the kinds of attributes that postgraduate students can be expected to demonstrate, building on their graduate attributes, particularly since changing fee regimes in these nations may well cause students to consider carefully what they can expect from both undergraduate and postgraduate programmes of study. For this reason it is timely to review the status and effectiveness of assessment within Masters programmes, and this is at the heart of a three-year Higher Education Academy funded National Teaching Fellowship project on assessing students at Masters level: ‘Assimilate. For three years NTFS award holders could bid for up to £200,000 for projects to advance understanding of issues related to assessment, learning and teaching. The project team set out to explore the extent to which
assessment methods and approaches used at Masters level are innovative and to seek out best practice in the area for dissemination.

At the outset it was believed that Masters programmes tended to use a relatively limited range of assessment methods in the UK and elsewhere by comparison with undergraduate programmes. The majority of these are principally in written formats including unseen time-constrained exams, essays, reports and theses. It was recognised that Scandinavian and Northern European nations make greater use of oral assessment in M level programmes than do the UK, New Zealand and Australia.

The literature in the field suggests that expecting M level students to be able to write at the level required might be optimistic, and that interventions to improve students’ writing ability might be necessary (Haworth, Perks and Tikly, n.d.).

Nevertheless the wide diversity of assessment methods and approaches described at undergraduate level (Brown and Knight, 1994, Brown, Smith and Race, 2005, Bloxham and Boyd, 2007, Pickford and Brown, 2006) was not thought to be in use at Masters level at the outset of the project. The Assimilate project set out to test this hypothesis and to investigate the range of assessment methods in use at this level, looking principally at innovative methods but also exploring traditional ones and proposing that an understanding of such diversity would be useful to course designers aiming for distinctiveness in the current highly competitive context.

2. Methodology

Initially the project team set out to use second year journalism students as researchers, but this proved impractical, so after the first year the work was undertaken by the project team, particularly the bid leader who at the crucial time took early retirement from a senior management role in a UK university and hence had sufficient time to dedicate to the project. The project team undertook 45 interviews lasting up to an hour with academics in universities in the UK, Ireland, Australia, New Zealand, Singapore, Spain, Denmark and the Netherlands. The contacts were located by the project team and steering group, which included four other National Teaching Fellows using their extensive networks. Interviewees were asked, using semi-structured interviews to outline any assessment innovations in their programmes, to comment on student satisfaction and quality assurance issues, and to indicate how they felt that undergraduate and Masters level assessments could be differentiated.
In some cases, the interviews explored how Masters level assessment manifested itself in various countries, but the majority of interviews were developed into 42 case studies, with further material being provided by interested additional correspondents working with the project team, who became aware of the research through the case studies being provided incrementally on the website at http://assimilate.teams.leedsmet.ac.uk/case-studies.

In most nations at least two different types of Masters degrees are offered, normally Masters by Research and Taught Masters programmes, with some nations offering hybrids also: the Assimilate project concentrated principally on Taught Masters programmes, since Research Masters primarily use some form of dissertation or report on research findings as the principal assessment instrument.

2.1 Innovative M level assessment from the Assimilate project.

While the research suggested that the majority of Masters programmes reviewed mainly used traditional written forms of assessment, especially dissertations, from the interviews and discussions the project team identified three principal groupings of innovations (although these were not fully discrete categories):

- alternatives to dissertations,
- methods of assessment designed to foster employability,
- creative approaches to assessment.

A number of these provided highly innovative alternatives to extended written assignments. Forty two case studies together with three national overviews and five vignettes are available in the Assimilate Compendium on the Assimilate website at http://assimilate.teams.leedsmet.ac.uk/ and these provide a useful level of detail for those wishing to incorporate similar approaches on their own programmes.

The range of subject areas investigated in this study was broad, with a wide variety of disciplines represented, and the institutions at which the respondents were based included elite research universities as well as mass teaching-orientated ones. The interviews principally took place over a two year period. A compendium including the 42 M-level assessment case studies, vignettes and three national overviews has been made available at http://assimilate.teams.leedsmet.ac.uk/
2.2 Alternatives to dissertations

Many Taught Masters programmes continue to use lengthy dissertations as a principal means of assessing outcomes, particularly where students are undertaking individual projects and research. The ability individually to produce extended text has traditionally been highly regarded at Masters level and this continues to be the case on many courses despite concerns around lack of authenticity of assessment. However, an increasing number of programme teams are looking to replace this form of assessment, often with multiple smaller tasks as curriculum designers seek to include evaluation of a wide range of skills and competences, particularly linked to demonstrating employability on graduation, especially through portfolios, which are highly regarded in this respect (Klenowski, Askew and Carnell, 2006). For example, at Central Queensland University (CQU), Rockhampton, Australia, several respondents described assessment strategies that included very short synthesis assignments, case studies and peer evaluated presentations.

One respondent described a ‘Railway Signalling’ subject area on a ‘Railway Signalling and Communications and Operational Management’ masters programme, delivered by distance learning as well as on-site, which utilises portfolio assessment. Higher grades are given for original work that impacts on the local national or international railway context, with all course work completed as a base requirements for the award of a Credit grade. The programme incorporates high levels of personal reflection as an integral part of the learning outcomes, and students are asked to submit weekly reflective journals as well as their weekly submissions. Model answers are provided to review questions, and students are encouraged to reflect on any discrepancies between these and their own answers. In addition, short weekly assignment questions are set for students to demonstrate their ability to apply learnt skills and knowledge to unfamiliar situations.

Another contributor at CQU described assessment on an Organisational Behaviour course where students undertake case studies where they write reports as consultants. On some pathways, students write five 250 word assignments each worth 10 marks (for example, synthesising the results of three journal articles, or discussion tasks, clarifying pros and cons of a case) which are reviewed together. At the same university, even when assignments include a final capstone shorter dissertation, these are preceded, for example, on a Masters Programme in ‘Occupational Health and Safety’ by incremental submissions, including the requirement to produce a project proposal, followed by a progress report and documentation to fulfil the ethics approval process for the university before proceeding with the actual
research.

At Sheffield Hallam University our researchers heard about an ‘M Res’ module on the ‘Philosophy of Research’ programme using a task based on disaster recovery on high profile international events, where the focus was on research design and analysis. Outputs include reports and reflection, with formative feedback being given to students incrementally. The course leader reported that students found the task challenging at first but later appreciated the incremental approach.

Masters programmes in Management for UK and international students at York University use a variety of assignments with plenty of formative assessment opportunities, in order to help students gauge the level of work required. Assessed presentations (including group ones), open book exams and reflective writing tasks form part of a diverse range of assignment types on these Masters programmes, which also include traditional essays, exams and dissertations. This allows students to show their strengths, and in a course with a high proportion of international students, progressively helps them build confidence and capability.

The range of alternatives to dissertations described here suggest that there is considerable scope for M-level assignments to be equally demanding of higher order skills and competences as dissertations, and in many cases to offer positive ways of engaging students actively in relevant tasks.

2.3 Assessments that foster employability

In many nations, undertaking a Masters programme on graduation is likely to be a significant investment not only of time but also of money, and therefore unlikely to be undertaken lightly particularly when prospective students may already be carrying significant student debt burdens. The ‘Postgraduate Taught Experience Survey’ run by the UK Higher Education Academy (Millen, 2012) indicates that at least 62% of their respondents regard improvement of employment prospects as a key motivation for undertaking post-graduate study. On vocationally-orientated programmes, authentic assignments that related to real world tasks tend to be highly prized by students and employers alike (QAA, 2010, Wharton, 2003). As most employment contexts require employees to work in teams, assignments that foster effective team-work and group activity can be particularly valuable and our interviews found useful examples of these.
A respondent at Bedfordshire University described an MSc in Marketing Communication with a strong focus on employability and a number of international students. Assignments include group tasks, but each student had also to produce an individual development portfolio including industry standard diagnostic tests as used in the advertising industry, promotional podcasts and personal reflections: peer assessment is widely used. Some assignments were peer assessed and an assignment close to the end of the course requires students to ‘sell themselves’ as if at a job interview, a skill highly rated in creative industries.

At Cranfield University the Assimilate team were told about a number of ‘Manufacturing Masters’ programmes where part of the assessment diet includes a group assignment where students learn in groups of 4-8, working with live clients on authentic tasks. Teamwork was seen by many of our respondents as a crucial skill for employability. Outputs include project reports, posters, presentations, and other features, for example, Lego models of new factory layouts, and employers and clients are involved in the assessment. Presentations are high profile and given to audiences sometimes exceeding 100 peers, academics and representatives from industry and commerce, providing a highly authentic competitive environment.

On a Masters level programme in ‘Learning and Teaching in Higher Education’ at the University of Cumbria, a respondent described the use of a digitally-enhanced patchwork text approach where Pebblepad enables groups of four or five students to write collectively throughout the module and peer review ‘patches’, which together with an individual reflection comprise the major assignment for the module, with an ePortfolio replacing cumbersome paper portfolios.

A respondent at Leeds University described a ‘Computer Assisted Translation’ module on a taught Masters degree where assignments are geared towards enabling students to demonstrate authentic skills. Students work in teams on real-life scenarios and engage in peer assessment, which is important in developing interpersonal skills. The course leader believes that the course is highly demanding and requires more front-loaded effort to set up, but has high benefits as it gives students experiences that match the kinds of activities they will be required to undertake in their professional lives.
At UNITEC Institute of Technology in New Zealand the team heard about a Masters of Business that uses an incremental assessment approach, with multiple small assignments included in the final assessment. Some students have the opportunity to work on live assignments with local companies, in which they immerse themselves in a consultancy experience, producing overview reports of real use to the companies concerned. The course leader is aiming to build IT competence as well as business skills, so assessment involves at least five contributions to online discussions of key current topics and involves high levels of personal reflection.

While many students work in groups on learning tasks, not all are assessed collectively. Students on an ‘MSc in Computing and Information Technology by Distance Learning’ at the University of Northumbria are assessed individually on the extent to which they have developed consultancy skills gained while undertaking live projects with IT clients through a critical review which is accompanied by a business plan for the establishment of a consultancy company.

Approaches to assessment at M-level as described by our interviewees demonstrate that authentic assessments can add value to students in terms of their careers on completion. Many of the students on these kinds of programmes are studying part-time alongside part-time (or more usually full-time) work, which makes work-relevant assignments even more of a priority. Our interviewees indicated that a high proportion of their students cite career advancement as a prime rationale for undertaking post-graduate study, so where students can undertake assignments based in their workplace contexts, the study can add real value to their work.

2.4 Creative approaches to M level

The majority of our interviewees provided us with examples of highly original approaches to M-level assessment, a number of which are designed to promote reflection, self-awareness and metalearning, which many regard as characteristics of Masters level programmes. Additionally, the ability to act independently, think on one’s feet and stay calm in stressful contexts is also prized at this level. Several of creative approaches involve the use of innovative technologies to support and engage M-level learners.
For example, on an ‘MSc in Building Surveying’ at Leeds Metropolitan University, the tutor runs modules on Property Asset management, including distance learning options, with regular use of web-based peer-to-peer and peer-to-tutor communication. In a global industry where much communication is currently by virtual means, competence in using technologies is regarded as essential. Assignments included scenarios that involved students in learning teams working on simulations where they were property managers for accountants in various cities. They were thus able to gain pre-submission feedback via wikis on their outputs and personal reflection was also assessed.

At Central Queensland University on a ‘Masters in Learning Management’, students who are often themselves teachers, design computer-based simulations and other kinds of authentic computer-based assessments, which link directly to the work environments in which they are currently based.

On an innovative programme at Massey University in New Zealand, the tutor allows students on some modules a free hand to negotiate their own assignment formats, including fiction, painting and reflection, with the responsibility being placed on students to ensure that the assignments they hand in are mapped fully against the published learning outcomes for the programme. This leads to some highly original outputs including pieces of creative fiction, paintings and fictionalised diaries, which are accompanied by reflective accounts of the learning processes involved. Few programmes in our study offered this very high level of flexibility in assessment, however.

Creative approaches we learned about sometimes included radical reframing of curriculum delivery. For example, an assignment on one module on a social sciences Masters programme at Griffith University in Queensland Australia comprises an intensive week where students come together to work on interpersonal skills using videoed role plays of counsellors and clients, under the supervision of trained tutors. Interpersonal skills are of high importance in this assignment, requiring high levels of mutual trust and support. Alongside the assessed practical work, they are also required to submit individual 500-word commentaries and personal reflections on the task.

At the same university, another respondent described a Masters programme in ‘Genetic Counselling’ which uses a range of authentic assessments including coursework, multiple choice tests and practical assignments. In this subject area also, where graduates will work in very sensitive contexts with potential parents making difficult decisions about their future families, the abilities of students to
demonstrate empathy and sensitivity are paramount, hence the need for different kinds of assignments. Students are assessed individually on their ability to unravel complex genetic problems, building genetics family histories and working on authentic case studies. Role plays, skills tests, short written responses to ethics issues and reflective journals are also used as well as some traditional exams.

A Masters in ‘Development Practice’ at James Cook University, Queensland, Australia principally delivered to international students, prepares them to work in sustainable development contexts. Their assignments are highly authentic and designed to be useful to the indigenous communities with whom they are working. For example, following concentrated periods of on-site research, students make presentations to the communities concerned including systems models, risk assessments and development plans. High levels of interpersonal skills are required for the preparation and communication of data to specialist audiences and laypersons, and both written and oral skills are tested in live contexts. A longer written assignment was also included at the time of the interview, but the necessity for this was being further considered.

Creative Masters level assignments can enrich programmes, engage students and reduce the likelihood of drop-out, which tends to be higher for students studying alongside paid employment. Those we interviewed spoke positively about the value of using innovative approaches to assessment, rather than over relying on lengthy written assignments, because, particularly on Masters programmes related to professions, programme leaders were keen to see fitness-for-purpose (Brown, 2011) as a key component of their assessment strategies. However, it is of course necessary to consider carefully how comparability of diverse assessment methods can be assured and that criteria are applied consistently and fairly. Our respondents suggested that returning regularly to the specified learning outcomes and ensuring that assignments aligned with these was therefore highly important.

3. Conclusions

Most students on programmes led by those we interviewed are self-funded, so they are likely, having made an investment in their own personal and professional development, to have high expectations of the usefulness and relevance of their programmes and particularly the means by which they are assessed. Authentic learning opportunities and assessment tasks are highly prized by students as evidenced in, for example the Post Graduate Experience Survey (Millen, 2012). Good Masters curriculum and assessment design is imperative to enhance recruitment and success rates and
programmes that use authentic and valid assessments are likely to be well regarded by students, employers and quality scrutineers. The research outlined here set out to explore the extent to which diverse assessment at Masters level is used within the higher education sector, and the project team were encouraged by the outcomes, while recognising that traditional written assignments remain the norm. By disseminating the outcomes, we hope to extend more widely the range and scope of approaches in use, thereby, we suggest, improving the student experience of assessment.

4. References

A compendium of examples of innovative assessment at Masters Level at http://assimilate.teams.leedsmet.ac.uk/ (accessed August 2012)


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