

# Transitions to Master's level study Pointers for practice



Learning from International Practice: Postgraduate Taught Student Experience



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The Learning from International Practice, Postgraduate Taught Student Experience project ran from January 2012 until the end of July 2013. It addressed the theme "what is mastersness?" and encompassed a number of strands, including identifying and collecting concrete case studies to illustrate practices developed, adopted and used by higher education institutions around the world to help their students reach master's level.

This paper provides an overview of the main practices and initiatives described in the case studies. The detailed case studies can be found at: http://www.enhancementthemes.ac.uk/sheec/learningfrom-international-practice/taught-postgraduate-student-experience. The paper gives an insight into how real academics are tackling PGT learning and teaching issues in their programmes and modules, rather than summarising the literature on these topics. However, the literature has been used by the project team to inform thinking around the topic.

Transition to postgraduate level study is important. Through engaging with the higher education sector - via events and workshops and discussions in its Working Group and Wider Consultative Group - the project found, in accordance with O'Donnell et al (2009)<sup>1</sup> that "postgraduates are a diverse group, with different levels of ability in terms of academic practices, and varying degrees of familiarity with the skills necessary for success at postgraduate level in higher education". This strand of the project sought to identify and record practice which institutions use to assist their students to make this transition to Master's level study. For ease of reference the case studies have been organised into three broad themes, adapted from Lines' chronology of the student journey: Getting there; Settling there; Being there; Staying there; Moving on from there.<sup>2</sup> We have conflated Getting and Settling and Being and Staying as we think this suits the Master's student's (rather shorter) journey, better. This essentially covers all aspects, from preparation and induction, through study oncourse, to the development of appropriate skills and attributes at Master's level, that will have been acquired by the time of leaving and that take students on to the next stage. The case studies mainly detail practice but also include some helpful materials and research findings that shed light on "mastersness". Some of the case studies apply to more than one stage but have been allocated once to the most appropriate category.

<sup>&</sup>lt;sup>'</sup>O'Donnell, V, Tobbell, J, Lawthom, R and Zammit, M Transition to postgraduate study: practice, participation and the widening participation agenda *Active Learning in Higher Education* 2009 10:26 http:alh.sagepub.com/content/10/1/26

<sup>&</sup>lt;sup>2</sup> Lines, David (2013) Guide to the Outcome of the Themes <u>http://www.enhancementthemes.ac.uk/themes-outcomes-guide</u> Last accessed 15-07-2013

## Summary of practices in case studies

Stage	Activity/subject	Key Practices	Case study links
Getting there/Settling there	Orienting international students	Bridging study skills gaps; British HE expectations and assessment; mixed cultural teams	7,8,12
	Developing student confidence at outset	Blended learning; innovative assessment strategies	5
	Getting diverse groups of students to the same level	Marketing and Pre- entry information; peer support	10
	Meeting diverse needs	Employability development; self- assessment; eportfolio	13
	Securing immediate engagement at Master's level	Transitional activities; 'outduction'	18
Deing they a / Otoring	Research: transition arrangements for postgraduate students	Postgraduate transition research	23
Being there/Staying there	Ensuring subject breadth at Master's level	Research readings	14
	Integrating disciplines at Master's level	Multidisciplinarity, projects and professional practice	15
	Creating research teams and belonging	Multidisciplinary research nodes; community of peers	19
	Encouraging communication amongst distance learning Master's students	Web-based distance learning; assessed group work; leaderless tasks	22
	Materials: Writing - What makes it Master's?	Writing at M level	1
	Research: Establishing and using networks	International students; autonomous working; IT literacy	11
	Research: Activity-led learning for PGT students	Activity led learning	16
Moving on from there	Real world application of knowledge	Consultancy projects; Work based projects; Internships; Academic / service integration; Community-based projects in the field; Review of	2,3,4,9, 21, 24
		businesses' operational management practices; Integration of management skills and science Non-academic	6
	Instilling professionalism	Non-academic foundational skills; professional networking	0
	Understanding professional context and reflection	Intellectual independence and experimentation; portfolio; reflection	17
	Curriculum development for practitioners	Joint UG / PG teaching	20
	Research: Pathways to PhD in Australia	Research component	25

## Master's level study: getting there and settling there

"Students often view a Master's course as a huge mountain that they have to climb and we envisage our role as guiding them up the mountain from base camp, helping them to develop the skills that will enable them to negotiate what are often steep paths of learning."

(CS05)

During its deliberations, the project encountered a number of important themes. One key message was that the Master's student body is highly diverse - taught postgraduate programmes attract students from around the world, from different educational cultures and at different stages in their educational and professional careers - and this diversity is often reflected in a single Master's student cohort. Although some students will develop Master's attributes faster than others, the aim is that they *all* achieve them by the end. Related to this, timescales can be a challenge to achieving the full range of Master's outcomes. Several of the case studies provided for the project sought to address aspects of these issues.

#### Practice: Orienting international students

Learning Methodologies (CS08) is a compulsory but non-credit bearing three-week module offered by Queen Margaret University to (predominantly) international students on a range of master's programmes in the School of Health Sciences. It aims to bridge study skills gaps by enabling the development of awareness and capabilities regarding Master's level learning, and preparing students for their forthcoming study programmes - which have a strong emphasis on student directed learning and practice-based learning. Developed in response to student feedback, by the end of the module, participants should know what is expected at Master's level. There is interest in expanding the module to all international students in the School and also in supporting distance learning students using material from this module.

The University of Stirling's Financial Reporting academic module (CS07) introduces international students to the expectations and norms of British higher education and discipline specific communication skills. Students complete literature and essay exercises - embedded within the module during the first semester - thus gaining hands on practice with feedback and an assessment that counts for 10% of the module weighting. Students are led through British higher education expectations, including how to write accounting and finance essays and exam questions, review literature and reference academic sources. Practical skills are developed as students are, for example, asked to grade mock essays.

The University of Northumbria (CS12) aims to better understand their international students' learning backgrounds in order to develop effective learning and teaching strategies to ensure these students realise their potential. It is widely accepted that international students often find the need to apply critical analysis a major difference between home and studying in the UK. The cultural background of the student is significant, with many finding it challenging to criticise academics and this in turn is linked to their confidence in expressing their opinion. The practice of students working in mixed cultural teams as part of their postgraduate learning is well established in management education. It is based on sound pedagogy and prepares the students for their future careers. However, many international students find it difficult to engage in discussions and team work activities and this can have a negative effect over the whole master's programme. Here, online materials and collaboration can be particularly valuable to international students in supporting processes of reflection and review. In addition, the support programme at Northumbria is designed to increase the student's critical analysis skills to Master's level.

#### Practice: Developing student confidence

On the MA Childhood and Youth Studies at University Campus Suffolk (CS05) students enter the

course from a wide variety of different backgrounds, academic experiences and abilities. It attracts many mature students who may have been out of formal education for some time and are often juggling paid employment, family commitments and post-graduate study – with consequences for their academic knowledge and levels of self-confidence to study at M level. To combat this, staff use a blended learning combination of traditional teaching methods, technology enhanced learning and innovative assessment strategies. The programme endeavours to develop students' confidence and foster meaningful engagement via collaborative student work. Through the use of mind-maps for theoretical structure, group webblogs to encourage debate and develop critical, concise analytical writing, and webquests, the students develop critical media literacy skills through investigation of their chosen specialist area of interest. Active participation is required from the outset and the task orientated mechanism enables immediate feedback opportunities from both academic staff and fellow students. This further motivates students to meaningfully engage with the subject area under discussion, thus creating a community for learning.

#### Practice: Getting diverse groups of students to the same level

The University of the West of Scotland's MSc Adult Nursing and MSc Mental Health Nursing programmes (CS10) must meet university and professional body requirements, including reaching specified academic standards and undertaking mandatory practice learning experience. Students are routinely awarded Recognition of Prior Learning (RPL), which shortens the duration of the programme and "this can result in an inadequate amount of time to 'think through' and ultimately consolidate their learning". The MSc programme has been redesigned to redress some of these issues, including the introduction of more robust marketing information, pre-induction resources to provide students with underpinning knowledge prior to commencing the programme, and more extensive research supervision. Support mechanisms have been strengthened, including peer support for graduates buddying those from "hard" science with those from social science backgrounds to help each to adjust to nursing theory.

#### Practice: Meeting diverse needs

The University of Aberdeen's I-SEE (Individualised self-assessment to enhance employability) (CS13) is a compulsory non-credit bearing course utilising the University's virtual learning environment. The initiative provides an online resource to extend employability provision for PGT students. Students complete a self-assessment of employability skills, which aligns with the University's Taught Postgraduate Attributes. Based on their self-assessment, students receive individualised, automated responses with tailored feedback, which identifies development areas and signposts appropriate support. During their studies students are required to record and reflect on their progress using an e-portfolio, as a prompt list to help identify their own skills and attributes, to use within future employment applications. It is anticipated that I-SEE will be extended as a compulsory course for all PGT students in the College of Life Sciences and Medicine and the possibility of incorporating it into the PG research students' programme will also be investigated.

#### Practice: Securing immediate engagement at Master's level

Kingston University and St George's University of London are among only a few universities within the UK to offer a fully funded Master of Research in Clinical Practice (MResCP) (CS18). This interprofessional programme is designed to build research capacity within the NHS, supporting the growth of a clinical academic workforce. It seeks to develop a wide range of research knowledge and transferable skills, enabling Nurses, Midwives and Allied Health professionals to develop best clinical practice and improve quality of care and service delivery by leading, generating and disseminating scientific research. Students are seconded from their place of employment to study full time or part time. Each cohort is diverse with respect to professional discipline, clinical roles, employment grade and educational experience, and many students will be unfamiliar with the expectations of masters' level study. For full time students the need to complete 5 x 15 credit modules and a 105 credit dissertation within a year necessitates immediate and all-inclusive engagement at master's level. Preentry activities, the induction programme and the learning, teaching and assessment strategies within the first term are focused towards supporting this transitional phase. Activities and strategies include

opportunities to gain personal experience, partake in discussion, personal and group reflections, as well as receiving feedback on performance from tutors and peers. The university is now looking at supporting "outduction" more fully. Academic supervisors continue to support the student when the course has ended and current developments include establishing an alumnus and academic network to continue to support graduates to develop their clinical academic career. Seminars and workshops facilitated by research experts support graduates to develop further research on return to clinical practice and assist with the transition to PhD registration.

#### Research into practice: transition arrangements for postgraduate students

Having recently developed and endorsed a new policy on New Arrivals and Transition for undergraduates, the University of Greenwich found that this raised questions about its primary focus and about the differences between undergraduate and postgraduate transition. The University established an institutional research project around postgraduate transition and CS23 outlines some of the key findings. Master's students are often assumed to be successful university students and thus progression to Master's level study involves 'more of the same', or 'taking things to the next level' (O'Donnell et al 2009, 27). The researchers posited that postgraduate students are challenged by this transition and set out to investigate whether the well-developed policies and practices that the University had in place to support undergraduate students were fit-for-purpose for postgraduate transition. They concluded that they needed to amend policy and practice to enhance Masters students' experiences of transition and identified a number of challenges, including processes and procedures to support students who are not fully prepared, so that they do not flounder. It is important that staff do not expect all students to have the same levels of expertise and skill when they start the programme and that they might have to go back to basics for some aspects of their courses. Postgraduate students' expectations need to be managed in relation to the level of study, what is required and the notion of 'scholarship'.

## Master's level study: being there and staying there

"Giving advice on 'how to read a paper' at the start of the course is useful to the students, and reassuring them that they will get more expert at reading as the semester progresses can help to mitigate...concerns"

(CS14)

"Work at Master's level is an 'I can't describe it, but I know it when I see it' situation"

(CS01)

As well as specific activities designed to assist the transition to postgraduate study, some of the case study examples included programmes of study where measures to meet the identified needs of Master's students were designed into the course.

#### Practice: Ensuring subject breadth at Master's level

At the University of Glasgow, the Research Readings in Computing Science course is compulsory for all Masters in Computing Science students (CS14). The course runs throughout the first semester, and is worth 20 credits (200 study hours). Each week covers a different area of computing science, and is led by an academic member of staff with research expertise in that area. The academic member of staff chooses four key research papers, which all students read before the discussion session. Students submit one-page summaries of the papers at the start of the session, and students who have been assigned the task of doing in-depth reviews of the paper lead the whole-group discussion of them. Marks are allocated for the summaries, the in-depth reviews, class participation, and for an examination for which all papers (approximately 40 in total) are examinable. The course ensures that all students gain a critical understanding and awareness of a wide range of computing science topics, not simply the areas in which they will specialise in their Master's programme.

#### Practice: Integrating disciplines at Master's level

Since emerging global challenges require companies and organisations, increasingly, to integrate their engineering and business capabilities, the School of Engineering at the University of Glasgow offers a suite of PGT programmes in Engineering & Management (CS15). Each programme was designed primarily for students with an undergraduate engineering background, but little business and management experience. Students develop knowledge and skills of business management principles and techniques in the first semester and then advance their technical expertise in the second, through a choice of discipline specific engineering modules. In the second semester students also get firsthand experience of managing an engineering project through a multidisciplinary integrated system design module, allowing development of project management, quality management and finance skills. The programmes provide students with a critical insight into the state of the art of their engineering discipline and of the current state of professional practice. Students are required not only to understand advanced techniques related to their area of study and professional practice but also to demonstrate a capacity for critical evaluation of the techniques and methodologies and to apply them to open-ended problems. Students are also required to demonstrate a capacity to deal with complex issues in a systematic and creative manner and to be able to communicate the results of their work to a professional level. These characteristics are exercised via a major individual project and via an interdisciplinary group project.

#### Practice: Encouraging communication amongst distance learning Master's students

Leeds Metropolitan University's School of The Built Environment has a suite of MSc programmes. One of the suite is the MSc Facilities Management. This is a web-based distance learning course which has been delivered via VLE for approximately 14 years. Some modules are common between MSc programmes. There are two intakes per year onto the MSc Facilities Management; thus for each delivery there are two cohorts of Facilities Management students, and students on other programmes taking the modules in question. Many of these students are located overseas. Students undertake a number of individual projects but, to encourage communication amongst distance learning students on these programmes, assessed group work has been designed into certain modules (CS22).

The Master's aspect manifests itself particularly in that the group work is a "leaderless task". Students are working as collaborative teams and have to decide for themselves how to allocate the various tasks and responsibilities. They are then expected to perform the task with minimum supervision. They only refer back to the tutor if there is a query of interpretation of the brief. The tasks themselves are quite realistic and could be expected to be actual projects for senior (i.e. Master's level) professionals, such as a Facilities Manager. The course organisers find that participating in group work overcomes some of the perceived isolation of distance learning and that working with students from different countries/cultures broadens their experiences of working with others.

#### Practice: Creating research teams and belonging

At Uppsala University, Master's students are included in the institution's research teams (CS19). Students are also organised in research nodes in which several researchers, from different departments, hold meetings concerning a common study area to share and discuss different disciplines' work on a similar topic. The Node is organised and quality assured by a researcher, but most activities and communication is conducted with, and by, students. Students are the Node's resource both for its organisation and for the individual research projects conducted within its framework. The Node provides selected Master's students and researchers the opportunity for joint research, supervision and teaching as well as connection to international networks. A node is focused on a particular research area or topic which several departments, programmes and researchers share. Also, the node updates the research community with developments in technical skills, e.g. through software workshops. By recruiting selected students to the node, researchers are able to include Master's students in their own research. The student's dissertation topic is framed according to the current research topic of the researcher, who serves as supervisor. The student thus becomes involved in up-to-date research projects and the supervisor is enabled to invest teaching and tutoring effort in the Master's student who by her/his own studies supports the work of the researcher. The Master's students of the node are supported, and expected, to commit to state of the art research among other researchers, e.g. write publications, apply for grants and organise workshops, seminars and conferences. In short, by the end of the Master's programme the student will be prepared for subsequent doctoral studies and to partake in a community of peers.

#### Materials: Writing - What makes it Master's?

James Atherton, semi-retired from University of Bedfordshire, (CS01) has prepared a series of notes that set out the qualities he would look for in Master's level work. These were originally intended to provoke debate with fellow tutors about Master's level work, but they "escaped into the wild" and are now available on the web, The notes acknowledge the challenge to academic staff who "recognise work at Master's level is an 'I can't describe it, but I know it when I see it' situation" but also that programme participants need some idea of what to expect and what to work to. Atherton has deliberately refused to create a more definitive set of guidance notes "because it is the status of the notes as something to be argued with or about which makes it work at this level".

#### Research: Establishing and using networks

Master's programmes allow learners to develop their potential in a less structured way compared to undergraduates, who rely more on the support of tutors and instructors. They are expected to be more autonomous and play a more active part within a learning community where professional development occurs by collaborative discussion. The shift from a learning style based mainly on the tutor's guidance, towards a more relational, collective one, where learners collaborate with fellow peers, is a fundamental component of "mastersness" and ultimately professional satisfaction. Academic staff on the MA/MBA International Business at the University of Greenwich (CS11) undertook formal research to analyse the networks generated by students during their studies. This found that students often rely quite heavily on "authority" (tutors) rather than their peers. Moreover personal networks were often established only with peers from the same nationality, resulting in a split of allies based on ethnicity. In a global world, where culture is essential for management, the researchers concluded that this might generate some concerns which need to be addressed, although the development of more robust networks across ethnic groups would require time and appropriate training for both tutors and students. They also considered the experience of students in internship and found that engaging in online networks is a demanding task. Some students might require specific training on the use of certain tools and the cohort presented real heterogeneity in terms of IT literacy. Specialist training prior to internships could enable learners to link their professional experience with relevant academic knowledge more effectively. Acknowledging these issues should influence the development of new teaching and learning strategies of international postgraduate students, and particularly those courses which are delivered on-line.

#### Research: Activity led learning for postgraduate taught students

The ALL for Masters project explored how to incorporate Activity Led Learning (ALL) into postgraduate taught programmes in the Engineering Management department of the Faculty of Engineering and Computing at Coventry University (CS16). Undergraduate students already learn in this way and in September 2012 the faculty moved to a new building that had been purpose-designed for ALL. The development of ALL and the design of learning spaces was evidence-led, building on good practice observed and studied elsewhere across the world, for example in problem and project based learning, CDIO (Conceive, Design, Implement, Operate) and similar approaches.

ALL requires a discovery approach to learning, leading to acquisition of deep and sustained knowledge and understanding. This ethos is particularly pertinent to master's studies, with learning outcomes and assessment criteria drawing on the higher level characteristics of analysis, synthesis and critical evaluation (Bloom's Taxonomy). The mixture of about 75% international full-time PGT students, with many mature UK and international students bringing wide ranging work-place experiences, demands a careful approach to changes that impact on the student experience. Prior to beginning their PGT programme, many students have only experienced learning by rote and memorisation of facts for examinations and some have not been in education for many years. ALL can be an extremely challenging experience, but if done well, this approach brings with it great rewards to the learning potential of students.

The ALL for Masters project aimed to extend the good practice to the PGT students in the faculty, but first it was necessary to investigate whether it was feasible to implement ALL for PGT programmes and if so, how this should be adapted to meet the different needs of the PGT student population. Based on the amassed evidence a report was produced that set out a series of recommendations and proposed a framework for revising PGT programmes to incorporate ALL.

## Master's level study: moving on from there

"The module takes students out of their comfort zone into the messy nature of the real world"

(CS03)

"What occurs during graduate school outside of class and how students engage with others during the course is just as important as the subject matter being taught"

(CS06)

"The intention is that students reflect upon how Classical scholarship is pursued and how they might pursue it"

(CS17)

"Masterness for us means moving beyond just knowledge and information – it implies the ability to be creative in finding solutions to real world problems. Much of this can only come from experiential learning – actually doing things in the field in teams" (CS21)

"The relationship between small business and student often developed to the extent that the need for "mastersness" emerged to a sometimes dramatic extent" (CS24)

Many Master's programmes are designed specifically with employability in mind and the project found that Master's level study involves "becoming" part of a community or culture - whether in academe or other professions. Several of the case studies aim to provide real, meaningful work-related learning at Master's level – either as an optional adjunct to more traditional study or embedded and compulsory with a view to developing postgraduate attributes that will be useful on leaving the course.

#### Practice: Real world application of knowledge

The MA in Luxury Brand Management at Regent's University, London (CS02) offers students the option of undertaking a consultancy project as opposed to a more traditional dissertation. This option provides an additional opportunity to apply the knowledge gained on the programme in a practical and real way and also a chance to develop their own skills base and enhance their employability in the sector. Students work on a live project, which the client needs doing now, acting as management consultants, and working within time constraints to develop costed proposals and recommendations that may well be taken up by the client. The consultancy project has an increasing number of students wishing to pursue this route and employers regularly requesting repeat projects. The key challenge in terms of 'mastersness' is to ensure that the consultancy projects are sufficiently complex and yet not too onerous for the students in the time allowed.

Case study CS04, Making the Most of Masters (MMM), a partnership between the universities of Aberdeen, Edinburgh and Stirling, also aims to enhance student employability and attributes by providing opportunities for master's students to undertake work based projects as an alternative to the traditional master's dissertation. Working with taught postgraduate (PGT) programmes, MMM seeks to instil personal responsibility in learning, and the initiative supports both programme staff and PGT students in making the most of the experience. The placement differs from a traditional UG placement or period of work experience because it must fulfil the assessment criteria for a master's dissertation. Projects can involve data analysis, modelling, reviews, method optimisation and comparison,

equipment development, laboratory or field work - depending on the business needs, the student's interests and the programme requirements. In addition to the research competency required to produce a dissertation at master's level, students must demonstrate professionalism when producing a piece of work on behalf of an external organisation. The student takes ownership to assess the feasibility of the project and plan accordingly, manage the relationship between themselves, their academic supervisor and external supervisor, and ensure their dissertation is finished on time and adheres to the expectations and requirements of both parties. This is evidenced by the fact that many organisations treat the student in a similar manner as they would an external consultant and many academic supervisors can take a more 'light touch' approach than with a traditional dissertation.

The Master's internship module at Coventry University Business School (CS03) aims to embed both subject mastery and employability skills within a range of master's business and management programmes. During the internship module, students spend 8-12 weeks completing a real business project identified by a host organisation. The work is real, and credit bearing; consequently quite different from many of the work placements typically found at undergraduate level. As a consequence, it requires a higher level of autonomy, initiative and confidence. The research is more critical in its evaluation and the reflective element requires a greater sense of self-awareness. "The module takes students out of their comfort zone into the messy nature of the real world". The initial challenge was finding discrete projects which allowed students to undertaken a master's level piece of work rather than just completing a work experience placement. In addition the projects need to be across the different functions within business. The University found that "organisations, having had a successful experience with one internship student, came back for more". How could they develop the skills of their students so that they could be certain that they were equipped to successfully undertake the internship project?

The University of Stirling's MSc in Psychology of Sport (CS09) integrates academic study and sport service facilities, enabling postgraduate students to have access to high-level sport psychology experiences. Students acquire their knowledge and demonstrate subject-specific (sport psychology) skills through job placements in the university teaching hospital, working with elite athletes who compete very close to, or at, the highest levels in sport. In order to be able to engage effectively and appropriately with postgraduate professional practice and development opportunities, students need to be operating towards postgraduate level. There is a steep learning curve for students to undertake and close supervision, guidance and availability by staff is essential to mentor the students into and beyond 'mastersness'.

The Master's in Development Practice (MDP), at James Cook University, Australia (CS21), is a combined academic and field-based degree program designed to educate and train a new generation of development practitioners who will be responsible stewards of the Earth's resources and will lead by example, fostering attitudes of social equity to all, as they master and use certain specific knowledge areas and skills. The programme aims to instil core competences and skills at Master's level. Working closely with their colleagues—other skilled practitioners and technical specialists—in both small and large, public and private, community-based and global teams, MDP graduates must display mastery of skill areas which include, among others:

- Project management skills,
- Policy intervention strategies,
- Participatory techniques,
- Risk management, and
- Cross-cultural and intercultural skills.

The programme focuses on exploring options, creativity in finding solutions, engagement with local people and with practitioners and facilitation skills: "Masterness for us means moving beyond just knowledge and information – it implies the ability to be creative in finding solutions to real world problems. Much of this can only come from experiential learning – actually doing things in the field in teams".

Unitec Institute of Technology, Auckland, New Zealand (CS24) has devised an elective paper in its Master of Business degree entitled "Small Business Consultancy". The primary learning objective is to have students work with a small retail business over a 12 week period to (a) carry out a review of operational management practices in the business; and (b) recommend a series of actions the owner could take to enhance his or her management capability. In the first cohort, five postgraduate students were recruited to work as implants in five separate businesses, and progress was overseen by an advisory board drawn from both industry and academic sources. Each student worked within the assigned business, typically for a full day each two weeks, and sought to validate the owner's self assessment of their business, through participant observation, and through talking with staff, clients, and other key stakeholders. The student reported back regularly to a governance forum of academics and practitioners, and was able to share "war stories" with the other four students enrolled in the programme. At the end of this process, the student delivered a verbal presentation and written consultancy report that presented recommended future directions for the business. The relationship between small business and student often developed to the extent that the need for "mastersness" emerged to a sometimes dramatic extent. One business owner explained his plans involving capital investment of around US\$ 60,000. He asked the student "what do you advise I should do?". In another instance, the student was placed in a position of having to tell her husband and wife management team that their business was rapidly heading for disaster, primarily due to the two marital partners' total failure to communicate as business partners. These were situations where successful resolution required high level competence and capability - in essence, a true demonstration of "mastery" that went well beyond the level that could reasonably be expected from undergraduates.

#### Practice: Instilling professionalism

The Masters of Science in Geographic Information Systems Technology (MS-GIST), at the University of Arizona (CS06) integrates science and cutting-edge systems technology, with management skills for use in government, corporate, non-profit, and academic settings. It is designed to meet the educational needs of working professionals and recent graduates seeking employment in the geospatial industries. Participating students can have either extensive or limited experience in GIST. The MS-GIST program meets in the evenings (Monday-Thursday), does not require a master's thesis, and can be obtained in one calendar year. The emphasis on professional development, in particular, makes it master's level. This is expressed both by having subject matter focused on professional applications and problems and by integrating the development of professional business skills that can aid a student in finding employment upon graduation - "in other words, what occurs during graduate school outside of class and how students engage with others during the course is just as important as the subject matter being taught". Unlike traditional master's level education, non-academic foundational skills are emphasised in the MS-GIST through internships, professional events, networking activities, and conference attendance.

#### Practice: Understanding professional context and reflection

At the University of St Andrews, taught Master's programmes consist of a taught component and a dissertation. In Classics' four MLitt (CS17) programmes, the taught component comprises a core 'themes and methods' module and two 'thematic' modules. The core module has a number of features that aim to promote self-reflection and self-awareness in scholarly terms, as well as offering an intensive introduction to a wide range of methodological and theoretical approaches and issues in the discipline. The core module runs throughout the year and consists of fortnightly (though sometimes more frequent) seminars. The aim is to help MLitt students understand their own professional context and reflect upon their own learning and current position. Students are expected to provide their own content and try to find ways in which the approaches and issues discussed in the seminars might affect their own work. There is an expectation of a high level of intellectual independence and experimentation at Master's level. The formal manifestation of this aim is the 'portfolio.' This is a specific piece of highly reflective coursework which is compiled across the year in addition to the various coursework essays, etc. that the students submit. It consists of seminar

'Position statements' and reflective posts. Overall, the intention is that students reflect upon how Classical scholarship is pursued and how they might pursue it.

#### Practice: Curriculum development for practitioners

Curriculum Development for Practitioners introduces students (who are all teachers/educators) of Murdoch University (CS20) to the principles and practice of curriculum design and development. It aims to give them practical experience of the kind of skills and processes educators need in order to develop curricula in their own workplaces or contexts, while helping them to critically consider a range of historical and contemporary issues and controversies surrounding curriculum design. The unit has been designed for people with some experience of teaching and students are enrolled in a variety of different courses, reflecting their professional backgrounds and interests. It is offered to undergraduate students in the Diploma of Tertiary and Adult Education, and the Bachelor of Education, but it is also offered as an elective unit in the Master of Education. Some of the students taking this unit teach in schools, but others teach at Technical and Further Education (TAFE) colleges, universities, community organisations or private adult education providers; a number of them are nurse educators. There is little difference in the content of the undergraduate and masters' level versions of this unit, but a great deal of difference in the expectations of students. Students taking the unit as an elective in the M.Ed programs are expected to demonstrate a greater breadth and depth of knowledge of curriculum theory and the principles of curriculum design. More importantly, they are also expected to demonstrate greater capacity for critical thought and reflection on the processes and issues involved. Differences in expectations are reflected in the different marking criteria used for undergraduate and postgraduate students' work.

#### Research into practice: Pathways to PhD in Australia

The revised Australian Qualifications Framework (2013) now requires all masters (level 9) programs to include some research (the extent is not specifically identified). Therefore, it could be argued that in Australia, one of the indicators of "mastersness" is the exposure of all students to research through research methods and, at least, a small scale research project. This research study from the Australian National University (CS25) outlines some recent developments in Australia regarding alternative pathways into the doctorate, including from a coursework (taught) masters. Such a pathway has not been common in many disciplines, with Honours or a research masters being the traditional route to a PhD. However, with greater numbers of domestic, mature-age students returning to postgraduate study and substantial increases in international student enrolments, universities are increasingly providing alternatives. Through interviews with a range of staff and students, this study set out to determine whether a coursework masters provided candidates with a supportable pathway into a PhD. One of the main recommendations from the research was the inclusion of at least one, preferably two, courses related to research processes in each coursework masters program.