Teaching at a Distance in a Digital Age: Perspectives from the Philippines

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Abstract

This qualitative study examines the pedagogical perspectives and priorities underpinning the course design practices of 10 academics engaged in 'open and distance e-learning' (ODeL) at a small single-mode distance education (DE) institution in the Philippines. It also looks at the impact of teaching with Web technologies on course design practices, and its implications for faculty development.

The study found that these academics' use of Web tools and resources relates to the importance that they give to independent learning and collaborative learning. However, the study also found that academics hold orientations to teaching and learning with Web technologies that do not necessarily conform with the extremes identified in the literature. Rather than subscribing to either an independent learning approach or a collaborative learning approach, which are presented in some studies and theoretical discussions as opposing approaches underpinned by contrasting orientations to learning, some teachers adopt different pedagogical approaches for different learning contexts, and/or they attempt to balance seemingly oppositional pedagogical approaches. This flexibility comes from their having multiple orientations to learning, which develops from an awareness of the need to take into account, and address tensions among, a range of design factors, including the diversity of learners, disciplinary contexts, and curricular goals. This flexibility in design practice may also be understood as a manifestation of the convergence of an open learning philosophy, distance education pedagogies, and e-learning technologies.

Based on these findings, an ODeL teaching skills framework is proposed as part of a holistic and integrated faculty development programme in ODeL. Also outlined are some strategic directions for policy development and organisational restructuring for effective ODeL implementation.

Declaration and Word Count

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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Statement

Before I commenced the EdD programme, my administrative work at the University of the Philippines - Open University (UPOU) consisted of coordinating course materials development, providing support for academic program development, and running workshops for faculty on instructional design and online teaching. I was also a member of the University Academic Personnel Board, which recommends policies regarding hiring, retention, promotion, and tenure of faculty. Thus, for my assignment in the first core course in the EdD programme, Foundations of Professionalism, I decided to focus on professional identity formation among distance education (DE) faculty. Drawing from readings on academic professionalism taken up in the course, as well as research on the role and status of DE in the academy, I did an analysis of constraints to professional identity formation among full-time DE faculty and proposed a reconceptualisation of professionalism for DE faculty based on the concept of 'democratic professionalism' (Furlong, Barton, Miles, Whiting & Whitty, 1999). Writing this assignment, which I subsequently submitted for publication[1], provided me with a broader and more theoretically informed perspective on practical issues in academic development that I had been grappling with as an academic administrator.

The assignments that I wrote for the Methods of Enquiry (MoE) courses and the Specialist Course in International Education focused on aspects of my 'extension' work — i.e., work outside of my regular teaching and administrative responsibilities at UPOU — as a teacher 'trainer' in ICT (information and communication technologies) integration in the secondary education curriculum in the Philippines. My assignment for the MoE 1 course was a theoretical and methodological framework for a proposed study on the impact of teaching with computers on the pedagogic practice of Filipino secondary school teachers, based on a review of the literature on the interplay between pedagogy and technology in ICT integration. In my assignment for the MoE 2 course, I reported the findings of an alpha test of courseware that I was helping to develop at the time for use in Grade 7 Science, Mathematics, and Social Studies in Philippine public secondary schools. This

[1] The paper "Going the Distance: Towards a new professionalism for full-time distance education faculty at the University of the Philippines" was published in Volume 8 Number 3 (November 2007) of the *International Review of Research in Open and Distance Learning*.

evaluation was based on a framework derived from a review of the literature on the design, development, and evaluation of interactive multimedia educational materials. Finally, for the Specialist Course in International Education I wrote a critical analysis of national policy directions in ICT integration in Philippine schools from a human development perspective, which eschews a narrow technology-centred approach to ICT integration in favour of a "people-centred" capacity-building approach. In the conclusion to this paper, which I presented at a national conference[2], I recommended that national policy on ICT integration focus on the use of ICTs to broaden access to education, teacher professional development in ICT integration, and the development of digital content resources in the local languages.

In the next stage of the EdD programme, namely, the institution-focused study (IFS), I continued with the line of enquiry that I had pursued in my assignments for the second, third, and fourth taught courses, namely, how teaching and learning with computer technologies in public secondary schools might be improved. At this point, however, I began to focus on teacher professionalism as a research interest. For my IFS I undertook a qualitative study of dimensions of and factors influencing the development of the technological pedagogical content knowledge (TPCK or, more recently, TPACK) (Mishra & Koehler, 2006) of four teacher educators from the Philippines. Through the study I hoped to contribute to the formulation of appropriate models of teacher professional development (TPD) in ICT integration in the Philippines based on a framework derived from theories and empirical findings on teacher knowledge, teacher learning, and the dynamics between technology and pedagogy. Thus, I presented the theoretical framework and key findings from my IFS at several national and regional conferences[3]. More recently, a national assessment of ICT integration in public secondary schools in the Philippines undertaken by a group of researchers of which I was team leader produced further empirical evidence of the critical importance of TPD in ICT integration, among others. The national assessment also points to the relevance of the TPACK framework in the design of such a TPD programme.

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[2] The paper "Reflections on ICTs in Basic Education Policy and Practice in the Philippines" was presented at the 2nd National ICTs in Basic Education Conference held on 6-7 September 2006 at Waterfront Hotel, Lahug, Cebu City, Philippines.

[3] These included the National Intel Teach Pre-service Conference held on 8-11 February 2009 at Tagbilaran City, Philippines; the 3rd National ICTs in Basic Education Congress held on 10-11 September 2008 at Cebu City, Philippines; the 5th International Conference on Teacher Education held on 24-26 July 2008 at Manila, Philippines; and the Asia Policy Forum on ICT Integration in Education held on 19-20 September 2007 at Pasig City, Philippines.

Soon after completing the IFS but before I had formulated my thesis proposal, I returned to teaching full-time at UPOU. Almost immediately after my return, I became involved in program administration, this time of the Master of Distance Education program that I had helped to conceptualise a few years earlier, and faculty development in teaching online for UPOU's full-time and affiliate faculty. But in contrast to my approach to administrative work prior to commencing the EdD programme, this time my appreciation of academic issues and my recommendations for how to address them were informed by a research-based perspective and the theoretical grounding that I had acquired during my work in the taught courses of the EdD, and the IFS. For example, I designed a workshop on rapid instructional design for faculty members based on concepts and principles derived from Anderson's (2008c) conceptualisation of the roles of the online teacher, and a framework for designing online courses derived from Anderson's (2008a) attributes of effective online DE, Beetham's (2007, 2009) approach to e-learning activity design, and Thiagi's (1999, 2008) rapid instructional design methodology.

As I found myself once again preoccupied with academic and administrative issues specific to DE, I realised that my thesis would have to be on an aspect of my work at UPOU. Hence my thesis focus on the course design practices of 10 colleagues at UPOU in a context characterised by a shift from print-based DE to Web-based DE — a shift that appears to have taken place at UPOU while I was on study leave. This thesis topic emerged from my concern that the rapid adoption of new Web technologies could have a negative impact on DE philosophy and practice at UPOU. I found this possibility alarming, and I became overly critical of colleagues whom I thought were buying into the e-learning 'hype' (Conole, 2004). However, following a review of the related literature, I understood that I was/am witnessing a development in DE that was/is not unique to my institution, and it is important to ground our practice and theorising of online DE in "the accumulated body of distance education theory and research" (Calvert, 2005, p. 227). Thus, in choosing what I perceived to be a key issue within my own institutional and professional context as the focus of my thesis, I would be drawing from, as well as contributing to, the international/global scholarly discourses on online learning, DE, and open learning.

It was in the process of conceptualising the thesis and writing the thesis report that I began to consciously establish connections between, and weave together, insights derived from my research on TPD in ICT integration in schools on the one

hand, and faculty development in e-learning and DE in higher education on the other hand. While these fields are not unrelated, I had not until then attempted to theorise the linkages between my work as an academic developer in a DE institution and my 'other' work of designing TPD programs in ICT integration in public schools. More specifically, I realised that the TPACK framework which I had applied in my IFS was not irrelevant to my analysis (in the thesis) of the factors that influence course design practices in online DE and the corollary issues and challenges in helping academics to become skilled and reflexive practitioners of online teaching in DE contexts.

One of the contributions of the thesis is a TPACK-based ODeL (open and distance e-learning) teaching skills framework for DE faculty. I intend to publish this framework for scrutiny by DE scholars, and to test and refine it as the basis of a blended design for faculty development in ODeL that I have proposed as part of a programme of research in the University of the Philippines System with the aim of improving the academic performance of units based on findings from the 2012 internal academic assessment. As for the recommendations for institutional policy development and organisational restructuring that I outline in the concluding chapter of my thesis, I feel that it is important for me to share these with colleagues at UPOU when opportunities to do so present themselves. One of the latter is a series of roundtable discussions on UPOU's 'openness' (or lack of it) as an open and DE university in a digital age that we started a few months ago and which shall culminate with the publication of policy papers at the end of the academic year (i.e., in March 2013). As I participate in these discussions, I find myself once again reflecting on and making connections between what I have learned from my readings and the research I have undertaken in the EdD programme, and what I have learned from my professional practice as a DE practitioner, academic developer, teacher 'trainer', and advocate of effective teaching with technology. And so my development as a scholar and practitioner continues.

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CHAPTER 1 – INTRODUCTION

1.1 The Broad Context: Evolution of Course Design in Distance Education

Since the mid-1990s significant changes have been taking place in the field of distance education (DE) as a result of rapid advances in information and communications technology (ICT). Many DE institutions have shifted from a print-based mode of delivery to online delivery characterised by the use of virtual learning environments (VLEs) and various Web technologies (Haughey et al., 2008; Bates, 2008). The adoption of these online technologies has changed the organisation, practices, and cultures of DE (Abrioux, 2001; Bennett et al., 2009; Cleveland-Innes, 2010) in ways that DE scholars have characterised as a generational shift. For example, Taylor (2001) refers to the use of interactive multimedia online and computer-mediated communication (CMC), or the 'intelligent flexible learning model', as fourth generation DE. He also refers to the 'flexible learning model', defined by the use of campus portals and CMC with automated response systems in addition to interactive multimedia online, as fifth generation DE.[4] Anderson & Elloumi (2004) likewise characterise the use of computer conferencing as fourth generation DE, and use of the 'educational Semantic Web' as fifth generation DE.[5]

The delineation of 'generations' in terms of the technologies in use highlights the key role of technology in DE (Anderson & Dron, 2011; Bates, 2008). DE is differentiated from other modes of education principally by the "quasi permanent separation of teacher and learner throughout the length of the learning process" (Keegan, 1993, p. 120) which requires among others the use of learning materials in various media and technologies for two-way communication and interaction between teacher and learner and among learners (Keegan, 1980; Moore & Kearsley, 2004). Web technologies are particularly attractive to distance educators because they enable multiple forms of interaction and dialogue that can bridge the distance between teachers and learners (Anderson, 2008c; Calvert, 2005; Garrison, 2009). In addition, the Web provides access to a vast array of interactive and multimedia learning resources that can be used to design learning environments for learners in diverse

[4] The first three generations of distance education in Taylor's five-generation scheme are: 1) the correspondence model using print media; 2) the multi-media model using multiple, one-way media; and 3) telelearning model using audio and video conferencing, as well as broadcast radio and television.

[5] Anderson and Elloumi also refer to five generations of distance education, with the first three generations making use of correspondence study, mass media, and synchronous technologies.

circumstances (Bates; 2008; Haughey et al., 2008; Tait, 2010). The use of an online portal and VLE[6] further enables DE institutions to support both independent learning and collaborative learning through "increasingly complex pedagogical structures" (Haughey et al., 2008, p. 15).

Flexibility and adaptability of design are said to distinguish 21st century DE from older forms of DE (Garrison, 2000; Haughey et al., 2008; Tait, 2010). Industrial era DE deployed "standardised, normalised and formalised procedures for design and delivery" (Peters, quoted in Burge & Polec, 2008, p. 238). In contrast, in online DE the boundary between course development and course delivery is increasingly blurred and "former course development roles... are being deconstructed and reinvented" (Abrioux, 2001, p. 1) as the role of teachers in the design of pedagogically effective learning environments receives renewed emphasis (Anderson, 2008; Bennett et al., 2009). Moreover, DE course designs are increasingly 'resource-based' (Calvert, 2005; Naidu, 2007) — i.e., featuring online learning activities organised around Web-based resources (Jara & Fitri, 2007) — and, in some cases, 'integrated' (Mason, 1998) or 'online discussion-based' (Jara & Fitri, 2007), where the course contents are "more fluid and dynamic" because they are created during synchronous and asynchronous online collaborative activities (Mason, 1998).

At the University of the Philippines Open University (UPOU, described in section 1.4), resource-based course development has been encouraged since 2003. It became the main course development model in 2007 when the university shifted to Moodle, an open source VLE which allows for the creation of courses featuring digital resources and online activities directly on the Moodle system. New courses are being developed under a resource-based course development contract, and faculty assigned to teach (called faculty-in-charge or FICs) already developed courses are encouraged to supplement the print modules (or replace them altogether, if warranted) with open educational resources (OER). FICs are also encouraged to integrate online discussion forums, and they are free to use open source Web tools, such as media sharing sites and Web-based conferencing applications, to enhance course delivery.

These changes in course design and delivery have led UPOU's current administrators, most notably the Chancellor[7], to coin the term 'open and distance e-

[6] A VLE is "a collection of integrated tools enabling the management of online learning, providing a delivery mechanism, student tracking, assessment and access to resources" (JISC Infokit, 2012).
[7] The Chancellor is the equivalent of a Rector or Vice-Chancellor in the UK system.

learning' (ODeL, defined in section 1.3) to refer to UPOU's DE practice[8]. This study focuses on the ODeL course design practice of a group of UPOU faculty who are integrating in their courses various types of Web resources and experimenting with learning activities using various Web applications. These faculty members stand in sharp contrast to other UPOU academics whose use of Moodle is rudimentary[9] but who are also not utilising other Web tools and resources in their teaching. The study seeks to understand the pedagogical rationales for the faculty's use of Web technologies, and their approaches to and perspectives on ODeL course design, as well as the implications of these for faculty development. The study is underpinned by the assumption that understanding their ODeL design practice can provide insights into how innovative practice in online DE can be fostered across the institution (see section 1.5).

1.2 The Research Focus

The study focuses on three questions:

1) What pedagogical perspectives and priorities underpin the faculty's use of Web tools and resources in their courses?
2) How does their use of Web-based tools and resources impact on their course design practices?
3) What are the issues and challenges in the design of online DE courses from the point of view of these faculty members?

Beetham (2007) defines tools as "artefact[s] designed to support a specific task function" (p. 35), and resources as "content-based artefacts that use various representational media such as text, images, moving images and sound" (p. 33). Examples of Web-based tools are email, discussion boards, instant messaging, Web editors, blogs, wikis, and video-sharing applications. Examples of Web-based resources are e-books, online articles, websites, and podcasts. The first research question assumes that faculty members select and use Web tools and resources with

[8] In February 2012, UPOU organised the 1st International Conference on Open and Distance e-Learning. More than 200 participants from 20 countries participated. The conference website is at http://icodel.upou.edu.ph/

[9] For example, such faculty members post few if any learning resources, create poorly designed discussion forums (e.g. it is not clear how the forum might help learners achieve the learning objectives; the discussion topics are not well formulated; there is no teaching presence to facilitate the discussion when necessary), and do not utilise the quiz, chat, and wiki features of the VLE. In one Faculty, about 15 per cent of the courses taught in one semester did not use the VLE, with the FICs providing minimal online support using email and relying on occasional face-to-face tutorial sessions.

particular pedagogical purposes in mind. These pedagogical purposes are dictated by particular pedagogical contexts and pedagogical orientations which vary among teachers. Hence the diversity of Web-supported pedagogical practice.

Web technologies are not neutral and their integration in learning situations has been likened to "a 'trojan mouse', which teachers let into their practice without realising that it will require them to rethink not just how they use particular hardware or software, but all of what they do" (Sharpe & Oliver, 2007, p. 49). Hence the second research question on the impact of teaching with the Web on the faculty's course design practice, or how they plan, structure, or orchestrate a learning situation, such as a course or a learning activity within a course (Beetham & Sharpe, 2007). In particular, the study aims to identify shifts in the focus of the faculty's design practices and their perspectives on DE course design which occur in the process of teaching with Web technologies.

Pedagogical change is complex and often challenging not only for individual teachers but also for the institution as a whole. Thus, the third research question focuses on what the faculty members consider to be the key issues that should be taken into account on the basis of their "experiential and perceptual engagement" (Pachler & Daly, 2011) with course design in a specific online DE context.

1.3 Definition of Terms

In this section I clarify how certain key terms are used in this study.

E-learning refers to "learning facilitated and supported through the use of information and communications technology" (JISC, 2012) such as computers, interactive whiteboards, digital cameras, mobile phones, online communication tools, and VLEs. E-learning may take place in the context of campus-based instruction as well as in DE contexts, and the domain of e-learning includes e-learning in the classroom, online learning, and blended learning.

Blended learning is a pedagogical approach "that combines face-to-face meetings with deliberately designed online activity" (Haythornthwaite & Andrews, 2011, p. 13) such as online discussion forums to discuss particular course topics outside of regular class hours.

Online learning is defined by Ally (2008) as "[t]he use of the Internet to access learning materials; to interact with the content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to

construct personal meaning, and to grow from the learning experience" (p. 17). Online learning may be a component of conventional on-campus education, as in blended learning, or the sole mode of educational delivery, as in DE.

Distance education (DE) is "planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organisational and administrative arrangements" (Moore & Kearsley, 2004, p. 2).

Online distance education (or **online DE**) is a term used in this study to distinguish DE conducted via the Internet from other forms of DE, such as correspondence study and radio- and television-based DE. The term also distinguishes online learning where learners and teachers are geographically separated, from online learning in blended learning contexts (cf. Forsyth et al., 2010).

Open and distance e-learning (ODeL) refers to "forms of education provision that use contemporary technologies to enable varied combinations of synchronous and asynchronous communication among learners and educators who are physically separated from one another for part or all of the educational experience" (Alfonso, 2012, n.p.). It may be considered an expansion of the term 'open and distance learning' or ODL, which refers to "[a] learning system that combines open learning characteristics with distance delivery" (Abrioux, 2006b, p, 10), to include the adoption of e-learning or online learning methodologies. In this study, ODeL is used synonymously with online DE to refer to the mode of DE used at UPOU.

Teaching with the Web refers to the use of Web-based technologies for instruction. One can teach with the Web in blended learning contexts or in DE contexts. In the current study, 'teaching with the Web' is used synonymously with 'online teaching' or 'teaching online'.

Web technologies is used in this study to refer both to 'new' or more recent Web applications — also known as 'Web 2.0'[10] — and 'older' or more established

[10] Synonyms for 'Web 2.0' that are used in the literature on Web technologies in higher education include 'social software' (Anderson, 2007; Minocha, 2008; Mason & Rennie, 2010) and 'social media' (Conole & Alevizou, 2010). It includes the following tools and services: media sharing, media manipulation and data/web mash ups, social networking, blogging, social bookmarking, recommender systems, wikis and collaborative editing tools, and syndication. These tools enable user participation in the creation of digital artefacts and their publication and distribution over the Internet (Conole & Alevizou, 2010; Mason & Rennie, 2010). In addition, they support "pervasive and multiple formats of communication" and patterns of interconnectedness that support groups, networks, and collectives or aggregated users (Anderson, 2008b, p. 225). It is important to note, however, that these affordances

Web applications, such as hypertext. It is used here synonymously with the term 'technologies for online learning' which McGreal & Elliot (2008) use to refer to Web technologies that are "opening up different opportunities for educators" in DE (p. 143)[11]. In higher education these Web applications may be used either in conjunction with or as part of (bundled into) a VLE or learning management system (LMS).

Course design is used in this study synonymously with 'educational design' and 'design for learning'. The latter is "the process by which teachers — and others involved in the support of learning — arrive at a plan or structure or design for a learning situation," which could be "as small as a single task or as large as a degree course" (Beetham & Sharpe, 2007, pp. 7-8). In this study, the level of course design referred to is the design of learning activities and the learning environment within a course (as opposed to a programme) that individual faculty members engage in when they are assigned to teach a course.

1.4 The Institutional Context

UPOU is one of seven universities comprising the University of the Philippines (UP) System, which is recognised by law as the national university and widely considered to be the country's premier university[12]. Established in 1995 "to democratise access to quality higher education", UPOU is the only constituent university (CU) of the UP System dedicated to the provision of DE programmes. It has its own governing, administrative, and academic bodies, and it exercises the same degree of administrative, fiscal, and academic autonomy as the other CUs. Thus, UPOU may be described as a single-mode distance institution within a conventional or campus-based university system. Abrioux (2006b) refers to this as the "university within a university" model, an institutional arrangement designed to "protect the ODL culture in a dual-mode institution" (p. 5).

"are not necessarily the preserve of 'Web 2.0', but are, in fact, direct or indirect reflections of the power of the network: the strange effects and topologies at the micro and macro level that a billion Internet users produce" (Anderson, 2007, p. 14). As Conole & Alevizou (2010) state, the functional characteristics of Web 2.0 should be seen "within the context of computer-mediated communication and networked digital media" (p. 9).

[11] These technologies include: interactive multimedia resources, streaming audio and streaming video, audio chats and voice over Internet protocol, web conferencing, instant messaging, mobile computing using handheld and wireless technologies, peer-to-peer file sharing, blogs, RSS and atom feeds, wikis, virtual worlds, computer games, and learning objects.

[12] A state-funded institution, UP receives a third of the budget for public higher education in the Philippines (consisting of more than 600 state colleges and universities) while accepting only the top two per cent of Filipino high school graduates into its programs. The university marked its centennial in 2008.

UPOU offers three undergraduate programmes, 24 graduate programmes, and two doctoral programmes in disciplines that in Becher's (1989) classification of knowledge domains may be said to be 'soft applied'[13]. This reflects one of UPOU's goals, namely, "to offer distance education degree and non-degree programmes and courses in various disciplines, *especially those that contribute to national development*" (UPOU, no date, emphasis added). All of UPOU's programmes are designed for part-time students, and they are cohort- and term-based.

Majority of the students are adults between 20 and 40 years old (Flor et al., 2008) with full- or part-time employment. About 80 per cent are based in the Philippines and the rest live and work abroad. Most are Filipino citizens. The offshore students, as the non-Philippine-based students are called, are dispersed in more than 40 locations worldwide, including the United States, United Arab Emirates, China, Hong Kong, Japan, Korea, and many other countries where there are overseas Filipino workers. Although envisioned to be an open university for the millions of adult Filipino learners in the country and abroad[14], UPOU's total student population has never gone beyond 3,000. Reasons for the low enrolment include relatively stringent admission policies (compared to the admission policies of other Philippine higher education institutions), relatively high tuition fees (compared to fees charged by other state colleges and universities), and the fact that it was not until recently that UPOU was allowed to offer a full undergraduate programme[15].

UPOU's faculty complement consists of 23 full-time mostly middle-ranking faculty members (i.e., with the rank of Assistant and Associate Professor[16]), and about 200 part-time faculty majority of whom are faculty affiliates from the other UP units[17]. The small complement of full-time faculty is part of a strategy adopted by UPOU's founders to forestall doubts about the quality of DE, which is perceived by

[13] UPOU offers programmes in such disciplines as environmental management, development communication, and public administration. The full list of programme offerings is available at http://www2.upou.edu.ph/academic-programs.
[14] The Philippine population is estimated to be more than 90 million. The estimated number of Filipinos working overseas is around nine million (Unlad Kabayan, 2011).
[15] The Bachelor of Arts in Multimedia Studies was approved for institution only in 2007. A second Bachelor's programme, the Bachelor of Education Studies, was approved for institution in June 2011. The institution of a new programme requires approval not only by UPOU academic committees and the University Council but also by other units of the UP System with similar or related programmes, the Academic Affairs Committee chaired by the Vice-President for Academic Affairs, and the President's Advisory Council which includes the Chancellors of all constituent universities of the UP System.
[16] This would be the equivalent of Senior Lecturers and Readers in the UK system of academic ranks.
[17] Affiliate faculty are regular faculty of the other UP campuses handling a course at UPOU on top of their normal teaching load in their own campus. Part-time faculty who are not from the other UP units, or who comes from organisations outside of the UP System, are called adjunct faculty.

some to be inferior to face-to-face teaching, by having the faculty of the more established units develop and deliver most of UPOU's courses (Arinto, 2007).

UPOU's course development and delivery structures were patterned after those of The Open University of the UK[18]. In its first years of operation, course packages were developed using the course team approach (Brigham, 1992), where subject matter specialists work with an instructional designer, editor, and other academic support staff to develop print-based modules for each course. A module was designed to be a 'standalone' self-instructional text or manual following Rowntree's (1994) tutorial-in-print model. Most of the course authors and reviewers were full-time faculty of the bigger UP campuses, and UPOU's full-time faculty members acted as the instructional designers. At the course 'delivery' stage, a course would be handled by an FIC and a team of tutors. Monthly face-to-face tutorials were held at learning centres established in various parts of the country. Invigilated examinations were also held at the learning centres.

In 2000, the decision was made to conduct tutorials online using an open source LMS. Online tutorials were introduced initially for students who were unable to attend the monthly face-to-face tutorial sessions. As UPOU students became more widely dispersed geographically and as the Internet became more accessible to teachers and students alike, online tutorials became the default tutorial mode for all courses. The same print course packages, however, continued to be used and the course development model remained unchanged. One or two courses used multimedia course packages specially developed for these courses, while several others began to include Web resources in their course reading lists.

In 2007, UPOU shifted to a Moodle-based online learning platform. Aside from an increased emphasis on resource-based course design, this also marked a shift to the development of new courses by what Power (2007, p. 65) refers to as "a reduced version... of the course team approach" where individual faculty members both design and deliver the courses asynchronously online. The faculty member may be assisted by an instructional designer in some cases, but more often than not in recent years he/she works alone to create a course[19]. Furthermore, the approach to

[18] The OU UK is credited with major contributions to the theory and practice of distance education, and its educational model has been highly influential among other DE providers around the world (Dron, 2002; Keegan, 1996; Kirkwood & Price, 2006; Moore & Kearsley, 1996).

[19] Brigham (1992) calls the author with assistant approach the 'author/editor model', and the unassisted author approach the 'intuition model'.

course design appears to be more 'ad hoc' rather than 'planned' or 'centralised' (Davis, 2001, p. 10). Aside from using the Moodle VLE and older online communication tools such as instant messaging services, some of UPOU's full-time faculty are constructing course blog sites and experimenting with Web-based conferencing systems and social networking services. For already developed courses, the old printed course modules have not been phased out. However, FICs are expected to update the modules by supplementing them with relevant resources and by introducing new learning activities and assignments.

In general, the DE model at UPOU is one where students (i) engage in guided independent study of mostly text-based course packages; (ii) participate in computer-mediated discussion and collaborative learning activities conducted asynchronously through a Moodle-based VLE; (iii) submit assignments; and (iv) for most courses, sit for a proctored final examination at a UPOU learning centre or testing centre[20]. But as subject matter experts and as members of an institution (UP) where faculty members enjoy a high degree of 'academic freedom', FICs have a great deal of latitude regarding what learning resources to include, what learning activities to implement, and what assignments to require. They are also given the same teaching assignments each year, which provides opportunities for course enhancement and redesign.

This study focuses on one group of UPOU faculty and examines their pedagogical rationales for integrating various Web tools and resources in the courses that they teach. It looks at the factors that influence their ODeL course design practice, and the policy and practical implications.

1.5 Significance of the Study

In focusing on online course design practice in a DE context, the study responds to a concern expressed by DE scholars like Calvert (2005) that as "distance education is becoming synonymous with non-contiguous online learning and the latter is dominating the research agenda....new researchers in the area do not ground their work in the accumulated body of distance education theory and research" (p. 227). This may well be due, according to Guri-Rosenblit (2009), to the tendency to conflate the terms 'distance education' and 'e-learning' particularly where DE is understood only as technology-mediated learning, without the key element of the physical

[20] Some FICs administer online examinations using the quiz feature on Moodle or via email.

separation of teachers and students and all that this implies. Thompson (2007) notes that there are advocates of e-learning who reject the term 'distance education' in the belief that e-learning makes distance a non-issue, as both on-campus and remote learners share equal access to the virtual classroom.

Power (2008), for example, refers to "distance education as a field...losing impetus as online learning is gaining momentum" (p. 503). He proposes the 'blended online learning design (BOLD)' as an alternative to traditional DE. BOLD combines use of an LMS for asynchronous communication and a desktop conferencing environment. Power (2008) claims that BOLD departs from "a classical DE design and development-focused model" because it allows "students and faculty to interact in a fashion quite similar to the on-campus experience while accessing powerful screen-sharing and Web browsing functions" (p. 503), and it enables faculty to "utilise a thoroughly socioconstructivist-oriented learning environment which would be in stark contrast to the sorely criticized, behaviourist-associated, lock-step ID model...implemented worldwide by open and DE universities" (p. 509). Power & Gould-Morven (2011) also argue that BOLD allows DE institutions to balance the often competing priorities of increasing accessibility, enhancing quality, and improving cost-effectiveness.[21]

Described thus, BOLD seems like an excellent option for DE institutions. It even addresses the issue of reduced accessibility for learners who cannot participate in webinars in real-time, through the recording of sessions, which is a standard feature of Web conferencing applications. Nevertheless, key issues that require further investigation remain. For one, the fact that DE students now include those traditionally marginalised by geographic location and economic circumstances as well as those who mix on-campus and distance learning to maximise flexibility (Calvert, 2005) calls for a mix of pedagogical approaches. There are important differences between students in blended learning programmes and learners for whom DE is not

[21] This is so because BOLD allows for the delivery of real-time online seminars (or 'webinars') that are accessible to off-campus students, "engaging and rewarding" for faculty and students because of the increased level of dialogue, requiring less faculty time commitment and effort to design than asynchronous online courses, and requiring "no substantial investment or costly incentive system" for university administrators. The latter is because various Web tools for synchronous communication are now available for use, reduced front-end design is cheaper, and faculty are more willing to participate not only because the mode of delivery is something they are used to but also because issues about the ownership of intellectual property are eliminated as the focus shifts from "products and costly didactic material design and development" to designing and managing learning activities (Power & Gould-Morven, 2011, pp. 31-33).

one option among many but the only option, and these differences should be addressed in the design of online DE to ensure effective learning for all. Second, Power (2008) proposed BOLD as an alternative for traditional universities adopting DE as a means to broaden access to higher education and to increase enrolments at little or no additional cost. Power & Gould-Morven (2011) present BOLD also as an option for dual-mode DE institutions, or institutions offering both on-campus and DE programmes. UPOU is neither a traditional nor a dual-mode university. Rather, it can be more aptly described as a single-mode DE university within a traditional university system, or 'a university within a university' (Abrioux, 2006).

Thus, instead of using the term BOLD, in this study I use the term ODeL to characterise online DE as practised at UPOU. ODeL encompasses open learning and DE as well as all variants of e-learning, including blended online learning. It is thus a more inclusive term and may be used to characterise the full range of course design practices that are possible in online DE. As Larreamendy-Joerns & Leinhardt (2006) have noted, it is the diversity of 'online instruction' in terms of "subject matters, technological means, learning styles, and implementation scenarios (e.g., stand-alone, blended instruction, synchronous online teaching)... that ultimately will allow online instruction to meet the expectations of a student population as diverse as that in traditional higher education" (p. 595). These authors also remind us that online instruction has inherited from DE the ideals of openness and democratisation of access to higher education — an idea which the term ODeL communicates with its inclusion of the term 'open' aside from 'distance' and 'e-learning'.

The study's empirical focus is whether the design of DE in one institution is changing with the introduction of online learning, and what implications this might have for the institution's DE policies and practices. How are DE faculty designing their courses now that there is a wider range of Web tools and resources available to them? Are their emerging course design practices grounded in and informed by DE frameworks? What are the implications of emerging ODeL course design practices for academic development of DE faculty? These are relevant questions to ask in the changing context of DE today.

In focusing on the course design practices of academics who might be described as 'proficient' and 'expert' online teaching practitioners (Compton, 2009), the study heeds Kali et al.'s (2011) admonition that "technological innovation needs to be accompanied — and probably guided — by good empirical studies of the design

practices and design thinking of those who develop these innovations" (p. 129). Such studies could lead to the development of "plausible theories of how intended users will come to take up new tools and resources" that would provide guidance on how the faculty as a whole may be encouraged to "shift [their] attention towards the upstream work of design" (p. 130). While design is a complex and highly contextual activity and "neither the process of design nor the final solution could be accounted for by one 'expert' practice" (Kali et al., 2011, p. 131), useful insights can nevertheless be drawn from the design practice of these experts to guide novice ODeL course designers, such as UPOU faculty members who are making limited use of the VLE and other Web technologies in their courses.

1.6 Structure of the Thesis

This chapter sets out the context and rationale for the study. Chapter 2 presents a synthesis of the literature that constitutes the study's theoretical framework. Chapter 3 describes the research approach used and the corollary methodological and ethical issues. The research findings are presented and discussed in two chapters: Chapter 4 presents the findings in relation to the first research question and Chapter 5 reports the findings in connection with the second and third research questions. Chapter 6 provides a concluding discussion of insights drawn from the research with regard to how UPOU and similarly situated institutions might foster innovative teaching practice towards effective and sustainable distance education in a digital age.

CHAPTER 2 – REVIEW OF RELATED LITERATURE

In keeping with the concept of ODeL, which yokes together open learning, distance education, and e-learning, in this chapter I review literature on course design in open and distance learning contexts, as well as relevant research on online teaching in mixed mode or blended higher education. Given the focus of the thesis, of particular interest to this literature review are studies on the experience of teaching online from the perspective of university teachers, including studies on conceptions of and approaches to teaching online, design for/in online learning, and practitioner development in teaching online.

The presentation is in four sections. Sections 2.1 and 2.2 review literature that is relevant to my first research question, namely: *What pedagogical perspectives and priorities underpin the faculty's use of Web tools and resources?* Addressing this question requires: 1) a description of the pedagogical use of Web tools and resources; and 2) an examination of the pedagogical perspectives and priorities influencing such use. For the first task, I review some of the research on types of educational media and approaches to teaching with technology. For the second task, I review studies on the pedagogical factors that higher education faculty take into account when they teach with technologies. Section 2.3 includes work that is relevant to my second research question, namely, *How does their use of Web-based tools and resources impact the course design practices of these faculty members?* Following Price & Oliver (2007), I conceptualise 'impact' as 'change' and I review research on how teaching with Web technologies may be changing how faculty design their courses. Section 2.4 includes literature that is relevant to the third research question, namely, *What are the issues and challenges in Web-based course design from the point of view of these faculty members?* The studies reviewed focus on perspectives on the professional development and support needs of academics who are engaged in online course design.

The chapter is not exhaustive in the sense of covering all of the studies conducted in these areas. Rather, what is presented is a synthesis of the theoretical and empirical literature that informs this study's conceptual and analytic framework.

2.1 How are Web technologies used in online learning?

In describing media use in education, Mason & Rennie (2008) distinguish between 'basic', 'intermediate' and 'advanced' uses, and between 'one-way' and 'interactive' uses. They cite examples of Web-based technologies for each type of use (Table 2-1).

Table 2-1. Types of media use in education (Source: Mason & Rennie, 2008, p. 45)

Media	Basic	Intermediate	Advanced
Text	One-way **Print** Interactive **Email**	One-way **Web pages** Interactive **Computer-conferencing**	One-way **Blogs** Interactive **Wikis, blogs**
Audio	One-way **Audio clips** Interactive **Telephone support**	One-way **Podcasts** Interactive **Telephone conferencing**	One-way **iPod downloads** Interactive **Audiographics**
Images	One-way **Photographs** Interactive **Image banks** **e.g., Creative Commons**	One way **CD/DVD** Interactive **Share and edit** **e.g., Flickr**	One way **Animations** Interactive **Simulations/games**
Video	One-way **Video clips** Interactive **Webcasts/TV**	One-way **Animations** Interactive **Skype**	One-way **Vods** Interactive **Videoconferencing**

Kirkwood (2009) classifies functions enabled by ICTs, which include Web technologies, as follows:

- presentation – making materials and resources (text, data, sounds, still and moving images, etc.) available for students to refer to, either at predetermined times or 'on demand';
- interaction – enabling learners to actively engage with resources, to manipulate or interrogate information or data, and so on;
- dialogue – facilitating communication between teachers and learners or between peers for discussion, cooperation, collaboration, and so on;
- generative activity – enabling learners to record, create, assemble, store and retrieve items (text, data, images, etc.) in response to learning activities or assignments and to evidence their experiences and capabilities. (p. 108)

Using technologies for presentation would qualify as one-way use in Mason & Rennie's scheme, while using technologies to foster interaction, dialogue, and generative activity would count as interactive use.

Laurillard (2002) classifies media forms according to the learning experiences that they support (Table 2-2). Narrative media as described by Laurillard appear to reflect one-way use of technology for learning, while interactive, adaptive, communicative, and productive media reflect interactive use of technology. These media types enable different degrees of learner activity and engagement. With narrative media, learners tend to be positioned passively as recipients of information presented by the teacher. With interactive media, students can act to achieve a task goal (e.g., locate specific information) and they can modify their actions based on feedback. Adaptive media support the goal-action-feedback cycle by enabling repeated practice. With communicative media, learners are actively engaged in discursive activity where they articulate their understanding, receive feedback, and re-articulate what they understand. Finally, productive media enable learners to construct or build new forms based on their understanding, and thus "engage with the subject by directly experiencing its internal relationships" (Laurillard, p. 171).

Table 2-2.Media types and the learning tasks that they support (Adapted from Laurillard, 2002, p. 90 and Beetham, 2007, pp. 226-229)

Media type	**Learning task supported or mediated**	**Examples of Web tools and resources**
Narrative	Tasks where learners are expected to apprehend and/or assimilate information presented; the narrative medium is used to present the subject matter	On-screen text, image, video files, PowerPoint slides, web pages, animations
Interactive	Exploratory or investigative learning tasks; the interactive medium returns information based on user input	Hypermedia, search engines, gateways and portals, interactive television
Adaptive	Tasks involving experimentation and practice; the medium continuously adapts to user input	Virtual worlds, simulations, models, computer games, interactive tutorials
Communicative	Tasks involving communication between individuals and groups (e.g., discussion, debate)	Synchronous: Chat, video conferencing, instant messaging Asynchronous: Email, discussion boards, video and audio messages

Productive	Tasks where students articulate or express their understanding of the subject by generating or constructing their own representations (i.e., what are sometimes referred to as 'knowledge products')	Web and multimedia authoring tools, word and image processing tools, audio and video capture and editing tools, blogs, wikis, shared write/draw systems

Other descriptions of how Web technologies are used in online learning differentiate between whether they support individual learning or collaborative learning. In a study involving faculty of a Scottish university, Roberts (2003) identified three conceptions of teaching with the Web: 1) use of the Web as a source of information; 2) use of the Web for individual and independent self-paced learning; and 3) use of the Web for group analysis, decision-making, and dialogue. The first conception looks at the Web as an easily accessible source of information that is presented in formats that facilitate understanding of the subject matter. The second focuses on the creation of Web pages and provision of Web-based materials for individual students to use in an interactive way in learning tasks designed to help them apply and test new or refined conceptualisations. The third conception emphasises the social and interpersonal dimensions of learning through group work and dialogue and activities that "extend the parameters of the learning environment... by drawing in external professionals and allowing access to the larger communities of practice" (Roberts, p. 147).

Applying Roberts' typology in a study of lecturers teaching postgraduate online distance learning courses at an Australian university, Gonzalez (2008) proposed a refinement that combines Roberts' first two conceptions into 'using the Web for individual access to learning materials and information, and for individual assessment'. Gonzalez's second and third conceptions of teaching with the Web are: using the Web for learning-related communication, whether synchronous or asynchronous, and using the Web as a medium for networked learning characterised by collaboration and "individual deep engagement with learning materials" (Gonzalez, p. 310). Gonzalez differentiates among these three conceptions of online teaching in terms of the roles of the teacher and students and the source of the content and knowledge (Table 2-3).

Table 2-3. Dimensions delimiting conceptions of online teaching (Source: Gonzalez, 2009, p. 310)

	Use of the Web for individual access to learning materials and information, and for individual assessment	**Use of the Web for learning-based communication**	**Use of the Web for networked learning**
Teacher	Provides structured information/Directs students to selected websites	Sets up spaces for discussion/facilitates dialogue	Sets up spaces for communication, discussion and knowledge building/facilitates or guides the process
Students	Individually study materials provided	Participate in online discussions	Share and build knowledge
Content	Provided by the lecturer	Provided by the lecturer but students can modify or extend it through online discussions	Built by students using the space set up by the lecturer
Knowledge	Owned by the lecturer	Discovered by students within lecturer's framework	Built by students

There are some parallels between Gonzalez's typology of conceptions of online teaching and Mason's (1998) online DE course models, namely, (1) the content + support model; (2) the wraparound model; and (3) the integrated model. In the content + support model, the Web is used for online exercises, submission of individual assignments, and a minimal amount of discussion using computer conferencing. In the wraparound or 50/50 model, students spend more or less equal amounts of time engaging in online discussion and working through content. The integrated course model consists of online discussion, sharing of learning resources, and joint assignments — i.e., the Web is used for collaborative content creation and the creation of a learning community.

Jara & Fitri (2007) proposed seven 'pedagogical templates for e-learning' based on a survey of technology use at the Institute of Education and a review of the literature on online course models. The templates include four blended e-learning templates and three DE or 'fully online' e-learning templates. The latter — 'distance online support, 'online resource-based', and 'online discussion-based' — correspond to Mason's three online DE course models. In distance online support types of courses, the core learning activities revolve around print-based distance learning materials and the VLE is used to provide student support and feedback and as a repository of course materials and student assignments. In online resource-based

courses, students use the VLE to access multiple resources and learning activities and engage in some sharing and discussion. In online discussion-based courses, discussion boards are "the primary tool for teaching and learning" (Jara & Fitri, p. 30). Like Roberts and Gonzalez's typologies of conceptions of teaching with the Web, Mason and Jara & Fitri's online DE course models are differentiated in terms of whether they focus on access to resources and individual learning activities, or on discussion and collaborative learning activities.

2.2 What factors influence how teachers use Web technologies in online learning?

The discussion in section 2.1 suggests among others that a key factor in how teachers use Web technologies is their appreciation of technology affordances, defined by Beetham (2007) as "how [technologies] support the learning task and of how they will be experienced by individual learners — the different 'possible relationships' between task and learners that they might mediate" (p. 34). Other key factors in how teachers use Web technologies that are noted in the literature are:

- The teacher's pedagogical orientation, which is usually based on her/his personal experiences of learning (Leach & Moon, 2000; Banks et al., 2005)
- Curricular requirements, including learning goals, prerequisites, and subject matter coverage (Conole & Fill, 2005), and approaches to the curriculum (Oliver, 2003) which might vary according to subject discipline (Armellini & Jones, 2009; Ellaway, 2007; John, 2002; Jones, 2007)
- Learner-related factors, including learner contexts, needs, and capabilities (Beetham, 2007; Shearer, 2007)
- Institutional or organisational contexts, including the policy environment and the availability of administrative and technical support (Becker, 2000; Masterman & Vogel, 2007; Oliver, 2004; 2007)

In sections 2.2.1 to 2.2.3, some key insights from selected studies on pedagogical orientations, disciplinary influences, and learner-related factors in teaching with technologies are presented.[22] While they are discussed one at a time, it is important to note that, from an "ecological perspective of learning with

[22] Institutional and organisational context as a factor in online teaching is discussed in section 2.4.

technologies" (Pachler & Daly, 2011), these factors do not occur singly or in isolation. Different pedagogical models and frameworks (see section 2.2.4) have been proposed based on an understanding of how these factors might interact in practice.

2.2.1 Pedagogical orientations

Roberts (2003) and Gonzalez (2009) suggest a relationship between teaching orientations and conceptions on the one hand, and approaches to Web-based teaching on the other hand. Roberts classified teachers as having either a teacher-centred/subject-focused orientation to teaching, or a student-centred/learning-focused orientation, based on a classification proposed by Kember (1997) where the teacher-centred/content-centred orientation includes teaching as imparting information and teaching as transmitting structured knowledge; the student-centred/learning-centred orientation includes teaching as facilitating understanding and teaching as conceptual change/intellectual development; and a transitional or intermediate conception views teaching as student-teacher interaction or apprenticeship. Applying the same categories, Gonzalez (2009) concluded that teachers with a content-centred orientation teach with the Web in an 'informative-individual learning focused' way, and those with a transitional orientation or a learning-centred orientation teach with the Web in a 'communicative-networked learning focused' manner (p. 311).

However, Bain & McNaught (2006) have noted that these "dichotomous descriptions appear to be insufficient if we want to understand how teachers interpret the possibilities of using technology in their teaching and then make decisions about how they might actually use technology" (p. 111). In a study of teachers' beliefs and practices in 22 computer-assisted learning (CAL) projects in Australia, they found complex and sometimes unpredictable relationships between beliefs and practices.[23] Similarly, in an earlier study of project documents describing the design of 'computer-facilitated learning' (CFL) in Australian universities, Bain et al. (1998) found that (1) differences between categories of CFL design could not be accounted for by one dimension alone, like instructivist vs. constructivist pedagogy; and (2)

[23] With regard to interactivity, for example, Bain & McNaught observed that while mathemagenic interaction might be assumed to be typical of an instructivist orientation and generative interaction is usually thought to characterise constructivist orientations, both the 'learning facilitators' and 'situated knowledge negotiators' in their study adopted mathemagenic interactions. The difference was that the situated knowledge negotiators embedded mathemagenic computer-assisted learning components within offline constructivist activities, thereby demonstrating an 'internal coherence' or consistency in their teaching beliefs and practices.

different categories could involve the same types of CFLs, which means that it is not the type of technology that accounts for category differences but the way technology is used or deployed, and their impact on teaching and learning. Bain et al. (1998) derived seven categories of CFL design forming a continuum from teacher-centred perspectives to student-centred views.

Avoiding "dichotomous descriptions", JISC (2009) and Mayes & De Freitas (2004) point out that most approaches to design for learning, including e-learning, draw from three perspectives[24] which analyse learning at different levels of aggregation: the associative view analyses learning at the activity level, the cognitivist view analyses learning in terms of structures and processes underpinning individual performance, and the situative perspective analyses groups and communities of learners. They state: "In any particular curriculum design it is very unlikely that there would be one-to-one mapping between a single theoretical analysis and a set of TLAs [teaching and learning activities] that are designed to achieve particular learning outcomes" (p. 11).

2.2.2 Disciplinary differences

Particular pedagogical approaches resonate with certain disciplines (JISC, 2009), as evidenced by the concept of 'subject pedagogies' (John, 2005). These in turn influence how technology is used in teaching and learning. For example, in a study of learners' use and perceptions of technology in four disciplines, Conole et al. (2008) found that economics, finance, and computing science students considered it important to have access to news networks featuring authoritative coverage of current events, while students studying science and medicine considered e-journals featuring

[24] The associative perspective views learning as the gradual development of competence through routines of organised activity broken down into component units that enable the building of associations between concepts and skills. The component units have specific goals, provide immediate feedback, and move progressively from simple to complex. Examples of associative e-learning designs are computer-aided assessment and programmed instruction. The constructivist perspective views learning as a process of understanding. Constructivism that focuses on the individual learner views learning as the active construction of meaning from the interaction between new and previous knowledge. This perspective calls for the design of interactive environments to enable knowledge-building, and learning activities that encourage experimentation, discovery of principles, and reflection. Constructivism with a social focus views learning as active construction of knowledge through social collaboration and dialogue. Social constructivist designs for learning encourage collaboration and shared expression of ideas, as well as reflection and peer review. A constructivist approach is evident in activity-based designs where students explore a range of digital resources and utilise tools such as online discussion forums. Finally, the situative perspective views learning as a process of participation in communities of practice. Situative pedagogy includes the design of authentic activities through which learners can develop learning skills and relationships. Examples are scenario-based learning and design-based learning, and learning activities using social software. (Mayes & De Freitas, 2004)

up-to-date research data particularly useful. They also cited practitioner reports in a Higher Education Academy symposium on mapping technology use to the disciplines which showed that communication is valued most in the social sciences, problem solving and interaction with data is considered crucial in the sciences, and working in teams is considered critical in the health sciences. In a study of digital resource use by teaching staff identified as innovators in their subject areas, Jones (2007) found that learner access to journals and books and a supply of appropriate 'ephemeral sources' such as news and government websites are important considerations in the design of learning environments for social science subjects. Jones also noted that social and situated views of learning and 'the cultural turn in the social sciences' dictate a preference for computer-supported collaborative learning and networked learning approaches.

More generally, some studies (e.g., Lindblom-Ylanne et al., 2006; Lueddeke, 2003; Postareff et al., 2008) have found that teaching approaches differ according to disciplinary context, with teachers from 'hard' disciplines tending to be more teacher-focused and inclined to use more mass lectures, and teachers from 'soft' disciplines tending to be more student-focused and inclined to use more discussions and debates. However, Bain & McNaught (2006) did not find any support for these 'discipline stereotypes'. They noted instead what they call a 'discipline heterogeneity' in each of the five belief-practice categories they derived from their interviews of teachers in 22 'computer-facilitated learning' projects. Similarly, in his study of lecturers teaching postgraduate distance courses Gonzalez (2009) noted that while one teacher was "using a 'content-centred' approach in a 'hard applied' discipline, the other lecturers were teaching in 'hard applied' to 'soft applied' content areas and using mostly 'learning-centred' or 'intermediate' approaches'" (p. 313).

Bain et al. (1998) cited studies by Bain (1998) and Quinlan (1997) of academics from the same discipline with contrasting pedagogical beliefs and approaches. Furthermore, it is possible for individual teachers to adopt different teaching approaches in two different teaching contexts. Lindblom-Ylanne et al. (2006) found that teachers adopted a more conceptual change/student-focused approach in a "less usual" or less mainstream teaching context, and a more information transfer/teacher-focused approach in their usual teaching context. The researchers hypothesised that teachers may be more open to new methods in new or

unusual teaching contexts, and/or they may have smaller class sizes, which gives them room to innovate.

2.2.3 Learner-related factors

The impact of context on teaching approaches is especially apparent where teaching and learning are non-contiguous. Among others, this situation makes learner analysis "before any teaching and learning occurs" (Naidu, 2007, p. 248) essential. According to Naidu, while in classroom-based teaching "[a] great deal about learner characteristics, their learning styles, and approaches to study is quite often presumed" (p. 248), in DE it is imperative that learner attributes, capabilities, and needs be taken into account in media selection, design for interaction, and assessment and feedback (Naidu, 2007; Shearer, 2007). However, factoring in learner characteristics is also particularly challenging in DE where there is a great diversity of learners and learning contexts (Benson & Samarawickrema, 2009; Naidu, 2007; White, 2005).

Three learner-related factors are especially relevant in DE programme and course design: access, learner autonomy, and interaction (Shearer, 2007). The concern for **access** is central to DE, a mode of education that seeks precisely to make learning opportunities accessible to "all individuals, regardless of their age, gender, location, and personal circumstance" (White, 2005, p. 166). Use of Web technologies both enables and constrains this mission by extending the reach of DE programmes while also limiting their reach only to those learners with access to the Internet. The increasing availability of computers and the Internet even in developing countries may be narrowing this particular digital divide. However, it is important to also consider the effect on learner access of the logistical requirements of particular e-learning designs, such as bandwidth for accessing a VLE, engaging in synchronous activities, and accessing and using particular content formats such as video files (Jara & Fitri, 2007). The technology literacy skills and 'technological efficacy' (Anderson, 2008) or 'e-confidence' (Pachler & Daly, 2011) required for successful online learning likewise need to be considered.

As for **learner autonomy**, studying without direct teacher supervision requires learners to behave more autonomously (Amundsen, 1993; Shearer, 2007). Learner autonomy is at the centre of several theories of DE (Anderson et al., 2005; Garrison, 2000; 2009), including Wedemeyer's theory of independent study, Moore's theory of transactional distance, and Holmberg's theory of guided didactic

conversation. In the theory of transactional distance, which is widely considered to be one of the seminal theories in DE (Anderson, 2009; Garrison, 2000; Woods & Baker 2004), Moore (1993) posits that the separation of teacher and learner gives rise to a transactional distance, which is "a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner" (p. 22). Three variables determine the extent of transactional distance: dialogue, structure, and learner autonomy. Dialogue refers to interaction between teachers and learners which has the effect of reducing transactional distance. Structure refers to course design elements that determine the responsiveness of an educational programme to learners' needs. Learner autonomy refers to the learner's ability to control and manage his/her own learning. Moore notes a relationship between dialogue, structure, and learner autonomy, such that the more structured a programme is, then the fewer the opportunities for dialogue between teacher and learner, which in turn requires learners to exercise a high degree of autonomy.

But even where transactional distance is relatively low, learner autonomy is important. The degree of learner control, an aspect of learner autonomy, "is critical to [the student's] successful completion" of a course of study (Shearer, p. 221), and it is important to balance it with the other variables that impact on transactional distance. "[T]oo much structure, within pacing, sequencing, and timing of assessment" could force a learner with competing life demands to drop out, while too little structure could lead to a sense of confusion and disconnection (Shearer, p. 221). In online learning, it is important to consider how the design of learning activities might affect the ability of distance learners to exercise self-directed learning (Anderson et al., 2005; Poelhuber et al., 2008). On the one hand, resource-based learning gives learners "more freedom and responsibility... to interpret the course for themselves" (Mason, 1998, p. 6) as they work with a variety of learning resources, develop and apply information literacy skills, and make sense of ideas exchanged during the discussions. On the other hand, where group interaction is "the central aspect of online engagement" (Benson & Samarawickrema, 2009, p. 6), learners are constrained to follow group schedules instead of their own pace (Annand, 2007).

That said, it is important to design for **interaction** in any learning context and especially in DE (Anderson et al., 2005; Bernard et al., 2009; Shearer, 2007). Interaction improves student motivation and achievement, and is believed to be a "defining and critical component of the educational process" (Anderson, 2003, p. 1).

Moore's (1989) classification of forms of interaction — learner-content, learner-learner, and learner-teacher interaction — is considered to be especially useful in DE course design (Anderson, 2003; Shearer, 2007). Learner-content interaction is facilitated by learning materials designed according to the principle of 'guided didactic conversation', Holmberg's (1983; 2007) term for a conversational style of presenting content that engages the learner both cognitively and affectively. The 'internal dialogue' (Laurillard, 2002) that learners have with learning materials contributes to the development of learner autonomy. Learner-teacher interaction is central to most conceptions of formal education. It is through this form of interaction that learners receive feedback on how well they are learning. Learner-learner interaction allows learners to engage in social interaction, which increases motivation and allows for the social construction of knowledge (Garrison, 2009). The dialogue arising from learner-teacher and learner-learner interaction reduces transactional distance. With the advent of computer-mediated communication, the possibilities for interaction and collaboration in DE settings have expanded significantly, and this is the focus of several pedagogical frameworks.

2.2.4 Online learning models and frameworks

Different pedagogical models and frameworks for technology-supported learning suggest different conceptualisations of how the three forms of interaction relate to each other.

Laurillard's (2002) **conversational framework** for the effective use of learning technologies (Figure 2-1, next page) conceives of teaching and learning as "an iterative dialogue" that is "discursive, adaptive, interactive, and reflective" (p. 86). Both teacher and student engage in discursive activities where they are able to access each other's conceptions of the subject and negotiate the topic goal; adapt their actions at the task level in light of the discursive process, with the teacher setting up and adapting a task environment for the student and the student adapting her/his actions in the task environment; undertake learning tasks following the goal-action-feedback cycle; and reflect on the interactions at the task level in order to re-describe their conceptions of the topic goal.

The conversational framework supports both interpersonal and internal dialogue through which students develop academic learning, which Laurillard characterises as the learning of 'precepts' or particular descriptions of the world. The

teacher is essential to this dialogic process, the ideal form of which is the one-to-one tutorial. But recognising that "the one-to-one tutorial is rarely feasible as a method in a system of rapid expansion beyond a carefully selected elite" — as in the case of DE with its aim of broadening access to education through the removal of space and time barriers — Laurillard uses the conversational framework to arrive at a "pedagogical classification" of media through which the dialogic process of teaching and learning might be achieved. Accordingly, she classifies media into narrative, interactive, adaptive, communicative, and productive forms[25], and recommends that they be used in combination in order to achieve the optimum balance for specific learning contexts. Laurillard stresses that the optimum balance would vary according to subject, level (i.e., undergraduate vs. graduate), and course design. But whatever the combination of media, teacher-student dialogue is essential and should be provided for.

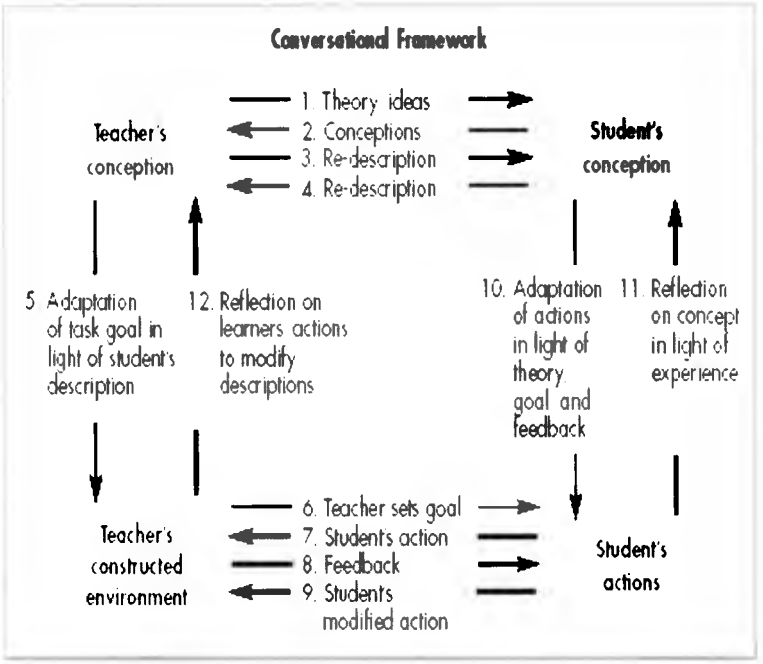

Figure 2-1. Laurillard's Conversational Framework
(Source: http://ausweb.scu.edu.au/aw03/papers/quinn/framework.jpg)

Dialogue is likewise central in Garrison, Anderson & Archer's (2000) **Community of Inquiry (CoI) model** (Figure 2-2, next page), which defines the educational experience in higher education as the building of a community from three

[25] See Table 2-2 in section 2.1.

elements: social presence, teaching presence, and cognitive presence. Social presence refers to 'the ability of learners to project themselves socially and emotionally and be perceived as "real people" in mediated communication' (Garrison & Arbaugh, 2007, p. 159). This sense of their online identity as members of a community of learners enables students to engage in the social construction of meaning. The latter is the focus of cognitive presence, defined as "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse" (Garrison & Arbaugh, p. 161). Cognitive presence is considered to be essential to the development of critical thinking, which is widely accepted as the goal of higher education (Anderson & Garrison, 2003; Garrison, Anderson & Archer, 2000). Teaching presence is "the design, facilitation, and direction of cognitive and social presences for the purposes of realising meaningful and educationally worthwhile learning outcomes" (Garrison & Arbaugh, p. 163).

Figure 2-2. The Community of Inquiry Model
(Source: http://communitiesofinquiry.com/)

The CoI model is based on a "collaborative constructivist" or "transactional" perspective which views the educational experience as having the dual purpose of enabling the personal construction of meaning and enabling the collaborative refinement and confirmation of this personal understanding within a community of learners (Garrison & Anderson, 2003). The model was developed based on research

on the distinguishing characteristics of computer conferencing or computer-mediated communication (CMC) as an educational medium. CMC is considered to be a critical development in DE, representing an important break from the independent, self-instructional model of DE that was dependent on mass produced learning packages (Garrison, 2000; 2009; Haughey et al., 2008).

While few would argue with the proposition that they are essential to effective learning, achieving the ideal amount of dialogue and collaboration is challenging. There are varying curricular requirements, learner preferences and needs, institutional capacities, and teaching approaches that need to be taken into account. For example, Anderson (2003) and Anderson et al. (2005) note differences in learner preferences for paced and un-paced and synchronous and asynchronous learning. For institutions, the cost of supporting dialogue-intensive courses, which are teacher-dependent (Haughey et al., 2008) and "undeniably labour-intensive" (Laurillard, 2002, p. 177), is also a key consideration. This led Anderson (2003) to formulate an **equivalency theorem of interaction** which states —

> Deep and meaningful formal learning is supported as long as one of the three forms of interaction (student–teacher; student-student; student-content) is at a high level. The other two may be offered at minimal levels, or even eliminated, without degrading the educational experience.
>
> High levels of more than one of these three modes will likely provide a more satisfying educational experience, though these experiences may not be as cost or time effective as less interactive learning sequences. (p. 4)

Anderson recommends that since levels of interactivity are difficult to prescribe or assess especially in mass-based educational systems, designers should "build into their programs strategic amounts of each type of interaction" (p. 6) using various technologies.

Like Haughey et al. (2008), I find that Anderson's equivalency theorem is a broad approach that takes into account the DE principles of access and flexibility for all participants in the learning process — i.e., learners, teachers, and institutions. Moreover, giving each type of interaction equal value instead of privileging one over the others has enabled Anderson (2003; 2005; 2008) to conceptualise a **model of online learning** (Figure 2-3, next page) that combines flexible, self-paced learning

and participation in a learning community. Of this model Haughey et al. (2008) note that "in placing the resources, materials and communications as the interface between the instructor and the student, [Anderson] has broadened the notion of content", making it inclusive of learner-teacher, learner-content, and learner-learner interaction (p. 13). At the same time, Anderson's model "reflect[s] the diversity of actual and potential practices [in online learning] rather than a single [pedagogical] orientation" (p. 14).

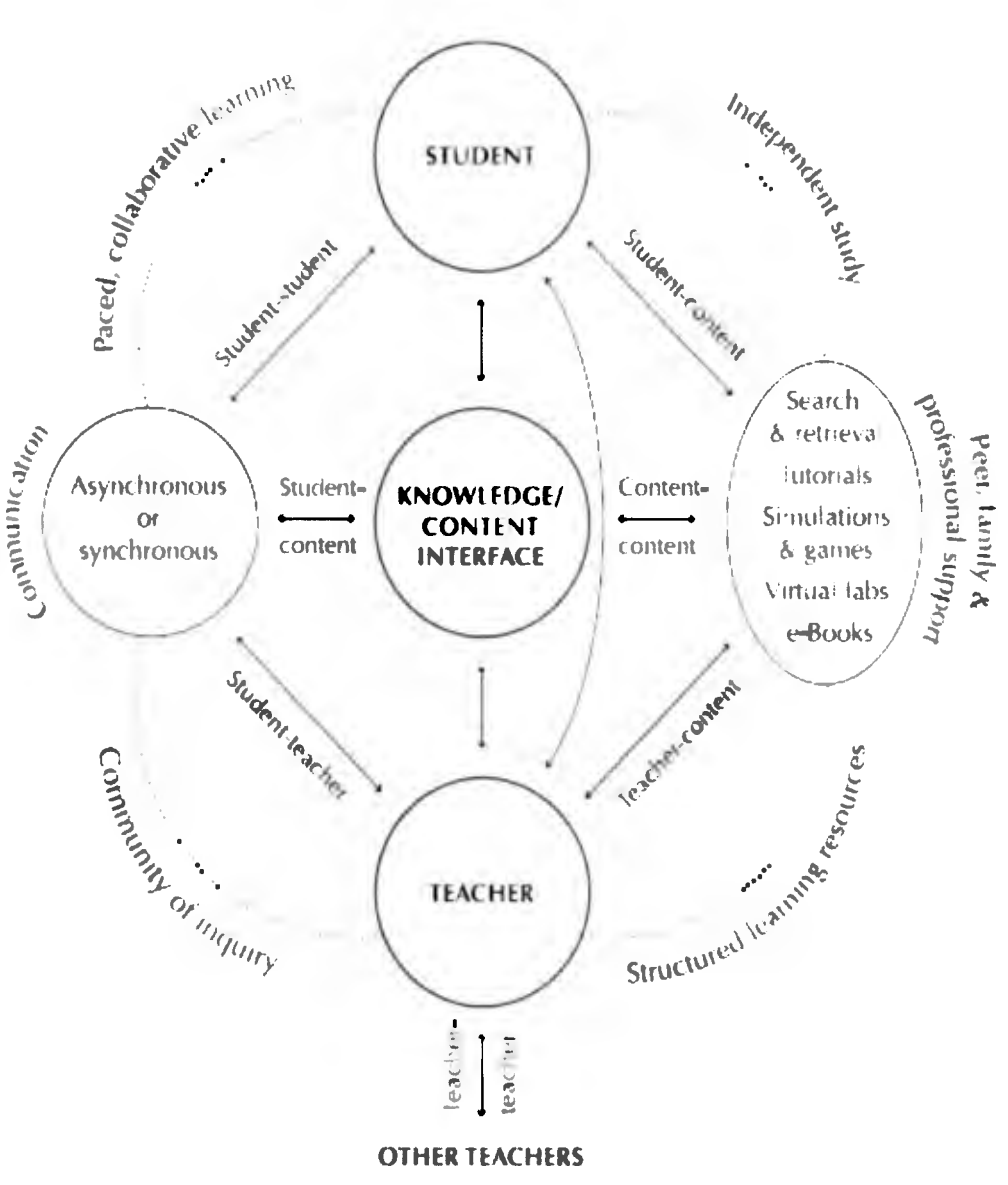

Figure 2-3. Anderson's model of online learning
(Source: Anderson, 2008, p. 61)

In his gloss on the model, Anderson (2008) calls attention to two approaches to online learning shown on the left and right sides — collaborative learning in a community of inquiry and independent learning, respectively. The collaborative approach uses synchronous and asynchronous communication technologies to enable dialogue, collaboration, and the social construction of meaning. The independent learning approach uses tools that enable learners to interact with, explore, and develop a deep understanding of content. The elements of content, teacher, and learner are present in both approaches. However, the interactions among these elements that are foregrounded differ, with learner-learner interaction being more prominent in the collaborative learning approach and learner-content interaction being more dominant in the independent learning approach. Also, teacher-learner interaction appears to be more direct in the collaborative learning approach (i.e., teacher and learner are shown to interact directly in the community of inquiry), whereas it is mediated by content in the independent learning approach (i.e., the teacher provides structured learning resources that the student studies independently). Learner-content interaction is also present in the collaborative learning approach in that the focus of the dialogue is the course content. Similarly, there is the possibility of learner-learner interaction in the independent learning approach, through the learner's interaction with family members, colleagues in the workplace, and peers, including those whom they might meet in online networks. According to Anderson, teachers and course designers using his model of online learning need to decide which approach to take based on the nature of the learning that is prescribed by the curriculum, among others.

2.2.5 A framework for analysing pedagogical perspectives and priorities in teaching with the Web

Addressing the first research question in the current study requires: 1) a description of how the faculty use Web tools and resources in the courses that they teach; and 2) an examination of the pedagogical perspectives and priorities that influence such use.

In task 1, I analysed variations in the research participants' use of Web tools and resources in the courses that they teach in terms of the typologies of Web-enhanced teaching and online courses that are presented in section 2.1. These typologies specify two apparently oppositional uses of Web technologies, namely, using Web tools and resources primarily for individual learning and using Web tools

and resources primarily for collaborative learning. While this dichotomous classification identifies only one dimension, for heuristic purposes it may be useful for describing general tendencies in the research participants' approach to Web-supported teaching. These would then be examined more closely (in task 2) to determine the pedagogical perspectives and priorities that underpin each academic's use of Web technologies.

My approach to task 2, which I formulated based on the literature reviewed in section 2.2, is shown graphically in Figure 2-4:

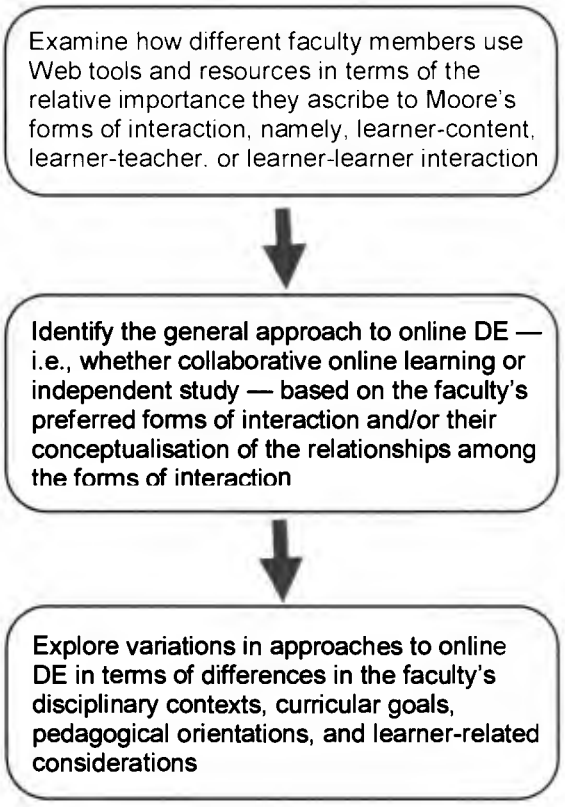

Figure 2-4. An analytic approach to analysing pedagogical perspectives and priorities in teaching with the Web

2.3 What is the impact of teaching with Web technologies on course design practices in online learning?

The studies reviewed in section 2.2 provide insights into how pedagogical perspectives and priorities influence how technologies are used for learning. In this section, I consider some of the research on the reciprocal effect of technology

integration on pedagogy. More specifically, I review research on how teaching with Web technologies impacts on DE course design.

Anderson & Dron (2011) describe the impact of technology on design in DE in terms of "pedagogical generations", namely, the cognitive-behaviourist generation, social constructivist generation, and connectivist generation. They note that early DE models were underpinned by a cognitive-behaviourist pedagogy characterised by highly structured content, lack of social presence because learning was largely an individual process, and reduced teacher presence as teacher-learner interaction consisted mostly of marking and evaluation. Online DE models reflect a shift to a constructivist and social constructivist pedagogy (Anderson & Dron, 2011; Burge & Polec, 2008) where learning is viewed as an active process of constructing knowledge on "the foundation of previous learning" through social interaction and application in authentic contexts (Anderson & Dron, p. 85). More recent online learning models, in particular massive open online courses (MOOCs), are underpinned by connectivist pedagogy where learning takes place in network contexts featuring learner participation in the definition of learning needs, evaluation and filtering of educational content, and production of educational content in the form of archives, learning objects, discussion transcripts, and other resources that document and demonstrate student learning and which "become the content that learners and teachers utilise and collaboratively create and recreate" (Anderson & Dron, p. 88).

As noted by Anderson & Dron and other commentators (e.g., Bates, 2005; Haughey et al., 2008; and Swan, 2010), each of these pedagogical generations has been enabled by particular sets of technologies: print and mass media technologies in the case of cognitive-behaviourist pedagogies, computer and Web technologies in the case of constructivist pedagogy, and Web 2.0 technologies in the case of social constructivist and connectivist pedagogy. The new technologies have made possible what Burge & Polec (2008) refer to as a change in emphasis in DE "from course *Content* (high quality, pre-designed materials plus mostly written text correspondence) to *Connection* (real-time structured discussions and adaptive teaching responses) to *Community* (aiming for group synergies in a medium that enables both self-interest and group-interest behaviours)" (p. 249; emphasis in original). But this is the macro view of change in pedagogical design in DE. What about change in the design practices of individual teachers? What shifts in

pedagogical design can be observed in the practice of individual faculty, and how do these shifts take place?

Two trends are noted in the literature. The first is that contrary to expectations, teaching approaches in e-learning contexts are not necessarily being transformed, or changed for the better (Conole, 2004; Hedberg, 2006; Kirkwood, 2009; Natriello, 2005). Instead, there is a persistence of traditional modes of teaching and, in some cases, outright resistance to educational innovation (Blin & Munro, 2008). The second trend is that as faculty awareness of and skills in new ways of teaching and learning with technology develop, there is a gradual shift from a teacher-focused knowledge transmission approach to a learner-focused knowledge generation approach (Armellini & Jones; Swan, 2010). These contrasting trends in online DE are noted by Burge & Polec (2008) thus:

> Some educators, coming from transmission modes of teaching face-to-face in conventional higher education, realise after some online trials that they may need some new teaching models, but others may see online as a new vehicle for transmitting pre-digested information.... Many distance educators... who already can apply general facilitation and collaborative models via face-to-face or audio-conferenced contexts, will instead analyse how far the mediating effects of each new technology may influence their continuing use of those teaching models and extend possibilities for successful learning. (pp. 246-247)

Burge & Polec add that while a shift from transmission models of teaching to constructivist learning models might be assumed from teachers' use of interactive features of online software, "many solo course designers have to struggle their way into the new model" (p. 249). This calls attention to the need to understand the dynamics of pedagogical change in online learning environments. For this we turn to literature on the changing roles of teachers particularly in relation to course design, variation in teachers' approaches to e-learning design, and the development of teacher knowledge of and through e-learning design.

2.3.1 Changes in the design role of teachers

In online learning some teaching roles are given greater emphasis or "amplified" (Kanuka & Rourke, 2008). The concept of amplifications, and corollary reductions, in technology-supported teaching and learning derives from the concept of the 'selectivity' of technologies (Kanuka & Rourke, 2008) — i.e., the idea that

technologies are designed for particular purposes and "[t]hey facilitate, emphasise, and enhance particular kinds of experience, while inhibiting, limiting, and sometimes even excluding others" (Swan, 2010, p. 110). The design role of teachers, for example, is amplified in online learning. According to Beetham & Sharpe (2007), while design is a key feature of teaching in general, in e-learning "the need for intentional design becomes more obvious and pressing" (p. 7). In face-to-face teaching, approaches can be immediately adjusted to fit learners' needs which teachers can gauge directly from learner performance. In technology-supported learning, seemingly 'ordinary' pedagogical activities like grouping learners, posing questions, providing resources, and other ways of scaffolding learning in response to learner cues during the learning process "require forethought and an explicit representation of what learners and teachers will do" (Beetham & Sharpe, p. 7).

At the same time, the new digital technologies are enabling design 'on the fly' (Oliver, 2004, p. 24). Mason (1995) included in her typology online DE course models where "less of the course is pre-determined and more is created each time the course is delivered, through the discussions and activities" that take place on the VLE. The focus of design therefore shifts from "the design and delivery of instruction and instructional materials" to "the creation of environments that foster and support active learning in collaborative communities" (Swan, 2010, p. 114). In these "resource- and activity-based learning environments" (Naidu, 2008, p. 250), "university teachers have to think carefully about the design of good learning tasks... as well as about the resources that students will need if they are to stand a reasonable chance of succeeding in these activities" (Goodyear, 2010, p. 4). Thus, the mediating role of the teacher is expanded to include helping learners "to make sense of the wealth of resources which they can, with guidance, find themselves" (Tait, 2010, p. x).

These new teaching tasks in online learning environments are aspects of what Siemens (2007) refers to as the curatorial role of teachers in networked learning. According to Siemens, unlike the simplistic dichotomy of 'sage on the sage' vs. 'guide on the side' that is often employed to differentiate face-to-face from online teaching, the term 'curating' underscores the complexity of selecting resources for learning[26] — i.e., expertise in the subject matter is required to be able to make

[26] See also Dron's (2002) description of the role of teachers as resource maker and distiller, resource gatherer, and resource organiser.

decisions about what resources to select, provide expert commentary about each resource or the resources as a whole, and showcase resources in ways that highlight each resource as well as the relationships among them — and its critical role in scaffolding learning particularly of disciplinary canons:

> A curatorial teacher acknowledges the autonomy of learners, yet understands the frustration of exploring unknown territories without a map. A curator is an expert learner. Instead of dispensing knowledge, he creates spaces in which knowledge can be created, explored, and connected.... A curator balances the freedom of individual learners with the thoughtful interpretation of the subject being explored. While learners are free to explore, they encounter displays, concepts, and artifacts representative of the discipline. Their freedom to explore is unbounded. But when they engage with subject matter, the key concepts of a discipline are transparently reflected through the curatorial actions of the teacher. (Siemens, 2007, n.p.)

That teaching roles can change in technology-supported learning is not always apparent. In a study of the impact of VLE use on the roles and practices of academic staff in the UK, Price & Oliver (2007) found that there appears to be no difference in teaching roles at the strategic or activity level. It is at the level of actions and operations that differences can be discerned — e.g., online teachers look for signs of non-participation not by looking around the room (as a classroom teacher would) but by checking log-in records in the VLE. Thus, "teaching online renders the role of the teacher both the same *and* different *simultaneously*. The purpose and strategic direction may remain unchanged, but the methods of achieving this alter in significant ways" (Price & Oliver, p. 24, emphasis in original). Moreover, once the changes in the operational activities of teachers in online learning become routinised, they become invisible not only to others but even to the teachers themselves:

> ... successful practice becomes invisible – once the breakdowns at the operational level are resolved, this entire layer of teaching is undertaken without conscious intervention. (This makes it even more likely that successful teachers online will see no real difference with their teaching face-to-face, because they will become unaware of the majority of the ways in which their practices are different.) (p. 24)

Price & Oliver (2007) also refer to Cousin's analysis of how the metaphors used for VLEs "act to preserve a sense of conventional classroom teaching... in order to provide teachers new to teaching in this way with 'a stable transition'" (p. 24).

Ironically, this emphasis on what is the same between teaching online and teaching face-to-face tends to encourage a conservative approach to teaching online (e.g., merely replicating face-to-face teaching practices).

2.3.2 Variation in the focus of design in online learning

It may be deduced from the preceding discussion that while the design role of teachers might be amplified in online learning environments, qualitative changes in their design practice — e.g., shifting from designing content to designing learning activities — do not necessarily happen unless they recognise the need for such changes. This recognition in turn comes from a broadening of the teachers' awareness of the pedagogic opportunities afforded by learning technologies, and the development of their knowledge and skills in online learning design.

Armellini & Jones (2008) conducted a study on the impact of a two-day design workshop on the e-learning design practice of 93 academics from different disciplines at the University of Leicester. They found that faculty move through three stages of e-learning design: 1) transmissive design; 2) interactive design; and 3) design for knowledge construction. Transmissive design is characterised by a focus on providing resources for students, using the learning platform as a repository of materials, and student interaction with tutors being limited to submitting assignments for marking. Interactive design, also referred to as 'interactive, single loop design', fosters limited participation typically by asking participants to share in the discussion forums their experiences with the course material. Because the discussion tends to be limited to one response to the task posed by the teacher, with little or no further exchanges among students, interactive design is characterised as being closer to teacher-centred rather than learner-centred approaches, and as having a strong focus on content. In collaborative designs, 'multiple-loop' interaction and collaboration among learners and tutors are considered central to learning, and the teacher's role is to design collaborative technology-supported learning activities, called 'e-tivities', and ensure meaningful student engagement through 'e-moderation'. Collaborative design is considered to be learner-centred. According to Armellini & Jones, while "[n]ot every course team changed in the same way or at the same speed,... all showed signs of change towards the collaborative category" (p. 25) after going through the design workshop, and course teams that opted to maintain a transmissive approach to

e-learning developed an awareness of alternative approaches and key pedagogical issues in technology-supported learning.

Two phenomenographic[27] studies of variation and change in university teachers' conceptions of and approaches to teaching provide some insights into how teachers' awareness of pedagogic change might expand in an online learning context. In a study of 28 academics at a conventional research university in Australia, Akerlind (2003) identified three categories of experiencing growth and development as a university teacher:

> 1) development experienced as an increase in the teacher's comfort with teaching, in terms of feeling more confident as a teacher or teaching becoming less effortful;
> 2) [development experienced as an increase in] the teacher's knowledge and skills, in terms of expanding content knowledge and teaching materials, and/or an expanding repertoire of teaching strategies; and
> 3) [development experienced as an increase in] learning outcomes for students, in terms of improving students' learning and development (p. 380)

In category 1[28], the focus of teacher development is the teacher self, and it is directed towards achieving a steady state. Category 2 is also teacher-focused but the experience of development goes beyond feelings to include the practice of teaching: the focus of development is to become a more effective teacher through the development of teaching skills. In category 3, the focus of teacher development goes beyond the teacher to the improvement of student learning. The three categories have a hierarchical and inclusive relationship, with category 3 including in the background an awareness of improved teaching skills and increased confidence in teaching and category 2 including an awareness of increased confidence in teaching.

In a longitudinal study of 27 university teachers in Australia, McKenzie (2003) also identified a shift in focus from the teacher to the student as a key dimension of variation in four categories of university teachers' ways of experiencing change in teaching. The four categories are: changing the content taught in order to improve teaching (cA); changing teaching strategies in order to improve teaching

[27] A phenomenographic approach involves collecting data through interviews and analysing the data to develop hierarchically inclusive (i.e., from less to more complete) categories of description representing "different ways of experiencing the phenomenon of interest" (Gonzalez, 2009, p. 12).
[28] Category 1 has two sub-categories: 'teaching development as teaching becoming easier', and 'teaching development as growing confidence in one's abilities' (Akerlind, 2003).

(cB); relating teaching more closely to students' learning in order to improve learning (cC); and coming to experience teaching in a more student-focused way by improving understanding of teaching and students' learning (cD). Category cA includes two sub-categories: changing the selection of content included or excluded in order to improve teacher interest or student motivation (cA1), and changing the way the content is organised for, and represented in, teaching in order to improve teaching efficiency or teacher comfort (cA2). Except for categories cA and cB which are considered to be parallel, the categories form a "semi-inclusive hierarchy" with category cD including category cC, which in turn includes category cA1, cA2 and cB. Category cA1 includes cA2. According to McKenzie, in categories cA, cA1, cA2 and cB, "[c]hange is directed towards improving teaching for the teacher" (p. 248). In contrast, in categories cC and cD change is directed towards improving students' learning, and with an awareness of how teaching relates to how students learn.

McKenzie explains lack of change in ways of experiencing teaching (i.e., teaching-focused teachers remaining teaching-focused) as the teachers "not [being] oriented towards their situations in ways which created relevance structures for discerning the critical aspects of student-focused ways of teaching" (p. 305). She adds, "Teachers whose ways of experiencing remained teacher focused were not resistant to change per se, and did not simply fail to discern and focus on aspects of student focused ways of experiencing teaching. [Rather] [t]hey discerned and focused on different aspects of their teaching and situations and experienced different patterns of variation" (p. 309). Differences in what different teachers focus on also explain "why, in similar learning situations, some teachers change their ways of experiencing teaching and others do not" (p. 309).

This analysis is relevant to understanding pedagogic change in online learning. That is, different teachers focus on different aspects of their online teaching experience, and their experience of pedagogic change varies. To appreciate qualitative differences in design practices that might appear to be similar, it is important to examine the underlying focus of these practices — e.g., whether the focus of a particular strategy is to improve teaching or to improve learning. Finally, influencing teachers to shift "from knowledge transmission to knowledge construction" (Swan, 2010, p. 113) in their pedagogic designs, would involve helping the teachers to discern critical aspects of alternative ways of teaching and design for learning.

2.3.3 Development of teacher knowledge in e-learning design

Pedagogic change in online learning might also be understood in terms of the development of teachers' knowledge of how to teach effectively with technology. Mishra & Koehler (2006) have proposed the 'technological pedagogical content knowledge' framework (TPCK or, more recently, TPACK) (Figure 2-5) for understanding the nature of this knowledge as one that goes beyond technology-related competencies to include knowledge of subject-matter or content and pedagogical knowledge, as well as the integrated forms of knowledge that develop in the interplay among these three main forms. These other integrated forms of knowledge, aside from TPACK, are technological pedagogical knowledge (TPK), technological content knowledge (TCK), and pedagogical content knowledge (PCK, first proposed by Shulman in 1986). Teachers develop these interconnected and complex forms of knowledge in the process of educational design work (Koehler & Mishra, 2005; Mishra & Koehler, 2006). Koehler & Mishra (2005) cite evidence for this from several of their own studies.

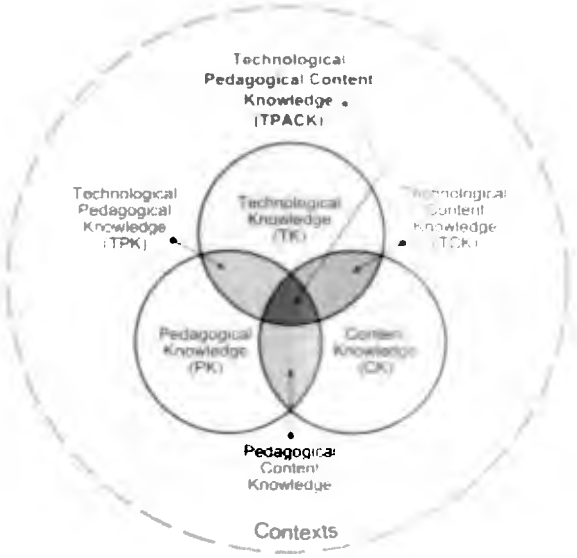

Figure 2-5. The TPACK Framework
(Source: http://tpack.org/)

In a case study of a college faculty member who worked with a design team in creating an online course, Koehler et al. (2004) noted changes in the faculty member's technology literacy and "her thinking about her personal relationship with

technology" (Koehler & Mishra, 2005, p. 136). In another study using qualitative and quantitative analyses of field notes for two design teams, Koehler et al. (2004) observed that "participants moved from considering technology, pedagogy and content as being independent constructs toward a richer conception that emphasized connections among the three knowledge bases" (Koehler & Mishra, 2005, p. 136). In a third study that made use of a survey administered to four faculty members and 14 students at two different points during a graduate 'learning by design' course, Koehler & Mishra (2005) found a change in participants' thinking about the role of technology in education, from "relatively simple beliefs" that "technology is just a new medium to be learned, and designing with technology is simply translating previous content and pedagogy into that new medium", to the recognition that "online courses require more time" and "a change of content and pedagogy" and "designing an online course is different than (sic) designing a face-to-face course" (p. 144).

In a more recent study, Graham et al. (2012) measured changes in the TPACK of 133 teacher candidates by analysing their rationales for selecting technology in three design tasks in a semester-long education technology course. Graham et al. noted changes in the quantity and quality of rationales, in particular "a dramatic increase for all of the TPK and TPACK categories, with a slight reduction in the number of teacher candidates using TK as a rationale for their technology use" (pp. 10-11), and much more detailed rationales being given during the post-course assessment than during the pre-course assessment. Graham et al. stated that although they had expected that a greater number of rationales would be focused on more content-specific strategies, these were the least common among the rationales cited probably because the teacher candidates had yet to take methods courses in their chosen content areas. Among the implications they derived from their study is the need for approaches to educational technology courses that would focus more on developing content-specific pedagogical strategies that are developmentally appropriate, and less on using technology simply because it would be motivating and fun for students. Relating this to the question regarding the process and direction of pedagogical change experienced by faculty engaged in online learning, I surmise that as faculty develop their TPACK through online course design, they will not only adopt technology-supported pedagogical designs that will foster meaningful learner engagement with the content of particular disciplines, but also provide pedagogical

rationales for these designs that highlight the integration of technology, pedagogy, and content.

2.3.4 A framework for analysing the impact of teaching with Web technologies on course design practices in online distance learning

The second research question that this study aims to address has to do with the impact of teaching with Web technologies on the faculty's course design practices, with 'impact' operationalised as 'change' in practice. The literature reviewed in this regard focuses on the changing role of teachers particularly in course design, variation in teachers' experiences of pedagogical change in designing online learning, and development of teacher knowledge of and through online course design. There appears to be a consensus in the literature reviewed about the direction of change — i.e., from the design of content to the design of learning environments fostering active collaborative learning, and from teacher-focused knowledge transmission or instructivist models of teaching to learner-focused collaborative knowledge construction models. Accordingly, in this study I look at whether these patterns can be discerned from the accounts of the research participants. In particular, I examine references to change, or the lack of it, in what they focus on in the design of their courses and their perspectives on design in online learning.

Some of the studies reviewed suggest that for many teachers the apprehension of change in online teaching is initially with reference to the experience of teaching in face-to-face settings. Whether this point of reference changes as teachers gain more experience in teaching online, and as their knowledge of how to teach online increases, is an aspect that I also consider in my analysis of the data collected in this study.

2.4 What are the issues and challenges in designing online learning?

Some of the key issues and challenges in designing online learning can be deduced from the preceding sections. In section 2.3, the issue of the non-improvement of teaching practices in online environments is mentioned. In a study of VLE use by faculty in a university in Ireland, Blin & Munro (2008) found that the dominant use of the VLE was for the dissemination of course-related materials previously distributed via the Intranet or on paper (see also Sharpe et al., 2006). Hedberg (2006) cites survey results indicating that for majority of more than 20,000 students and 800 staff

surveyed in five large technological universities in Australia, online learning meant the provision of information online and unmoderated discussions. Kirkwood (2009) observes that "[d]espite huge investment in infrastructure by governments and individual institutions, there ... [are] disappointing levels of uptake, of engagement, [and] limited development of 'learning communities'" in both campus-based blended learning and DE contexts (p. 109).

The mix of factors accounting for non-transformational use of technologies will differ according to context (Kirkwood, 2009). But one of the factors that might be true in most if not all contexts is faculty preparedness for the complex and challenging practice of design for effective learning with technology. e-Learning design requires the integration of diverse knowledge systems, which is not a simple or straightforward process. Markauskaite & Goodyear (2009) observed synchronous online sessions conducted by one university teacher in Australia, analysed her teaching resources and notes, and asked her to explain her educational design decisions "to discover how different mental resources are activated and blended in making complex professional judgments about learning design, teaching and inquiry in specific contexts" (p. 617). They found evidence of the need for and the complexity "of integrating pedagogical frames and ICT tools with the other knowledge frames needed to design productive learning tasks" (p. 621) for teaching specific disciplinary knowledge.

Mishra & Koehler (2006) have noted that TPACK is developed by engaging continuously in the design of technology-supported learning. According to Angeli & Valanides (2009), this continuous practice should lead to the transformation of the forms of knowledge that comprise TPACK and not just the increase or accumulation of each component. Moreover, "teachers need to be *explicitly taught* about the interactions among technology, content, pedagogy, and learners" in order to effectively use technology to improve learning (Angeli & Valanides, p. 158, emphasis added).

There is a consensus in the literature regarding the need for practitioner development programmes in teaching with technology to be holistic, keeping in mind that the development of TPACK and its deployment in technology integration practice are influenced by a complex of factors, such as: the policy environment (Conole, 2007; Pachler & Daly, 2011); institutional support for technology integration (Kirkwood, 2009; Sharpe et al., 2006); a vision for technology-supported teaching

and learning (Bates, 2000; Hughes, 2004); teachers' personal and professional use of technology (Becker, 2000; Russell et al., 2003); teachers' pedagogic orientation and subject subculture (John, 2005; John and La Velle, 2004); professional development, particularly the kind that fosters critical reflection on practice (Daly & Pachler, 2007); and membership in a community of practice (John, 2005; Laurillard, 2011; Otero et al., 2005). Holistic practitioner development would adopt a variety of approaches — including "training (faculty development courses and workshops), guidance (learning technology experts), online resources (open educational resources for content, digital repositories), digital tools (toolkits, authoring tools, virtual learning environments), and communities (peer groups working together in online spaces to exchange ideas and information)" (Laurillard, 2011, p. 66) — the planning and implementation of which would be based on principles for 'effective interventions that support e-learning', namely, usability, contextualisation, promoting professional learning, working with communities, and promoting good learning design (Sharpe, 2004; Sharpe & Oliver, 2007).

Kirkwood & Price (2006) argue for professional development that includes not only the individual teacher but also departmental faculty and senior university managers in order to "help engender an evidence-based and genuinely developmental approach" to e-learning policy development within higher education institutions (p. 10) (see also Sharpe et al., 2006). Policy development needs to address policy gaps as well as 'policy tensions' (Hardy, 2008; Pachler & Daly, 2011) or conflicting policy pressures arising from incompatible or contradictory policies, procedures, and guidelines, "whether ratified or tacitly agreed" (Masterman & Vogel, 2007, p. 58). For example, there can be tensions between policy on assessment of student learning and policy promoting innovation with ICT, as Pearson & Naylor (2006) found in their study of ICT integration in secondary schools in England. There might also be contradictory discourses within policies promoting innovation which, when coupled with pressure to rapidly implement a complex learning reform agenda, can militate against policy support for good practice in professional development in e-learning, as noted in Hardy's (2008) study of a cluster of six schools in Queensland, Australia.

Among established DE universities, there is a need to review and reconceptualise organisational structures and procedures in order to manage and support innovations, and to address issues such as service standards for students and staff, and quality assurance (Abrioux, 2001, 2006; Annand, 2007; Sangra, 2006). This

is not as easy as it sounds. As Abrioux (2001) has noted, the enhancement of "old models of distance education by taking advantage of the e-learning environment" is just as challenging as the adoption of online learning by conventional institutions because "the [very same] institutional infrastructures and learning/teaching support functions....which, in the past, complemented the individual academic's expertise and served to create a comprehensive high quality learning environment for distance learners" (p. 1) might also now constrain innovative practice by distance educators.[29]

2.5 Chapter summary

This chapter reviews some of the theoretical and empirical literature on online teaching in higher education. The review points to a range of Web technologies currently in use in online learning, from more recent Web 2.0 applications to older or more established online learning technologies such as hypertext and VLEs. While approaches to teaching with Web technologies are described in the literature in dichotomous terms — i.e., whether they are one-way or interactive; information/content-focused or learning-focused; teacher-centred or learner-centred; and catering to individual study or fostering collaborative learning and knowledge construction — studies on what influences how Web technologies are used in online learning suggest a mix of factors, including teacher conceptions of or beliefs about teaching, disciplinary influences, curricular requirements, teaching contexts, and learner-related concerns. In DE contexts, technology use is influenced by considerations related to learner access, learner autonomy, and interaction in a distributed learning environment.

The studies reviewed suggest that designing online learning is a complex situated process that requires the integration of knowledge of content, pedagogy, context, and technology. It involves not only balancing various design factors but also modifying teaching practices and adopting new teaching roles, strategies, and frameworks. The research also suggests that pedagogical change is complex and it is more evolutionary than revolutionary. Change can be observed in the amplification of certain aspects of design practice and the reduction of other aspects, variation in the focus of design, and the development of teacher knowledge of how to design for

[29] The "constraining infrastructure" includes "capital investments such as printing presses, television and radio production, course material warehouses, and various administrative and computing systems" and "institutional investments in human resources... and labor relations structures" (Abrioux, 2001, p. 1).

effective learning with technology. The need to adopt new designs for learning poses challenges to both individual teachers and institutions, which highlights the importance of practitioner development and support for effective pedagogical practice in online learning.

The literature review also suggests that there is no lack of research on online teaching and design for online learning. However, the studies that have been undertaken are on Australian, European, and North American higher education contexts, and there is value in looking at whether and how approaches to and perspectives on online teaching and design for online learning in the Philippine context are similar to and/or different from what is reported in the literature. In the current study I examine online course design practice in a single mode DE university in the Philippines using a set of analytic frames formulated from the literature reviewed in this chapter. The next chapter describes the methodologies I employed for researching teachers' practices in and perspectives on designing online DE in the Philippines.

CHAPTER 3 - METHODOLOGY

This is an exploratory study of ODeL course design practice at a small single-mode DE university.[30] It uses a qualitative approach to develop an understanding of academic experiences in and perspectives of ODeL course design in this institutional context.

More specifically, this is a 'collective case study' (Stake, 1995) of the ODeL course design practice in one institution based on the experiences of 10 university lecturers. A collective case study is derived from joint analysis of several individual cases (Stake, 1995). These individual cases are referred to (by Stake, 1995; 2003) as 'instrumental case studies' because unlike an 'intrinsic case study' which is undertaken to understand the uniqueness of a specific phenomenon or case, they are conducted to help provide a general understanding of a phenomenon that extends beyond single unique cases (Harling, 2002). According to Stake (2003), in the collective case study, particular cases are "examined mainly to provide insight into an issue or to redraw a generalisation. The [particular or individual] case is of secondary interest, it plays a supportive role, and it facilitates our understanding of something else" (p. 137). The generalisation aimed for is analytic generalisation, defined as "the development of a theory which helps in understanding other cases or situations" (Robson, 2002, p. 177). In this study, I look into the course design practices of 10 academics in order to understand the phenomenon of online distance learning at UPOU. The focus therefore is not the course design practices of individual faculty members *per se*, but their collective practice of course design and the institutional ODeL 'profile' at a specific historical moment. Accordingly, as described in section 3.3 below[31], data are analysed "horizontally" or "cross-sectionally" — i.e., for each research theme and sub-theme, data from all research participants are examined and patterns identified and analysed.

3.1 The Research Participants

The 10 academics included in this study were purposively selected to provide a range of perspectives on ODeL course design. First, I sought out as research participants faculty members whom I knew to be using various Web technologies in

[30] See Chapter 1, section 1.4, for a description of the institution.
[31] See in particular step 4 of the first stage of data analysis.

their courses, and who were using these technologies in a variety of ways. Second, I chose colleagues whose collective experience of DE at UPOU spanned several 'generations', from the early phase of using pre-packaged print-based materials with face-to-face tutorials, to the middle phase of using print-based materials with online tutorials, to the more recent phase of resource-based online course development and delivery. In this way, they could provide more insights into how course design practices at UPOU have evolved and the corollary issues if any.

Based on these criteria, eight full-time UPOU faculty and two affiliate faculty administrators who have been closely involved with the institution since its establishment were selected as research participants. The eight full-time faculty members comprise about a third of the total number of full-time faculty members, while the two affiliate faculty administrators represent about one percent of the total number of affiliate and adjunct faculty. Three of them are male and seven are female, reflecting the predominance of female faculty members in the university as a whole. In terms of rank, three research participants are assistant professors, four are associate professors, and three are full professors. Four of the participants have at least 10 years experience in teaching at a distance, two have more than five years experience, and four have less than five years experience. They teach courses from different disciplines, all teach graduate level courses, and four teach undergraduate level courses as well. Table 3-1 presents the teaching profiles of all 10 participants.

Table 3-1. Participant profile

Participant Code	Gender	Rank	Subject/s Taught	Years in DE	Level Taught
P1	M	Associate Professor	Biology; Ecology	4	Undergraduate; Graduate
P2	F	Professor	Reading Education	15	Graduate
P3	F	Associate Professor	Nursing	10	Graduate
P4	M	Associate Professor	R&D Management	8	Graduate
P5	F	Associate Professor	Organizational Communication; Qualitative Research	6	Graduate
P6	M	Assistant Professor	Marine Biology; Natural Resources Management; Land Valuation	3	Undergraduate; Graduate
P7	F	Professor	Development Communication	12	Graduate

P8	F	Assistant Professor	Computer Skills; Multimedia Design	3	Undergraduate; Graduate
P9	F	Assistant Professor	Public Management	3	Graduate
P10	F	Professor	Audio-Visual Materials Development; Gender and Multimedia	15	Undergraduate; Graduate

The participants also vary in the kind and quantity of training in teaching online and at a distance that they have gone through. One has formal graduate training in DE, three have completed a 10-month online training programme on e-learning, and three have participated in study visits to DE institutions abroad. Four have attended only university-organised one-day or half-day workshops on course design and use of the VLE. All but two have participated in national and international conferences in ODL. In addition, all 10 participants are faculty administrators and/or have administrative roles that gives them a vantage point from which to observe the course design practice of other faculty members and reflect on the factors that impact on this practice, the issues arising therefrom, and their implications for policy and operations.[32]

Given the study's focus on the collective case rather than individual cases, I have opted not to provide more detailed portraits of each of the research participants in this chapter. However, in the discussion of findings (in Chapters 4 and 5) I take care to provide relevant details about particular participants to help explain particular perspectives and viewpoints that are ascribed to them.

3.2 Data Collection

3.2.1 Selecting the method

Because this study focuses on what pedagogical perspectives and priorities underpin how and why the research participants use Web technologies in their courses, how they think teaching with the Web has impacted on their course design practices, and what they think are the issues and challenges in online course design, interviews comprised the method of data collection. The interview is the most

[32] Four of the participants are currently serving as programme chairs, three have served as programme chairs in the past, two are programme development associates providing technical support to faculty in the use of the university's learning management system, and three have overall supervision of academic program development and delivery as dean, vice-chancellor of academic affairs, and chancellor.

appropriate method for finding out what individuals think and feel about a phenomenon (in this study, this phenomenon is course design in online DE) — i.e., their intentions and perceptions and the meanings that they ascribe to the phenomenon (Merriam, 2009; Robson, 2002). It is also a suitable method for deriving participant accounts of how a phenomenon has developed over time (Robson, 2002).

I had initially considered using participant observation, in particular focused observation and selective observation, as the method of data collection. According to Angrosino & Mays de Perez (2003, p.114), focused observation is a method applied to "well-defined types of group activities" while selective observation is used to study the specific attributes of these activities. In focused observation, what to pay attention to is guided by the insights of those whose practice is being observed, which in turn are elicited through interviews (Angrosino & Mays de Perez, 2003). However, reflecting further on comments on the proposed method of data collection from the reviewers of the thesis proposal, I decided against using participant observation for two reasons. First, course design is often a private process that is difficult to observe directly. While course design is manifested through such artefacts as course plans or syllabi, activity guides, and course websites, these are arguably not the design process itself but rather the outcomes or products of that process, and it is still necessary to ask the designer directly what factors were considered in their development.[33] Second, with the shift to single lecturer-generated courses at UPOU, there is practically no opportunity to observe the actual course design process.[34] While the UPOU faculty included in this study have talked about their course design work during faculty workshops and colloquia, these presentations and discussions are arguably '"second order" commentaries on design, rather than actual design itself'[35].

More to the point, because my study focuses on the pedagogical rationales or explanations that underpin the research participants' specific design practices, rather than how they actually go about the course design process, interviews are the most suitable means of data collection. This is based on my understanding that —

1) Course design is a purposeful activity: it involves making deliberate choices of content and instructional strategies to achieve specific curricular outcomes based

[33] I experienced this in my institution-focused study where my initial impressions and analysis of teachers' lesson plans were proven to be partially valid at best and on occasion simply inaccurate by the teachers' explanations during my interviews with them.
[34] With course team-generated courses, course team meetings provided an opportunity to observe the course design process.
[35] I am indebted to Dr. Martin Oliver for this phrasing.

on the designer's understanding of the learning context, including the nature of the subject matter, the type of learner, and the resources and tools available (Goodyear, 2009); and

2) Especially in courses designed by faculty members working alone or independently, course design is influenced by the teacher-designer's personal constructs, which consist of personal experiences of learning, including those shaped by culture, gender, and ethnicity; personal views of what makes for 'good' teaching; and beliefs about the purposes of the subject (Leach & Moon, 2000; Banks, Leach & Moon, 2005).

I contend that the intentions and personal constructs that influence design are best accessed by asking the designer directly what he/she intended to do or achieve, and why.

The interview method is not without limitations. One is possible incongruence between what interviewees say and what they actually do (Kane et al., 2002). But since the research focus is the designer's intentions and rationales, this is not an issue in this study. Another limitation of the interview method is the possibility of 'respondent bias' which is manifested either in interviewees withholding information or interviewees giving responses that they think the interviewer wants to hear (Robson, 2002). The possibility of respondent bias was an issue in this study because of my status as insider-researcher and, more generally, because of the nature of interviewing as a data *generating* method rather than simply a data gathering method. As Freebody (2003, p. 137) puts it, in interviews the "questions are...not...neutral or uninterested invitations to speak [but] rather...shape the grounds or the footings on which the participants can and should speak". This is not necessarily a negative quality because interviews, especially in insider-research, are also "interactional events in which members of a culture draw on and rebuild their shared cultural knowledge" (Freebody, 2003, p. 137). However, interview participants should feel that they can interact with the interviewer freely and on an equal footing.

In this study, I sought to achieve this by carefully explaining to the participants the purposes and scope of the study, including the types of questions I would ask them to answer; formally requesting their consent to participate in the study and formally requesting an interview at a date, time, and place of their choice; and assuring them that their answers would be anonymised in the report. Indications that the research participants interacted freely with me during the interviews are their

active engagement in the interview process and detailed responses to my questions (as can be seen from the discussion of findings in Chapters 4 and 5), which often led to a lengthier and deeper discussion than I had anticipated. Furthermore, I felt confident that I did not exercise any undue influence over the research participants, despite my status as a colleague, and that they could interact with me on an equal footing, because of their position and rank in the university hierarchy (two of them are high-ranking university officials and four others are heads of key university offices, including one academic unit), and the fact that they are members of other Faculties (i.e., not the Faculty I belong to) (this was the case with eight of the research participants).

In sections 3.2.3, 3.3 and 3.4 of this chapter I discuss further how I conducted the interviews in ways that I hope address the limitations posed by my status as insider-researcher.

3.2.2 Developing the interview schedule

The first version of the interview schedule consisted of 23 questions grouped into five sections. This was piloted with a faculty member with the same characteristics as the research participants, to determine whether the questions were clear, sensible, and discrete (i.e., not repetitive and with minimal overlap), and whether the length of the interview was reasonable. The pilot interviewee said the questions were phrased clearly but two questions seemed to call for answers she had already given. She also commented that the questions "made me think", which I interpreted to mean that the questions were meaningful and they stimulated reflection on practice, as intended. In addition, she emphasised that she answered the questions based on how she teaches undergraduate courses, and explained that she "behaves" differently in undergraduate and graduate courses because of "the nature of the course and the kind of students". I took note of this and, during the interviews with the research participants, made sure to ask those who teach both graduate and undergraduate courses whether they designed courses differently depending on the degree level.

The final interview schedule consisted of 11 questions (see Appendix 1). The rest of the questions — about the participants' background, personal definition of online teaching and learning, and self-description of their teaching style — I put in a

short questionnaire that the interviewees could answer after the interview and send to me by email (see Appendix 2).

Table 3-2 shows how the final set of interview questions maps on to the research questions. The sequence of questions followed Entwistle's (1997, p. 132) recommended movement "from actions to experience, and from concrete to abstract" — i.e., from descriptions of specific and concrete teaching situations and practices, towards deeper reflection on their experiential and more abstract dimensions.

Table 3-2. Question map

Research Questions	Interview Questions
Research Question #1: How and why do UPOU faculty members use Web tools and resources in the courses that they teach? What pedagogical perspectives and priorities underpin their use of Web tools and resources in their courses?	1) What Web-based tools and resources have you used or are using in the courses that you teach at UPOU? 2) Please describe how you use each of these Web-based tools and resources in the courses that you teach.
	3) What are your pedagogical purposes for using these Web-based tools and resources? *(may cite different purposes for different tools and resources)*
	4) How important is each of the three types of interaction — learner-content, learner-learner, learner-teacher — in your online DE courses? (**Probe**: Is there a particular type of interaction that you consider more important than others? If so, which one?) How do you design for the type(s) of interaction that you consider important?
	5) In your online DE courses, how important is independent, self-paced learning on the part of the students? How do you design for independent, self-paced learning in your online DE courses?
	6) What (other) factors do you take into account when you design your Web-based or online DE courses?
Research Question #2: What is the impact of Web-based tools and resources on the course design practices of these faculty members?	7) How has your course design practice evolved from your early years of teaching at a distance to the present?
	8a) How does the use of Web technologies impact the way you teach? More specifically, what aspects of your online distance teaching practice are strengthened by your use of Web-based tools and resources?
	8b) What aspects of your online distance teaching practice are weakened or diminished by your use of Web-based tools and resources?
Research Question #3: What are the issues and challenges in Web-based course design from the point of view of these faculty members?	9) What gaps, if any, have you observed between your pedagogical aims and what you are actually able to do or achieve in your online DE courses? What do you think would explain these gaps?
	10) What do you think are the issues and challenges in designing and developing online distance education courses at UPOU?
	11) How do you think should these issues and challenges be addressed?

3.2.3 Conducting the interviews

The questions included in the interview schedule refer to the main categories of information that I intended to collect, and they are phrased in a generic fashion as they were intended to be used in an exploratory and flexible way during the interviews themselves. This semistructured approach to interviewing (Merriam, 2009), taken in keeping with the qualitative or 'flexible' design (Robson, 2002) of the study, involved rephrasing the questions and using probes or follow-up questions to elicit specific answers and to clarify points raised. Table 3-3 shows a sample of the specific questions and follow-up questions posed during the interviews.

Table 3-3. Sample specific questions and follow-up questions

Questions in the interview schedule	Specific questions posed during the interview	Follow-up questions/Probes
1) What Web-based tools and resources have you used or are using in the courses that you teach at UPOU?	...So let me begin with the Web tools and resources that you use. I know for example that you use tools like.... Other than that, what other applications and resources do you make use of?	But there are specific features in our virtual classroom, in Moodle, as you know, some of which you use maybe or some of which you don't? Or do you use them all? *** I think at one point or another you mentioned chatting with your students using Skype or some other tool maybe?
2) Please describe how you use each of these Web-based tools and resources in the courses that you teach.	Ok, how do you use these resources that you've mentioned? *** Let's take each of these and if you could describe how you use them. So for example, how do you use chats and for what purpose do you use them? *** Can we take them one by one? You've just described now how you use screencasting. So if you can briefly describe how you use all the other tools?	Can you elaborate a little bit on that? When you design a discussion forum, what objectives do you have in mind? What would you like to happen? *** Can you differentiate a little the kind of discussion that takes place via chat and the kind of discussion that takes place via the discussion forum? *** Ok. Why do you like that particular way of doing things, [I mean] repurposing...?

3) What are your pedagogical purposes for using these Web-based tools and resources? *(may cite different purposes for different tools and resources)*	Ok, if we can just abstract a little bit. In general, what I'm getting is that you use a range of tools and applications for different purposes: to engage them in discussion, to be able to provide easy access to content, to be able to motivate and engage them and get them to participate more, to answer very specific questions about what they find difficult. Any other purposes we haven't surfaced? *** How would you summarize your pedagogical purposes for using all of these Web-based tools and resources?	Why is that in particular? Is it a function of the kinds of students that you have? Or would you do this anyway? *** Ok, so the principle of redundancy. Any other? Other than those you have previously discussed? *** So far you've identified several pedagogical purposes for your choice of web-based activity. One that emerges very clearly is to maintain learner interest.... to keep them engaged – that's one purpose that you've identified. The other is, for this particular activity, it's to clarify misconceptions. Any other? I'm just recapping what you've already mentioned or implied.
4) How important is each of the three types of interaction — learner-content, learner-learner, learner-teacher — in your online DE courses? (**Probe**: Is there a particular type of interaction that you consider more important than others? If so, which one?) How do you design for the type(s) of interaction that you consider important?	I actually have one question asking you about what you think of each of the three types of interactivity. You've already mentioned the interaction between the learner and the material, the learner-content interaction. And then there are two others – the learner-learner interaction and the learner-teacher [interaction]. So how important is each of these in your courses and how do you design for each of them?	You mentioned that a particularly dominant form of interaction is the teacher — you — interacting with students. How does this happen? Is this in the context of the forum or do you for example have a private, one-on-one conversation with them by email?

5) In your online DE courses, how important is independent, self-paced learning on the part of the students? How do you design for independent, self-paced learning in your online DE courses?	The other priority in distance education is learner independence, independent learning, because of the circumstance. How important is this in your courses and how is it designed into your courses? *** ...you said that for you it is important for them to be able to interact with the teacher and with each other, but there are people who cannot work collaboratively and who would prefer work by themselves, to learn by themselves. So that's them, right? But for you personally, how important is it that students should be able to work independently within the context of your course? What is the place of independent learning in your course vis-à-vis for example interactive learning which you already said is important?	Ok. I will probe a little bit in terms of how you design, because it is much more clear how you design for interaction, like by forming a forum and then posing a question. But how do you design for independence? *** In the previous question you talked about the role of the teacher in encouraging that kind of learning. Is there a role for you or the FIC in developing autonomous learning skills? *** Would you say that providing that kind of structure has an effect – a positive effect – on their ability to do things by themselves? If so, how is this apparent?
6) What (other) factors do you take into account when you design your Web-based or online DE courses?		Ok. So that's three factors now: the learning objective, your conception of what learning is and how it takes place, and what you know about your students, what you assume initially but actually this is also I guess confirmed by your experience, right? Are there any other factors that you take into account?
7) How has your course design practice evolved from your early years of teaching at a distance to the present?	...You've been teaching at UPOU for what – three years, two and half years? So you've handled these courses several times maybe? With different sets of students. Do you notice whether the way you are designing your courses now is different and if so in what way is it different? *** ... you've been teaching with UPOU since 1999. As you know, the way we develop our courses has changed. We've moved from print-based primarily with face-to-face tutorials, and we've transitioned to online tutorials. In what way has your own design practice changed, with this shift?	You mentioned precisely the key term – pedagogy... if we focus just on pedagogy, on the way that you teach, and try and identify or describe a little more concretely the changes that have taken place in that area. How would you describe the change for you? *** Right. So that's from the print-based with face-to-face study sessions [to] online tutorials. I don't know if you will agree that there has also been sort of a shift in the way that we use the Web from the early years of our online way of doing things to the more current situation. And my question really has to do with that – whether the way you design your course is changing. *** Ok. Experimentation towards what purpose?

8a) How does the use of Web technologies impact the way you teach? More specifically, what aspects of your online distance teaching practice are strengthened by your use of Web-based tools and resources?		Just to make sure I'm getting what you're saying, does this have to do with strengthening instruction and the modes or the diversity, or the instructional strategies? *** The fact that you can use them and not have to make them yourself, as you put it — what is the advantage of that from a pedagogical point of view? For you as a teacher, what does that add or what does that enable you to do?
9) What gaps, if any, have you observed between your pedagogical aims and what you are actually able to do or achieve in your online DE courses? What do you think would explain these gaps?	...when you were designing the activities that you were designing, you had very specific goals in mind. Has it ever happened that there is a gap between what you had aimed for and what you were able to achieve?	So far what you've been pointing out as one explanation for the gaps and the weaknesses is the technological limitation. Are there other reasons that you can think of for why there is a gap between what you intended and what actually happened?
10) What do you think are the issues and challenges in designing and developing online distance education courses at UPOU?	This is more general and your vantage point is interesting because you are the program chair so I suppose you would have [the] opportunity to observe the way others are designing their courses, if at all. So my question has to do with what you consider to be the issues and challenges in the way that we do course design and development at UPOU -- based on your own practice, based on what you have observed of what others are doing. *** You are reflecting on the challenges and issues in course development in the [program], beyond your course and therefore across the program. What about...in UPOU as a whole? Do you have any thoughts about issues and challenges in UPOU as whole in terms of course design and development?	Like different faculty do different things. And then you mentioned the need to share what they develop. Why is that important? Why is that necessary?
11) How do you think should these issues and challenges be addressed?	Now how do we address these issues that you have identified? How can we begin to address them?	

As can be deduced from Table 3-3, aside from following up on details mentioned or referred to in answers to previous questions, I also posed specific questions based on relevant background information or my personal knowledge of some of the research participants' course design practices based on previous exchanges with them[36]. I tried to draw out thick descriptions of their course design practice by asking for and about specific examples of their course design practice. Sharpe et al. (2005) refer to this use of an artefact or activity to guide recall as the 'interview plus' method. The method helped the research participants to be more explicit not only about how they used specific tools and resources but more importantly for this study, about their reasons for using these and the factors that they take into account in their course design work.

In addition, asking the research participants to elaborate on and clarify points helped me to avoid jumping to conclusions about what they meant, which is one of the risks in insider-research (Rooney, 2005). I also tried to avoid missing and/or mis-recording important information, a related issue in insider-research (Rooney, 2005), by repeating back to the research participants statements they had made and giving them an opportunity to confirm that I had noted the statements correctly and to provide additional details if they wished.

The interviews were conducted in UPOU offices that were convenient to the interviewees and which afforded privacy and quiet (e.g., a small conference room, the interviewee's office). All interviews were conducted in English, which is the official medium of instruction in higher education in the Philippines and one of the country's two official languages[37]. The interviews, which lasted between 45 minutes and 90 minutes, were audio recorded. I transcribed all interviews fully, a process that gave me the advantage of becoming very familiar with the transcripts.

[36] Such exchanges took place during university colloquia and faculty workshops where participants shared and discussed examples of their design work.
[37] The other official language of the Philippines is Filipino.

3.3 Data Analysis

The data analysis was undertaken in two stages. In the first stage, I did the following:

1) First, I read through each transcript to check that the transcription was as complete and as accurate as possible. This meant (re)checking certain sections of the transcripts against the audio recording. While my first concern was to ensure a verbatim account of each interview, I also decided to improve the clarity and coherence of the accounts by removing verbal tics (e.g., 'uhms' and 'ahs', repetitions, false starts) except where these appear to signal a shift in tone or perspective, and by translating into English the odd Filipino word or expression that sometimes occurred during the conversation.
2) I read through the "clean" transcripts and then annotated what I considered to be key or significant comments, following a process of open coding (Merriam, 2009).
3) With each interview transcript, I proceeded to read closely the response to each question and to code them more systematically. I also looked at the way responses to different questions within each transcript were related, not only because the questions themselves constituted thematic clusters (see Table 3-2) but also because in the course of an interview an answer to a previous question would often be elaborated upon in the response to another question. This process enabled me to refine and group the codes I had initially assigned to different parts of each transcript.
4) Next, I took all responses to each question from all of the interview transcripts and compared and contrasted these in order to identify similarities and differences, and formulate categories of responses to each question. For example, I took all of the interviewees' responses to question #4 and organised the responses according to the different perspectives on the importance of each type of interaction and their relationships to each other.
5) I continued the analysis of responses to particular questions and clusters of questions, listing all categories or themes that I had identified, and refining and reducing them as I read and re-read the data sets and began to write the report of the research findings.

In the second stage of data analysis, which took place during the writing of the report, I looked at the data using the analytic approach and frameworks that I had derived from the literature review[38]. In broad terms, this involved comparing and contrasting the themes or patterns I had identified in the interview data with related themes or patterns in the literature. This gave me a broader perspective on particular findings, helping me to avoid a tendency to miss the forest for the trees. At the same time, I sought to avoid seeing in the data only what my theoretical lens would allow me to see (i.e., tunnel vision) by being careful to attend to 'counter-examples' (Knight, 2002; Robson 2002) or themes emerging from the study that appeared to be new or different or relatively unexplored in the literature. The study's findings are presented (in Chapters 4 and 5) according to the final set of themes and sub-themes.

3.4 Ethical Considerations

The study adhered to the Revised Ethical Guidelines of the British Educational Research Association (2004). Informed consent was sought by email initially, and then just before the start of each interview following an explanation of the research aims and purposes. None of the participants raised questions about the conduct and content of the interview. To maintain anonymity, codes are used to refer to participants in this report.

An important ethical concern in this research is my position as a faculty member and administrator at UPOU. As a long-time member of UPOU's core faculty who also served for four years (from 2000 to 2004) as head of the university's instructional materials development unit and who has sat in policymaking committees[39], I cannot pretend to be an "objective" or "disinterested" observer of teaching and related practices at my institution. My position in fact is that of a 'complete member researcher' engaged in the study of my own and my colleagues' "subjectively lived experience" (Angrosino & Mays de Perez, 2003, p. 114) of ODeL course design. From a research point of view, this has posed both advantages and limitations.

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[38] See Chapter 2.

[39] I joined UPOU in 1999 after 10 years of teaching at the flagship campus of the UP System. My administrative roles at UPOU have included membership in the Academic Personnel Board (APB) and the Chancellor's Advisory Council. The APB recommends and implements policies on hiring, retention and promotion, as well as tenure of faculty.

One advantage is that I know firsthand the course design practices that I sought to study. Another advantage is that I know from many formal and informal discussions with colleagues that there is a great deal of interest in further study of issues and trends in ODeL course design particularly within our institutional context. Third, because we are a very small university, my colleagues and I work closely together on many university projects and we have a highly collegial relationship. Thus, my colleagues were fully aware of my intentions to undertake this study and they expressed full support and willingness to cooperate.

On the other hand, I found that our organisational roles and experiences, as well as our personal and professional identities, made it difficult for my colleagues and I to assume the roles that our respective engagements in/with my study called for. I, for one, needed to consciously take on a situational identity as researcher, to "reinvent [my]self from complete insider to interested-but-ignorant bystander" (Angrosino & Mays de Perez, p. 125). To prepare for this process of 'role-making' (Angrosino & Mays de Perez, p. 111), I convened a colloquium series where my colleagues and I talked about some of the course design practices and issues that I was interested in analysing. The series ran from September 2009 to January 2010 and included presentations by 11 faculty members, including one by myself. Several aspects of the colloquium series assured me of the feasibility of conducting the kind of insider-research I undertook in this thesis: my colleagues' willingness to talk about aspects of their teaching practice and their openness to questions from the audience (including my own questions); the thoughtful and animated discussions during the colloquium sessions; and our collective resolve to continue our critical reflection and dialogue on our practice of DE.

Because my study revolves around issues and concerns in which they too have a special interest as DE practitioners and researchers, I consider my colleagues my research collaborators and not just "respondents" or "key informants". Accordingly, during the data collection, I adopted an attitude of disclosure and openness, explaining the purposes of my study and taking care to listen attentively to their responses to the questions that I posed. My colleagues were equally forthcoming in their accounts of their teaching practice, and they were unstinting in their sharing of insights and reflections.

Moreover, during the data analysis and report writing, I took pains to avoid making reductive interpretations by trying to be aware of my prejudices and taking

care not to impose these 'unexamined interpretive frameworks' (Brown & Dowling, 1998, p. 44) on the research data. Especially in cases where these contradicted my own perspective, I carefully re-read and reflected on statements made by my colleagues, referred to related studies, and rigorously applied my analytic framework. Aware that "the interpretations of the researcher [myself] are likely to be emphasised more than the interpretations of those people studied", I have tried in this report "to preserve the[ir] multiple realities, the[ir] different and even contradictory views of what is happening" (Stake, 1995, p. 12). I hope that in so doing, I shall have demonstrated, at least to myself, that "[a]n ethic of caution is not contradictory to an ethic of interpretation" (Stake, p. 12).

Chapter 4 – Findings and Discussion (Part 1)

In this chapter, I present and analyse findings related to my first research question, namely, *What pedagogical perspectives and priorities underpin UPOU faculty's use of Web tools and resources?* In my interviews with the research participants, this was articulated through questions about the faculty's pedagogical use of particular Web technologies, and the factors that they take into account in their choice of these technologies, including their perspectives on interaction and independence in learning. The first section of this chapter describes the faculty's use of Web tools and resources, with emphasis on patterns of use and what these suggest about their approaches to online teaching. The second section examines the pedagogical priorities and perspectives that underpin how the faculty design their online courses.

4.1 Use of Web tools and resources

The 10 academics who participated in this study indicated a variety of Web technologies that they use or have used in their courses (Table 4-1).

Table 4-1. Web technologies used by the research participants

Partici-pant	Subject/s Taught	Level Taught	Web Technologies Used		
			VLE features used	Other Web tools used	Web resources used
P1	Biology	UG	discussion forum	Yahoo Messenger, Googlesites (alternative course site)	websites, online articles, YouTube videos
		G	discussion forum	broadcast SMS	websites, online articles, YouTube videos
P2	Reading Education	G	discussion forum, assignment bin, quiz	alternative course site, social networking site (Ning), email	online articles, slide presentations, e-books, modules and tutorials, videos
P3	Nursing	G	discussion forum, quiz, assignment bin	blogs (Blogger), Skype, Yahoo Messenger, screencasting (Jing), email	YouTube videos, journal articles, images, websites (library resource lists), e-books
P4	R&D Management	G	discussion forum, assignment bin, quiz, wiki	Googlesites (as activity page and alternative resource page), email	YouTube videos, online articles, photographs

P5	Organisational Communication; Qualitative Research	G	discussion forum	Skype, email	online articles
P6	Coastal Resources Management; Land Valuation & Management	G	discussion forum	email, Skype	online articles, e-books, online database, videos
	Marine Biology	UG	discussion forum	email, Skype	website, e-textbook, videos
P7	Development Communication	G	discussion forum	email, Yahoo Messenger	online articles, YouTube videos
P8	Computer Education; Multimedia Design	UG	discussion forums	wiki, email, Slide Share, screen casting (Jing), chat, Facebook, Multiply	online articles, videos, tutorials
P9	Public Management	G	discussion forums, chat	chat, email, wiki	YouTube videos, online articles and reports
P10	Development of Audio-Visual Materials;	G	discussion forum, assignment bins	Multiply, email	videos, online articles
	Gender and Multimedia	UG	discussion forum, assignment bins	Email	videos, online articles

The most frequently mentioned Web resources were online articles, followed by video materials, websites and online databases. Also mentioned were webcast/streaming media and images taken from online repositories. The reasons given for the use of online articles and websites mostly point to the need to augment course materials with more current research-based information. Those who use videos cited its advantage as a medium for representing certain types of information (e.g., processes). In some cases, resources are used not as sources of content but as a focus for discussion or scenario building. Table 4-2 summarises the reasons given by the faculty for their use of particular Web resources.

Table 4-2. Reasons for using Web resources

Web-based resource	Reason for use/inclusion in courses	Research participant
Online journal articles	• To expose learners to current research findings that will clarify key concepts and illustrate the application of theories discussed in the course	P6, P9
	• To provide a focus for a discussion forum (i.e. the article or set of articles serves as the object of discussion)	P4, P5, P7, P9
Online videos and podcasts (e.g., YouTube videos,	• To expose learners to experts talking about particular topics	P6, P10
	• To clarify and illustrate concepts and processes	P6

video lectures, movie/film clips)	• To use in scenario building	P3
	• To serve as the basis/focus for an examination	P9
Websites and online databases (e.g., websites of specialist organisations)	• To expose students to real-world data that they can extract, assemble and analyse to demonstrate their understanding of key concepts and processes	P4, P6
	• To provide learners with a source of additional information and interactive materials on key topics	P2, P6, P8
e-Book/e-Book chapters	• To serve as the main text for specific modules (i.e. in lieu of a specially prepared module)	P2, P6
	• To serve as supplementary material to a course module or set of modules	P4, P7, P9

With regard to Web tools, all research participants said they use discussion forums in UPOU's Moodle-based VLE. Email and chat tools are also widely used. Some faculty members said they use media sharing sites, blogging services, and wiki applications. Some also mentioned online quizzes, screen casting, and social networking tools. Table 4-3 presents the pedagogical purposes cited by the faculty for their use of particular Web tools.

Table 4-3. Reasons for using Web tools

Web-based tool	Reason for use/inclusion in courses	Research participant
Online discussion boards/forums	• To provide an opportunity for learners to clarify their understanding of key concepts and issues and explore the connections between their practical experiences and theories taken up in the course	P1, P3, P4, P9
	• To enable learners to learn from each other	P8
	• To enable co-construction of knowledge about a particular subject matter	P5
Email	• To provide individualised feedback on assignments	P5, P6
	• To disseminate information about the course, such as schedules and announcements	P9
Chat tools (e.g., Skype, Yahoo Messenger)	• To provide a venue for socialisation	P9
	• For small group tutorials on difficult topics	P3, P5, P8
	• For individual consultations	P6
	• For Web-based seminars in which individual learners make short presentations and then respond to questions from classmates	P1
Media sharing sites	• To enable students to share assignments in various media	P7, P8

(e.g., Slide Share, Flickr, YouTube)	• To disseminate course materials in various media	P8, P10
Blogs/Blogsites	• To give students an option with regard to the format of an assignment (i.e. the assignment submission can be a blog, a video, or text document)	P1, P7
	• To enable sharing of personal critical analyses and reflections to which other learners can react using the 'comment' feature	P3
	• To serve as an alternative to discussion forums	P2
Wiki applications	• For collaborative writing exercises/activities/tasks	P3, P4, P9
Structured wikis (e.g., Googlesites)	• As another format for a course module or activity guidelines	P4, P8
	• To serve as a course website	P1, P2, P10
Online quiz tools	• To provide for learner self-assessment of how well they understood course readings	P2, P3, P4
Social networking sites (e.g., Face-book, Multiply)	• To disseminate course materials	P8, P10
	• To encourage and enable learner-initiated course-related discussions and activities	P8
	• For students to publish their multimedia assignments	P10
Screencasting applications (e.g., Jing)	• To explain certain concepts and processes (e.g., how to do a statistical computation)	P3, P8
Online polls	• To get a headcount on an issue or question	P7, P9

The faculty's use of Web tools and resources can be analysed in terms of Laurillard's (2002) media types:

Table 4-4. Web technologies used by the faculty classified by media type

Participant	Narrative media	Interactive media	Adaptive media	Communicative media	Productive media
P1	online articles, Web pages			discussion forums, chat via Yahoo Messenger, Web-based SMS	student blogs as an option for the term project student videos uploaded to YouTube as an option for the term project
P2	online articles, slide presentations, e-books, online videos	portals, topic hotlists, WebQuests	interactive tutorials; online quizzes	discussion forums, email, discussions on Ning	

P3	journal articles, videos, images, e-books, screencasts	resource lists	online quizzes	discussion forums, chat via Skype and Yahoo Messenger	group blogs wikis
P4	online articles, Web pages		online quizzes	discussion forums	
P5	online journal articles			discussion forums, chat via Skype, email	
P6	online articles, e-books, videos	websites, online databases		email, discussion forums	
P7	online articles			discussion forums, chat via Yahoo Messenger and Skype	student videos uploaded to Youtube as an option for the term project
P8	online articles, videos, screencasts, tutorials			discussion forums, Facebook	media sharing by students via Facebook
P9	online articles			discussion forums, chat tool on Moodle	wiki, chat summaries posted online
P10	online articles, videos			discussion forum	videos and other production exercises published by students on a social networking site

Table 4-4 shows that the research participants' use of narrative media is complemented by use of communicative media (by all), interactive and adaptive media (by some), and productive media (by some). Thus, their use of Web technologies may be said to be 'interactive' rather than 'one-way' (as defined by Mason & Rennie, 2008) for the most part.

How they use Web technologies can also be differentiated in terms of whether they emphasise individual and independent learning, or collaborative learning, as suggested by Roberts (2003) and Gonzalez (2009). Based on their reasons for using Web tools and resources, two (P6 and P10) appear to put more emphasis on independent learning, two (P7 and P8) emphasise collaborative learning more, and the other six (P1, P2, P3, P4, P5 and P9) give more or less equal emphasis to both independent and collaborative learning.

Among those who use the Web for collaborative learning, the collaborative learning activity is mostly asynchronous online discussion but with occasional synchronous activities such as chat sessions and small group tutorials. Some (like P3

and P7) design learning activities that require students to work together on projects, such as a group blog, wiki or video project. Among those who use the Web for independent learning, there appears to be an emphasis on providing a variety of resources for learners to use — i.e., rich media as well as text materials (in the case of P6, P10, and P2), interactive media such as online databases (P6) and tutorials (P2, P8), and adaptive media such as online quizzes (P2 and P3), aside from narrative media.

Still, even those who emphasise independent learning more than collaborative learning use discussion forums as a way of motivating learners (P6) and as a venue for learners to articulate their understanding of content (P10). Also, those who use social networking sites do so both for collaborative learning purposes, such as encouraging greater learner dialogue (P2 and P8), and to support independent learning, in particular as a venue for students to publish their individual work (P10). In other words, all of the faculty use more or less the same Web technologies to support both independent learning and collaborative learning. This proves Bain et al.'s (1998) assertion that it is not the type of technology used but how a particular technology is used that accounts for differences in pedagogical approaches.

Furthermore, contrary to the dichotomous description of academics' use of the Web that has been proposed in previous studies, in both independent learning with the Web and collaborative learning with the Web the academics included in this study use Web technologies in an interactive way to foster learner interaction with content and interaction among learners, and only some faculty members emphasise either independent learning or collaborative learning in their use of Web technologies and the rest attempt to balance both types of learning. This finding supports Haughey et al.'s (2008) comment regarding the diversity of pedagogical practices and orientations in contemporary DE, as well as Anderson's (2008) model of online learning which combines flexible, self-paced learning with participation in an online learning community.

4.2 Pedagogical perspectives and priorities underpinning use of Web technologies

In this section, I explore further variation in how the faculty use Web technologies in their courses in terms of their perspectives on learner independence and the three forms of interaction proposed by Moore (1989), namely, learner-

content, learner-teacher, and learner-learner interaction. My contention is that these perspectives would explain the general approach to online learning that is reflected in the faculty's course design practice. At the same time, there are variations in how faculty members put these general approaches into practice due to differences in disciplinary influences, curricular goals, pedagogical orientations, and learner-related considerations, as discussed in this section.

4.2.1 Perspectives on interaction and independence in online learning

The faculty were asked which of the three types of interaction identified by Moore they consider to be particularly important. Two (P6 and P10) said they consider learner-content interaction to be particularly important; two (P7 and P8) said they value learner-learner interaction the most; and six (P1, P2, P3, P4, P5, and P9) said all of the three types of interaction are important. Learner-teacher interaction was not ranked first by any of the research participants; instead, they discussed its importance in relation to either learner-content interaction (e.g., P2, P4, P6, and P10) or learner-learner interaction (e.g., P7, P8, and P9). The responses are consistent with the general approach to online teaching that each faculty member seems to espouse. That is, those who highlighted the importance of learner-content interaction use Web technologies for independent learning; those who underscored the importance of learner-learner interaction over other forms of interaction use Web technologies for dialogue and collaborative learning; and those who referred to the three forms of interaction as having more or less equal importance use Web technologies for both independent and collaborative learning.

The faculty were also asked about the importance of independent learning, a key feature of DE (Annand, 2007; Garrison, 2009), in their courses. Those who said they consider learner-content interaction to be the most important (P6 and P10) were unequivocal in their view that independent learning is essential. Among those who consider learner-learner interaction to be a priority (P7 and P8) and those who consider the three types of interaction to be equally important, there seemed to be some ambivalence towards independent learning. That is, while all acknowledged it to be important, some referred to the need to exercise independent learning within the boundaries set by course timetables (P2 and P3) and alongside collaborative learning (P4 and P7). This is discussed further below.

On learner-content interaction and independent learning. P6 and P10, who both consider learner-content to be the most important form of interaction, design learning activities that require learners to go through sets of learning resources and complete individual assignments based on their readings. For P6, learning resources that allow learners to extract, assemble, and analyse data (e.g., online databases) are particularly useful. Course design for P6 is a matter of coming up with a list of course topics, compiling resources (such as e-books, articles, and websites) for each topic, and then requiring students to read these resources and submit assignments consisting of their answers to 10 or so essay questions for each topic. He then provides detailed feedback on each student's work in a system that he says is "almost [like] individualised instruction" (P6). P10, on the other hand, requires her students in an undergraduate course on gender and multimedia to read several online articles on each topic and/or view video interviews, and then write a synthesis that she comments on. In a course on developing audio-visual communication materials, her students study video lectures where she explains the elements, principles, and processes of audio-visual communication, and then they complete a series of individual exercises and submit their work for marking. P6 and P10's descriptions of how they conduct their online courses are consistent with the independent learning approach shown on the right-hand side of Anderson's (2008b) model of online learning[40]. A key feature of this approach is a structured set of learning resources carefully selected by the teacher based on curricular requirements, and which the students are expected to study on their own.

For both P6 and P10, independent learning is a key feature of DE:

> P6: ...I often say that independent learning is a big part of [DE] simply because the instructor is physically removed from the student. I really think independent learning is 90 per cent of it. And you know, sometimes I think that you can teach yourself anything these days [because] everything is on the Internet already. And our function as instructors is simply to provide pressure. There are free books that people will not read [by themselves] but [which] they will have to read because you ask them questions about it and then you give them grades. That's our role really. Independent learning is really [the way to learn]... it seems there is no other way. My courses are all like that: read this stuff and then I'll ask questions about it. And I try to design the questions so that they make you think more about the material that you've read.

[40] See Figure 2-4 in Chapter 2, p. 42.

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> P10: [Learner independence is] very important. In fact, you can take my course and not even talk to me. But you make sure that you submit all the outputs that are asked of you. That's why I always say don't talk to me because that's just talk and if I don't see what you have done, then I know that you didn't get it. Sometimes I make comments like, "Why are you making your own principles? It seems that you did not read, you did not view "Knowing How to See" and you call these things by other names. What have you been doing?" In other words, with their output I know whether they have been able to process the text that they viewed....

Thus, discussion forums are not a main feature in the courses that they teach. P6 said that he began including a discussion forum in his courses only recently, when he realised that students might need to have some social contact with fellow learners to mitigate the sense of isolation that studying at a distance might engender. In P10's classes, learner-learner interaction comes at the end of the term when students showcase their work on their Multiply sites for others to view and comment on. This type of learner interaction with their peers and their personal community of family and friends, which a social networking site like Multiply allows for, is included in Anderson's representation of the independent learning approach to online learning.

On learner-learner interaction and independent learning. For P7 learner-learner interaction is the most important type of interaction and she exerts a lot of effort to design collaborative activities even if these may not be necessary to achieve the course objectives:

> P7: ...there are certain activities, course requirements actually or activities that are embedded in the modules that you could say are not always because this is really the course goal, you know, but what I really want here is [to] encourage the collaborative work....

P7 seems to look at learner-content interaction and independent learning as being simply an aspect of the ability to participate in collaborative learning:

> P7: It's like this — The independence will come in terms of you being able to manage your own learning, your knowing what to do at what time. For instance, you have to read all these things, you have to read all these reading materials, you have to do your assignment. At the same time, there is the group aspect of the learning wherein you will be coming there prepared because you have done all the independent things....

Like P7, P8 said that she goes out of her way to select Web tools and design activities for collaborative learning "because I know that they [learners] will learn from each other, aside from the teacher" (P8). Aside from discussion forums, P8 conducts online tutorials on-demand[41] and she has experimented with the use of Facebook as a supplementary learning space for her students. But P8 also noted that while most students have no problem participating in group activities, there are some who are unable to participate (like one student based in China where Facebook is banned) or who are unwilling to participate because they prefer to study on their own. P8 admitted that the latter pose a dilemma for her because while she believes in the importance of collaborative learning, these 'solitary learners' who have an 'intrapersonal' learning style (Ke & Carr-Chellman, 2006) are able to demonstrate that they can do the required work by themselves: "But in the end there are students who go it alone, who really cannot work in a group, who refuse to participate in group work. But their work is good!" (P8). Because of this, and her appreciation of the diversity of students in terms of degree of preparedness for her course in basic computing, P8 makes available all learning materials at the outset instead of releasing them in instalments. This allows the more advanced learners to read ahead if they wish. She also limits the collaborative work to the final project which is done towards the end of the term.

The foregoing suggests that the independent learning approach and the collaborative learning approach to online distance education may be combined. For those whose preferred approach is collaborative learning (like P7 and P8), independent learning is something that precedes and supports collaboration. For others (discussed below), the two approaches should be balanced, or provided for to an equal degree.

On balancing the forms of interaction and independent learning. The six faculty members who said that the three forms of interaction are equally important referred to the different types of learning activities in their courses that foster these forms of interaction. For example, learner-content interaction happens when students study the learning resources provided (mentioned by P2, P5, and P9), learner-learner interaction takes place in the discussion forums and other online collaborative

[41] The tutorials are requested by students who 'catch' her online.

activities (mentioned by P2, P5, P8, and P9), and learner-teacher interaction occurs when teachers give learners individualised feedback on assignments (mentioned by P4 and P5). Aside from asynchronous discussions, four of the six research participants who said that all three forms of interaction are important (P1, P3, P5 and P9) have synchronous discussions with students using instant messaging and Web-based conferencing tools. They also include in their courses other types of online collaborative activities, such as webinars (P1), forums with resource speakers (P9), and wiki activities (P3, P4 and P9). They likewise cited a variety of Web-based materials that they include in the course packages they prepare for students, such as online journal articles (P3, P4, and P5), e-books (P2 and P4), video materials (P1 and P3), development reports (P9), lesson plans and tutorials (P2), and even political advertisements (P4). Their integration of a variety of Web-based learning materials and tools, and discussion-based and collaborative activities, is consistent with their view regarding the need to balance the three forms of interaction specified by Moore.

With regard to independent learning, the general view among these six research participants seems to be that it is important but it must be balanced with other pedagogical considerations, such as the course structure and the need for interaction. Except for P1 who allows students to hand in their main course assignment any time during the term, all of the research participants set deadlines for learning activities and assignments, and they expect students to move through the course as a cohort. For P2 and P3, this is a way of helping learners to manage their studies better. For P4 and P7, it is a way of helping students to feel that they are part of a learning community:

> P4: I think that's one of the bases for developing a community. Because one problem with the DE mode of learning is the isolation of the students and I think that would address that, if they do the activities at the same time....
>
> ***
>
> P7: ...you [the teacher] give them time, a guide, a schedule of learning tasks. For me it's also because you also have to help them manage their time. Because if you don't, they will not be able to come together on time, they won't be able to come together as a group.

These comments suggest more or less equal emphasis being given to course structure and dialogue, while learner autonomy is de-emphasised. According to Benson & Samarawickrema (2009), this mix is appropriate for learning contexts with the

potential for high transactional distance because of the geographic dispersion of learners, the lack of face-to-face contact and, in some cases, the size of the learning group.

For P5 and P9 the preferred mix appears to be high dialogue, medium structure, and high learner autonomy. Both P5 and P9 teach graduate-level courses in management with a lot of discussion-based activities, and they believe that learners should take the initiative in managing their own learning within the structure of the course:

> P5: To me independence means you are managing your own learning process, not the teacher. That's why I require them to email me [for feedback regarding assignments submitted]. That's [also] why at the beginning of the course, we discuss the mechanics of the course and they participate in the setting of [evaluation] criteria.... If the way I have designed the course is not something that fits their situation, they can actually say so. There are cases when the student does not have regular access to the Internet, so if they are not able to participate in the online forum they can submit a write-up in lieu of a forum post.
>
> ***
>
> P9: ...As teachers we can only do so much.... I do not want to spend so much time and effort encouraging someone who does not even encourage himself (sic). I might as well spend my time and effort encouraging people who are active instead of those who simply refuse to be integrated into the course.... They [students] should also do their share [in managing their own learning].... They should read the course policies, the house rules, so that they won't go astray....

As mentioned, a factor that might account for P5 and P9's perspective on learner independence is course level. That is, the degree of learner independence that teachers design into a course is influenced by whether the course is an undergraduate or graduate-level course, and/or whether it is a first year versus senior year course (Benson & Samarawickrema, 2009; Oliver, 2002). This is evident in the following remarks by P3:

> P3: Actually, I was thinking [about] when I choose which course to be self-paced and not too self-paced. I'm teaching the Theoretical Foundations course. It's the first course that the students take and I think for that course I really need to pace it because these are new students coming in, it's their first course in the university, and I think pacing them will help them adjust to the mode of learning, adjust to... being a student again, for example, because a lot of them are also just coming back and they haven't done any schooling for a long while....

> Whereas in the research [course], they're already on their third year, second to third year, and I assume that they would be more disciplined and they already know more or less how to manage their time and their topics and how to be able to complete the course. Between the two courses, I really wouldn't want [the research course] to be too paced, although I will have to devise a better way, I mean so as to be able to give feedback earlier rather than later.

4.2.2 Pedagogical orientations, disciplinary influences, and curricular considerations

Several research participants (i.e., P3, P4, P5, P7, P8, and P9) appear to subscribe to the social view of learning, which is the belief "that learners learn best when engaged in the tasks of social negotiation" and learning is "a collective, participatory social process where a series of multistranded interpersonal transactions mediate the exchange of knowledge" (Ke & Carr-Chellman, 2006, pp. 249-250). Teaching from this point of view involves guiding learners and "choosing and constructing educational interventions" (Anderson & Dron, 2011, p. 86) that will help learners to participate productively in collaborative meaning making (Kirby, 1999). P3 discussed the underlying pedagogical orientation as follows:

> P3: That is actually not obvious to students — that they need to interact with each other. And so you have to push them to interact with each other. Well of course, obviously I'm operating not under the framework that they will learn from me; it's more of learning from each other. And I do learn a lot from them as well. So it's learning from the material that we prepare for them, but also learning from each other's experiences. It's a big group and they're coming from different places, from different cultures, and even though they're [all] Filipinos, they're working in different settings — in Saudi Arabia, the United States, UK. That for me is very rich, and it shows when we are discussing certain issues and foundations in Nursing. The students are very good in bringing out their experiences. But it's not easy for them to relate that with the topics that we're trying to learn and understand. But once you give them discussion questions, once you give them certain perspectives, then they get motivated, especially when they realise that they have something to contribute to the discussion. And that's where learning is happening. For me that's the point of why I'm teaching — when they get to share what they know, what they experience, and that contributes to the learning of the group.

The faculty members who subscribe to a social constructivist perspective have different disciplinary backgrounds: nursing (P3), management (P4 and P9),

communication studies (P5 and P7), and multimedia design (P8). Similarly, those whose approach to online learning reflects a cognitivist constructivist orientation have different disciplinary backgrounds: reading education (P2), marine science (P6), and film studies (P10). Based on Becher's (1989) classification of disciplines, five of the disciplines mentioned are 'applied soft', two are 'pure hard', and one is 'applied hard'.[42] While several faculty from a 'soft applied' discipline have a social constructivist pedagogical orientation, at least one of them (P10) has a cognitive-behaviourist pedagogical orientation[43]. P6, who comes from a 'pure hard' discipline', also appears to have a cognitive-behaviourist orientation to teaching. The two faculty members from 'pure hard' disciplines (P6 and P1) also differ in their approaches to online teaching, with P1 leaning more towards a social constructivist approach. These findings corroborate Bain & McNaught's (2006) observation regarding 'discipline heterogeneity' in pedagogical beliefs and practices in 'computer-facilitated learning', and Gonzalez's (2009) findings of academics from similar discipline categories with contrasting approaches to teaching with the Web.

This is not to say, however, that their disciplinary affiliation has no influence on how the academics in this study use Web technologies for teaching. P5, for one, referred to the influence of her discipline on her beliefs about how learning takes place, thus: "Maybe coming from the communication discipline, [I think that] interaction is where knowledge is created." For other research participants, disciplinary influence is apparent in subject pedagogies. For example, P1's use of webinars in his graduate courses, where students make an oral presentation and answer questions from their peers and from a panel of experts, reflects the influence of scientific conferences which are common in his discipline. P8, who teaches computer education and Web design courses, talked about trying to simulate the computer laboratory approach which involves on-the-spot demonstrations and hands-on exercises:

[42] The applied soft disciplines mentioned are management, education, communication studies, multimedia design, and film studies; the pure hard disciplines are biology and marine science; and the applied hard discipline is nursing.

[43] See Chapter 2, section 2.3. A cognitive-behaviourist orientation is described by Anderson & Dron (2011) as having highly structured content, minimal social presence because learning is largely an individual process, and reduced teacher presence as teacher-learner interaction consists mostly of marking and evaluation.

> P8: ... It is really difficult to teach software by DE [mode]! You really need to do a demo[nstration]. They need to see how to open a file, how to add a chart.... Comp Ed is really a lab course! It's a lab course!
>
> ...The learners need to see how you use the software. Or if you have your text, they need visuals, screenshots, showing how it would look if you log in...

A particularly stark illustration of disciplinary influence on ODeL course design is P6's use of two contrasting approaches in two sets of courses. For courses in land valuation and management he recommends the development of instructional manuals, while for courses in environment and natural resources management he prefers having students analyse readings and case studies. He explained these contrasting approaches thus:

> P6: ... Like now we have the LAMP [Land Administration and Management courses]. For that we really have to produce course manuals. This is like going back to the old [way of developing course materials].
>
> Me: Why do you need to produce course manuals for that?
>
> P6: There are no textbooks in the Philippines. It's such a new field for the Philippines. Essentially the practice is there but the practitioners have learned from manuals in the US etc.... So we have to really write manuals. Also, this program is really for practitioners, people who will go out and do.... For Environment students I want people who will question.... Here [in Land Valuation and Management] it's different. In other words, I don't expect them to learn from a reading list. One book — that's what I imagine for them.
>
> Me: So... the factor in this instance is the nature of the discipline?
>
> P6: Yeah. Because valuation is... still evolving in the Philippines but it is sort of set as a discipline. You find out how much the cost is of a certain piece of property. Unlike environment and natural resources management where the field really needs to develop in terms of people thinking critically. Is it correct to look at a resource this way? Is it correct to always assume that people will have to be involved?.... Because the pendulum swings from centralised command and control to community-based [approaches]. So you need practitioners who are questioning [critical].

A similar contrast in instructional strategies in two courses taught by one faculty member can be observed in P10's description of her course on audio-visual materials development and her course on gender and multimedia. In the former, which is a skills course, P10 uses video lectures to do a step-by-step demonstration of audio-visual design principles and production processes, and the exercises that she sets for students require them to replicate the techniques shown as precisely as possible. In the gender and multimedia course, which is more discursive, P10 uses journal articles and video interviews of gender studies experts to expose students to various perspectives on the topics covered in the course, and she requires students to submit syntheses and critical analyses of what they have read and heard. P6 and P10's contrasting teaching approaches in the different courses that they teach are clearly a function of the subject matter and type of course, which are aspects of disciplinary contexts as well as curriculum.

With regard to curriculum as a factor in course design, all of the research participants mentioned course objectives as an important consideration in the way they design courses. Course objectives are used as a basis for delineating what content to include (P6) and in what sequence, selecting instructional strategies (P5) and learning resources (P1), and planning assessment. This 'rational' approach to course design (Oliver, 2002; Sharpe & Oliver, 2007) appears to be common to faculty members with contrasting approaches to online teaching. However, at least one faculty member admitted that setting or clarifying course objectives can sometimes not be the first step in the curriculum planning process:

> P4: Of course we have to start with learning outcome, what we intend the students to do or achieve. And then of course what kind of learners do we have? Where are they located? Do they have access to the computer at work? What would be the typical Internet connection of the students, bandwidth problems, and all that? At the same time, I was talking with you yesterday about rapid instructional design and I realised that there are instances when you start with the resource and see how the resource would be applicable to your course and how you could design it around the learning outcome and based on the learner outcome that you have. We all know that it's important to start with the learning objective but in reality that is a boring way of approaching things.
>
> ...There are times when you are more encouraged by a resource. It catches your attention. It tickles your imagination. So there are situations in which that's the way to go.

This is an aspect of creativity in the curriculum design process, in particular being able to design curricula 'on the fly' (Oliver, 2002), that appears to be enabled by the availability of a wide variety of digital resources on the Web.

4.2.3 Perspectives on learner access and participation

P4's remarks above also refer to learner access to technology as a factor in whether and how particular Web tools and resources will be integrated into a course. Some faculty members said that they sometimes decide not to use certain types of resources because not all learners may be able to access them. P8, for example, said that she stopped using videos when she found out that many students access the course site at their workplaces or at Internet cafés. Video is less accessible than other formats not only because of the bandwidth requirements (as noted by P2 and P9) but also because of restrictions against video channels like YouTube in some jurisdictions (e.g., the Middle East, as mentioned by P3 and P9).

P2's strategy for ensuring universal access to resources is to select resources in multiple formats. She referred to this as the 'principle of redundancy':

> P2: Well, for one, the principle of redundancy because I do not know how limited or how extensive the access to materials of my students is....
>
> ... Sometimes a resource appears three times in different formats because some could download this and others could not, depending on the computer system they are using.

P1's strategy for reaching learners with variable access to the course is to use a Web-based broadcast SMS application to communicate with students. He also keeps learners engaged with the course by sending them content-related questions through broadcast SMS.

Following good design practice, the research participants engage in an analysis of learner needs. This can be through learner surveys, such as those undertaken by P1 and P8, or by extrapolating the characteristics of the 'typical' or 'expected' student (Oliver, 2004) in a particular discipline and course level. P5 referred to this process of extrapolation as a matter of 'anticipating' and making assumptions about learners and designing learning activities accordingly:

> P5: Of course, we anticipate our students, right — where they are coming from, what they might know already and what they might not know in terms of experience. So at the beginning I would have that assumption that… their… worldview is not singular but multiple, unlike people staying in one location, say a small barangay or small district, [who] more or less share the same worldview. I do not assume that.
>
> …I would assume that because this is a graduate level [course], the students have both the practical and the theoretical knowledge and that I have to exploit that for them to realise that you're not coming here *tabula rasa*, that you don't know anything. You come here with knowledge. You can participate in knowledge creation….

P5's reference to designing her course to leverage (she uses the word 'exploit') the heterogeneity of learner perspectives highlights learner participation in course activities as an aspect of learner access. Good design should foster learner participation (Goodyear, 2009), and the faculty members included in this study consider it an important goal of their design practice. However, there are particular challenges to ensuring participation by all learners in online DE, aside from access to technology. P3, P4, and P9 observed that although learners have a wealth of experiences to draw from, they need to be encouraged to articulate and share their personal and professional experiences, and they need guidance in how to relate these to the concepts and theories taken up in class.

Aside from formulating discussion questions and moderating discussion forums with this in mind, providing for less formal discussion is one strategy for encouraging learner participation. P9, for example, holds regular chat sessions because "socialisation is very important especially because [learners] are far from each other [and] you have to make them feel that they belong to a learning community, [that] they are not alone in this course" (cf. Shin, 2003; Kehrwald, 2008). To distinguish discussion forums intended purely for socialisation, faculty members use labels like 'kapihan' (Tagalog for 'café' — used by P7) or 'open forum' (P3). Others like P8 and P2 use Web applications outside of the VLE to engage students more. P8 uses Facebook, and she contrasted its informality and democratic character with the formality and teacher-centredness of the VLE:

> P8: It seems to me that Moodle mimics the classroom, so students tend to be too formal in a way, and then they lose motivation. They just go

> there and then download [materials]. And sometimes there is no activity; the learners don't log in.... I was looking for more ways to engage them, and then I noticed that almost everybody seems to be on Facebook. Plus some of the students saw my account in Facebook and then they started inviting me, they were asking me to be their 'friend'. So it occurred to me that perhaps it's one way by which I can engage the students in discussions, in sharing materials. Moodle is too [restrictive]. Only the teacher can share resources and open discussion forums.... In Facebook it is possible to have small discussions and students can open their own discussion forums. And then they share resources. If one student posts, "I'm having difficulty understanding this...," then someone will post a link to a tutorial on that topic.
>
> ...Also, even if you don't give instructions. Actually, there are no rules [in Facebook] although of course I set guidelines like you can only talk about this, you can only post such pictures. But there are no rules as such really. In Moodle it's understood that only [the teacher] is in control. But in Facebook there is a sense of freedom.

P2 made a similar comparison between Moodle and Ning, a blogging service that she has decided to use in one class. She finds the latter "easier [for students] to navigate" (with fewer "layers in terms of clicking"), "more youthful", and less "clunky" than Moodle.

One issue in designing for learner participation in online learning is unevenness in participation (Seddon et al., 2011) among learners and in different learning activities. Take P9's account of some students participating only in chat sessions and not in the discussion forums:

> P9: There are some who participate in the chat but don't go to the forum.
>
> ...I think it's more because they feel more comfortable in the chat because they don't, perhaps they do not write very well.
>
> ... in the chat, since you are only allowed to write down a few sentences, you know, you're not really compelled [to write much], sometimes you just say, "Yes, I agree." (laughs) But your presence is there, you know. I mean that's fine. If they could not contribute, what can I do?

P9's remarks call attention to the need to consider learners' capacities for participation and how different Web tools might be used to address this (Hrastinski, 2007). It also raises the question of how to account for and assess the distinct forms of

learner participation in online learning, such as lurking (see, for example, Seddon et al., 2011 and Slevin, 2008).

Ironically, some e-learning designs that aim to foster learner participation also have the potential to limit learner access and inhibit participation. For example, while chat sessions might be intended to encourage learners to participate more, as P9 explained, not all learners can participate in such sessions due to differences in time zones and competing demands on time and, in some cases, bandwidth limitations. If not all learners can participate in a learning activity, should the activity be implemented anyway? For P2 this is a key concern and she does not have chat sessions for this reason: "I have very big classes and I don't really want to start that, you know, I can chat with 10 people and not chat with the others." P3 and P8 also have large classes. Their solution to the issue is to make the synchronous tutorials voluntary rather than compulsory:

> P3: ...when I announce the chat session I will tell them that this is to clarify this topic and so on. In a way I'm also sort of narrowing, I mean really focusing what would be the discussion in the chat and so I assume that those who are not interested have already grasped the concept. And in any case it's not part of the grading requirement.

Aside from individual learner predispositions, learner participation in online learning activities is also influenced by prior experiences of learning (Anderson et al., 2001). For example, P8 noted that some learners think that collaboration requires that they be in the same place at the same time:

> P8: ...there are Web 2.0 tools that are available so that you can collaborate, do collaborative work, without being online at the same. In other words, collaboration can be asynchronous; it does not have to be synchronous. But some students cannot stop thinking of it as a synchronous activity. For example, they explain the group's inability to work together in this way: "Ma'am, it's because they [other group members] don't log in at the agreed upon time." And then I say,... "You can still collaborate on the project, work on it, even if you are [not logged in at the same time]." As it is, students are not necessarily in the same time zones especially if they have a group mate who is abroad. In fact, I deliberately group students who are geographically dispersed. I make it difficult for them to opt to have a face-to-face meeting. Because there are tools they can use. But no. They insist on organising, scheduling a chat. They can't drop the idea of synchronicity. Or they will use their cell phones.

> Me: Yeah, to text each other —
>
> P8: To text each other. So the result of my collaborative experiment is that they do not really use the tool to work on the project, to collaborate on the project, but actually to organise themselves.... and to sort of establish a division of labour. In the end, they work individually....

In this example, learners also appear to favour non-interdependent collaboration (Ke & Carr-Chellman, 2006), or collaboration where there is a clear division of labour and delineation of responsibilities. This suggests the influence of their prior experiences of doing group work and individual assessment.

To sum up, in this section I have considered learner access and participation as factors in the design of online DE courses and learning activities by UPOU faculty. The discussion suggests that while there may be unanimity among faculty members regarding the importance of learner access and participation, how to enable these using technology is not always a straightforward matter. For one, not all learners have the bandwidth and/or the technological skills needed for certain kinds of online activities. Second, even where technology availability and competence in the use of technologies can somehow be standardised for all learners, participation by all learners is still not assured. While learning activities may be designed to foster participation, actual learner participation will differ because of differences in learner backgrounds, predispositions, and skills. What is crucial from a design point of view is how faculty members determine what kinds of participation to design for.

4.3 Chapter summary

This chapter presents the study's findings on what Web tools and resources are used by the 10 research participants, how they use them, and what pedagogical perspectives and priorities underpin their use of these Web tools and resources. It was found that the research participants use a range of Web technologies for a variety of pedagogical purposes. In general, the research participants adopt either an independent learning approach or a collaborative learning approach to ODeL, or they attempt to balance both approaches. Those who espouse an independent learning approach are content-focused. They use a broader range of media types and emphasise learner-content interaction over other forms of interaction. Those who espouse a collaborative learning approach are communication-focused. They use a

variety of communicative media to enable learner-teacher and learner-learner dialogue. Aside from emphasising learner interaction and dialogue more than other forms of interaction, they also tend to downplay independent learning. Those who implement a combination of independent and collaborative learning approaches build into their courses learning activities that foster learner interaction with content and with their fellow learners, and they view learner independence as something that should be balanced with course structure and dialogue.

The faculty's orientations and approaches to course design are influenced by their perspectives on the relative importance of learner interaction with content, fellow learners, and the teacher (Moore's three forms of interaction in DE); the relationship between learner interaction and learner independence, which is a concern in DE; disciplinary contexts and curricular goals; and learner access and participation. The following findings are consistent with what has been noted in the literature regarding each of these design factors:

- Faculty members with a collaborative learning approach to ODeL value learner interaction with other learners more than learner interaction with content. The opposite is true for faculty members who prefer an independent learning approach. This is consistent with Gonzalez's (2009) finding that those who teach with the Web in a communicative-networked learning focused way have a learner-centred orientation, and those who teach with the Web in an informative-individual learning focused way have a content-centred orientation.
- Faculty members with similar pedagogical orientations and approaches to ODeL come from different disciplines, which confirms Bain & McNaught's (2006) finding of 'discipline heterogeneity' in 'computer-facilitated learning'. Some faculty members from related or similar disciplines have contrasting pedagogical orientations and approaches, and faculty members teaching courses in two different programmes belonging to different disciplines adopt different approaches to each course. This supports Gonzalez's (2009) observation of academics from similar discipline categories having contrasting approaches to teaching with the Web, and Lindblom-Ylanne et al.'s (2006) finding that a teacher might adopt different teaching approaches in two different teaching contexts.
- Disciplinary influence is apparent in the more frequent use of particular types of Web resources and tools, as well as certain types of online activities, in some

courses than in others. This is similar to findings from a mapping of technology use to the disciplines by Conole et al. (2008) and Jones (2007).

- All of the research participants said they consider course objectives as the starting point of course design. This is consistent with the 'rational' approach to design (Oliver, 2002; Sharpe & Oliver, 2007).
- Some research participants mentioned learner access to technology as a factor in their choice of Web resources and online learning activities for their courses. This is consistent with learner access being a key concern in DE course design (Shearer, 2007).
- The research participants consider fostering learner participation to be an important goal of course design. This is consistent with the importance given to "participation as a condition for learning" in online DE (Hrastinski, 2007, p. 18).

The study also found what might be considered to be emerging trends or unexplored aspects of the influence of certain design factors on how academics do ODeL course design. These are:

- Faculty members who combine content-focused and communicative-focused orientations and who balance independent learning and collaborative learning approaches seemed to also downplay the importance of learner independence or autonomy. They stressed the need to balance learner independence with other pedagogical considerations, such as the course structure and the need for interaction. This is inconsistent with the primary importance that is ascribed to learner independence in older DE models (see, for example, Holmberg, 1983). But it is compatible with and very likely an outcome of the emphasis on computer-mediated communication and dialogue in online forms of DE (cf. Garrison, 2009).
- The availability of online resources in various media is enabling deviations from the 'rational' (Oliver, 2003) approach to course design which begins with course objectives. A teacher might use a digital resource as the starting point for the design of a learning activity. This could be viewed as an instance of creativity in curriculum development (Oliver, 2003). At the same time, it suggests how misalignments with course objectives in the design of some online learning activities can take place (a problem noted by two research participants).

- Among faculty members who are inclined towards dialogic and collaborative learning activities, there are different perspectives with regard to what types of learner participation are valuable and how they should be designed for. In particular, there are differences of opinion over the value of synchronous learning activities. While an increasing number of faculty are expressing interest in using Web conferencing tools for tutorials, lecture sessions, and group discussions, some faculty members have pointed out the constraints on learner access, participation, and autonomy that such activities pose. The place of synchronous online learning in DE is an area for further study, as evidenced by the emergence of 'blended' or hybrid DE combining asynchronous and synchronous interaction (see, for example, Hrastinski, 2007; Power, 2008; Power & Gould-Morven, 2011).

The faculty's approaches to ODeL course design are influenced by many factors, and differences in perspectives account for different design approaches. However, the research participants' accounts of how they use Web tools and resources suggest that pedagogical priorities are context-specific and they are not fixed or stable. While it is possible to identify a dominant approach to teaching with the Web for each faculty member, their perspectives on and practice of ODeL course design are much more complex and dynamic than the labels for each approach might suggest. This is discussed in Chapter 5.

Chapter 5 – Findings and Discussion (Part 2)

This chapter discusses findings related to the second and third research questions, namely, *How does their use of Web-based tools and resources impact the faculty's course design practices?* and *What are the issues and challenges in the design of online DE courses from the faculty's point of view?*.

In connection with the second research question, the research participants were asked how they think their course design practice has evolved from the time they started teaching in distance education mode, and after Web technologies became more widely available and UPOU adopted a more resource-based approach to course development. More specifically, they were asked what aspects of their course design they consider to have been strengthened and weakened by their use of Web technologies. The analysis of the responses to these questions looks at evidence of shifts in the *focus* of their course design practice. This is based on the idea, derived from the studies on variation in the focus of online learning design discussed in Chapter 2[44], that the impact of teaching with the Web can be gauged not so much from the literal uptake of online tools, as from what teachers focus on in their use of these tools. How teachers use online tools is guided by their conceptions of teaching and learning, which in turn can be inferred from what they focus on in their descriptions of their online teaching experience. Change in their pedagogic conceptions comes about from a broadening of the teachers' awareness of the pedagogic opportunities afforded by learning technologies, and the development of their knowledge and skills in online learning design. To appreciate qualitative differences between the design practices of different academics, which might appear to be similar (because, for example, they use the same tools), as well as qualitative changes in one academic's design practice over time, it is important to examine the underlying focus of these practices — e.g., whether the focus of a particular strategy is to improve teaching or to improve learning. In section 5.1 the analysis of the research participants' perceptions of changes in their course design practices are compared to trends noted in the literature regarding shifts in emphasis from content development and independent study to social interaction and collaboration in online

[44] See section 2.3.2.

DE, and from a teacher-focused knowledge transmission approach to a learner-focused knowledge generation approach in online teaching and learning.

With regard to the third research question, the faculty were asked what they think are issues and challenges in designing online DE courses at UPOU, and how these might be addressed. The analysis also includes issues and challenges that emerged from the faculty's description of aspects of their practice that have been weakened by use of Web technologies, and what they consider to be gaps between the goals and outcomes of their use of Web technologies in their courses. The faculty's responses are examined vis-à-vis issues and challenges in online teaching that are described in the literature.

5.1 How teaching with the Web impacts on course design practice

The research participants described changes in their course design practice arising from or corollary to their use of Web tools and resources in their courses, that fall into four areas: content development, teaching strategies, learning activities, and assessment of learning (Table 5-1):

Table 5-1. Perceived changes in participants' course design practice

Changes in content development	Changes in teaching strategies	Changes in learning activities	Changes in assessment
• including learning resources in various formats (P1, P2, P9) • frequent updating of the course package (P2, P6) • inclusion of learning resources that learners can also use in their own professional context (P2) • being able to customise a course through the inclusion of sample texts from the students' field of study (P5)	• using Web tools to implement a process-oriented, synchronous discussion-based course model (P5) • exploiting LMS functionalities to structure/organise the course better (P5) • use of Web tools in a "lab" course requiring demonstrations and hands-on exercises (P8) • conducting synchronous discussion sessions (P9)	• using a variety of learning activities to motivate students (P3) • scaffolding learning (P3) • involving students more in the teaching and learning process; enabling greater student participation (P2, P9) • enabling collaborative learning (P4, P8, P9) • fostering dialogue and community-building (P5, P7)	• more holistic assessment through use of formative and summative assessment, and different types of assessment (not just tests) (P1) • adoption of different formats for student work (i.e. aside from print or text) (P1, P3, P7) • specification of assessment criteria to guide students better (P4)

Change in content development and change in teaching strategies (the first two columns of Table 5-1) are similar to the first two categories of change in how university teachers experience teaching identified by McKenzie[45] (2003), namely: changing content taught in order to improve teaching (cA) and changing teaching strategies in order to improve teaching (cB). The two other areas of change in Table 5-1 (i.e., change in learning activities and change in assessment) do not have equivalents in McKenzie's classification. However, as shown in Table 5-1 and as discussed below, they represent important dimensions of variation in the ODeL course design practice of the faculty.

McKenzie identified a shift in focus from teacher to student as a key dimension of variation in how teachers experience change in their teaching. A similar pattern of pedagogic change has been noted in the DE and e-learning literature[46]. Accordingly, in the discussion below I examine whether the changes described by the research participants are teacher- or student-focused, and whether the direction of change is from being teacher-focused to being student-focused.

5.1.1 Perceived changes in content development

Some of the content-related changes listed in Table 5-1 have been noted in the literature on online DE course design. For example, Mason (1998) has described the shift from pre-packaged, standalone print-based course materials to more fluid and dynamic online course content. Guri-Rosenblit (2009) has observed that the new technologies "provide easy access to libraries and other information resources which was nearly impossible in the past", and they enable "updat[ing of] study materials on an ongoing basis" (p. 106). The Web also provides tools that faculty can use to put together course packages autonomously, with little or no assistance from course development units (Abrioux, 2006; Muirhead, 2005; Power, 2008).

Phrased thus, these advantages point to flexibilities in content development that Web resources afford teachers more than learners. They can also be characterised as subject- or content-focused, which is considered to be typical of a knowledge transmission approach to teaching (Gonzalez, 2009). In the current study, P6 appears to have a subject- or content-focused approach to resource selection:

[45] See Chapter 2, section 2.3.2, p. 44.
[46] See, for example, Anderson & Dron, 2011; Armellini & Jones, 2009; Burge & Polec, 2008; Gonzalez, 2009; Mason, 1998; and Swan, 2010.

> P6: My usual thing is to make a course outline and then look for things out there. And there's lots of good stuff, mostly printed stuff, PDFs and soon. There's so much [out there]. The research organisations, UN bodies, they just keep on publishing and coming out with new reports.
>
> ... And then you can update.... It's possible for the information you include to be always current.

A contrasting focus on learners is suggested by P1's selection of online learning resources in various formats to cater for different learning styles:

> P1: I try to avoid sticking to one reference because there are lots of learning materials online and there are different or diverse presentations of concepts and different formats available to suit the learning styles of students. For example, I have students who like watching videos, so I make sure that the learning materials that I select have a video equivalent.

P2 likewise revealed a learner orientation when she talked about selecting resources that her students, who are themselves teachers, would be able to use in their own classrooms: "Many of those will be very useful for them outside of my class. I mean they are really teacher resources, so they can go back to these" (P2). P1 and P2's rationales for implementing Web-based content development suggest that it is not simply including learning resources but how these learning resources are used in a course, especially by learners, that might spell the difference between a subject- or content-focused approach, and a more learner-focused approach.

5.1.2 Perceived changes in teaching strategies

Several faculty members characterised the development of their online teaching practice as acquiring teaching strategies to help them teach certain types of courses more effectively. The strategies mentioned include synchronous interaction via Web conferencing and similar tools. For example, P5 described use of Skype for a series of group discussions to illustrate qualitative research procedures. P8 referred to Web technologies that enable live teacher demonstrations of how to use particular software. P9 reported periodic chat sessions with students, sometimes with an invited expert on a particular topic.

According to McKenzie (2003), descriptions of change in teaching strategies are usually teacher-focused — i.e., they are about adopting a strategy "in order to solve a problem in teaching, improve the teacher's comfort, teaching efficiency, or perceptions of effectiveness, or sometimes to improve the students' motivation and reactions to teaching" (p. 242). Variation is therefore evident not in how students are learning but in the teaching strategies employed and "the teacher's feelings about whether these are working" (p. 242). There is some evidence of this in the rationales given by P5 and P8 for holding synchronous online sessions:

> P8: Although I acknowledge that DE is different, that DE pedagogies are different, I am still trying to mimic as much as possible the face-to-face, residential setup. So because of these tools, to a certain extent I am able to simulate face-to-face [teaching]....
>
> ***
>
> P5: ...the previous interactions that I have with my students contribute to the improvement of my interaction with my students [in the next course]. For instance, the Skype thing is an improvement. [My ability to] organis[e] the virtual classroom [has also improved]. In the past I would just have a social forum, a news forum, and then the learning units. Now the design of the virtual classroom is improving as I teach anew every semester....

These teacher- and teaching-focused descriptions of change in teaching strategies can be contrasted with the learner-focused rationales for designing learning activities discussed in the next section.

5.1.3 Perceived changes in learning activities

The faculty who talked about being able to include a variety of learning activities in their courses include those identified in Chapter 4 as having a clear preference for a collaborative learning approach to ODeL (like P7), and those who attempt to balance the independent and collaborative learning approaches (e.g., P3 and P4). Their rationales for designing learning activities point to providing more opportunities for social interaction, dialogue, and collaboration. For example:

> P9: ...[previously] the inputs [were] coming mostly from you. But now, with all of these [Web] tools, you can now ask them, you can involve them much more, and they can now participate more actively and they have the venue for that rather than just me providing this information.... They can now collaborate with each other....
>
> ***

> P7: ...it's really the dialogue. In the past, when it was just the [face-to-face tutorial], there was not much dialogue happening. Now you have elbow room to really discuss so many aspects that you really want to discuss with your students. Now it's really like you are talking with them.
>
> ***
>
> P5: In my first and second semesters in 2004 I conducted face-to-face sessions with students.... Then I made the decision to go fully online because I find that our discussion there is very rich and I wanted the other students to hear and listen, too....

These remarks support Andrews & Haythornthwaite's (2007) contention that e-learning is not just "the use of [ICT] as a communications and delivery tools... to support students and improve the management of learning" but rather "a reconceptualisation of learning that makes use of not only instructor-led pedagogy but all the flexibility that asynchronous, multi-party contribution can bring" (p. 19).

Their comments also suggest that these academics espouse what Armellini & Jones (2008) refer to as design for collaborative knowledge construction, which is characterised by 'focused, multiple-loop interactions' between learners and tutors and among learners, and which is considered to be more advanced than 'transmissive design' and 'interactive, single-loop design'. According to Armellini & Jones, the change from one design approach to another begins when the faculty "becomes aware of the opportunities afforded by technology-enhanced design" and "the key pedagogical and technological issues" (pp. 26-27). Some of this increasing awareness is evident in the following:

> P6: My concept of forums is evolving. To be honest, it used to be just an add-on for me. It accounted for only 10 percent of the student's grade. Now it's still a bit of an add-on but I've increased the weight to 20 percent and that's about the equivalent of a TMA [tutor-marked assignment]. My purpose is to engage them [the students]. And it's only recently that I have become aware that they do need some kind of [interaction], that interconnectivity is not just a fancy word — students do need it and dropout rates are high because they feel that they are isolated and so on....
>
> ***
>
> P8: ...When I started teaching, I acted like the 'techie' [technology geek] that I am. I did not pay attention to pedagogy. I was just excited to use the tool. Now there is a reversal, because I am getting more exposed. I now think about the pedagogies first before the tools. In the past it was all about the tool for me. I was excited to use the tool so I

> would play with it, and only later would I think about its effect on the learner. Now I think more about [how it impacts on the learner].

According to Armellini & Jones, disciplinary identities are particularly influential how teachers teach, and not all teachers will transition from transmissive to collaborative design. But helping teachers to use learning technologies effectively in their discipline brings about incremental changes towards greater interactivity. This appears to be the case with P6 who ascribed his increased appreciation for fostering learner interaction to his exploration of the interactive features of an online database and exposure to pedagogical discourse while writing a journal article about using the database as a learning resource in a class on coastal resources management. P8's remarks (among others in this study) also confirm Graham et al.'s (2012) finding regarding the development of technological pedagogical knowledge (TPK) as faculty engage in the design of technology-supported learning.

5.1.4 Perceived changes in assessment of student learning

The changes in assessment practice described by some faculty members, and the rationales they provided for these changes, can also be contrasted in terms of whether they are teacher- and teaching-focused, or learner- and learning-focused.

P4 said online teaching has increased his awareness of the importance of specifying assessment criteria:

> P4: ...basically we have to be clear about first the assessment criteria. I think that's the first part — laying down your expectations. If you are clear enough with regard to the expectations, then the students would have a better chance of delivering the output that is expected and hopefully the learning outcome that you have set out. And when you give feedback, I think it would be fairer in that sense, because in the first place you have attempted to level off the expectations as far as the output or the assignments is concerned.

Although the intent is to provide students with better guidance, P4's rationale for providing assessment criteria is consistent with the traditional approach to assessment where the teacher is the authority and the assessor and arbiter of the quality of student learning (Mason, 2008). A more learner-centered approach would be to negotiate the assessment criteria with learners and have them use these to assess their own learning (Anderson, 2008; Mason, 2008).

In the current study, it is P1 who described most clearly a shift to more learner-centred assessment practice. P1 allows students to choose different assignment formats (they can submit a report, blog, or short video production posted on YouTube) based on their media preferences. He said that "[t]his is based on my previous experiences of sticking to one format and finding out that there are students who have difficulty meeting the requirement." In P1's description of his assessment practice there is evidence of what Mason (2008) refers to as "new opportunities for innovative assignments, which encourage research beyond conventional course materials and caters for a variety of interests and levels of experience" (p. 521). At the same time, allowing the use of various media for the demonstration of student learning enables teachers to measure learning outcomes that are difficult to assess in a distance learning context, as P3 suggested:

> P3: ...Because of the existing tools, now it's easy for them [the students] to video. I mean when they prepare their assignment, it can be multimedia.... And that helps in assessing learning outcomes, because then you [the teacher] have better ways of checking their performance, for example when they're doing their clinical practicum and even if you are not there.... This is what we have been doing for students based abroad, and for a particular skill like physical assessment. They can actually just do it and send a video, or they can compile a case study and put all these evidences of their work. So it's like a portfolio for the clinical practicum. In fact I wrote a course manual for the clinical practicum course to help the faculty improve the learning activities that they have for students based abroad that they are not able to see face-to-face.

However, very few faculty members in this study referred to change in assessment practice as an effect of teaching with Web technologies. This is remarkable because one of the affordances of online learning is that it "provides many opportunities for assessment — opportunities that involve the teacher, but also ones that exploit the influence and expertise of peers and external experts, others that use simple and complex machine algorithms to assess student learning, and perhaps most importantly, those that encourage learners to reflectively assess their own learning" (Anderson, 2008, p. 49). The lack of reference to change in assessment practice seems to be consistent with Mason's (2008) observation that "innovative programme design has vastly outstripped innovative assessment design in online courses" (p. 523), leading to a "mismatch" between the philosophy of student-centered learning that

many online courses espouse and the teacher-centred approach to assessment in such courses. This is discussed further in section 5.2.4.

In sum, the faculty's descriptions of how their online course design practice has changed call attention to four areas: content development, teaching strategies, learning activities, and assessment. In general the changes in learning activities suggest a shift towards a learner-focused social constructivist design. Similarly, while some of the changes in content development appeared to be either teacher- or subject-focused, other descriptions were learner-focused. In contrast, descriptions of change in teaching strategies were largely teacher-focused, with emphasis on the improved ability to teach certain kinds of courses and to organise a course better. Descriptions of change in assessment practice also tended to be teacher-focused, with only one faculty member describing the change in his assessment practice in a learner-focused manner. However, it is notable that faculty members who have contrasting approaches to ODeL articulated both teacher- and/or subject-focused and learner-focused descriptions of how teaching with Web technologies has changed or is changing how they design their courses (Table 5-2). This is discussed further in section 5.2.

Table 5-2. Distribution of faculty responses in terms of area and focus of change in course design practice

Area of Change	Teacher- or Subject-focused descriptions/rationales	Learner- or Learning-focused descriptions/rationales
Content	P2, P6, P10	P1, P2, P5, P9
Learning activities	P2, P3	P2, P3, P4, P5, P7, P8, P9
Teaching strategies	P5, P8, P9	
Assessment	P3, P4	P1

5.2 Issues and challenges in online course design (Part 1)

The issues and challenges discussed in this section emerged from the faculty's description of aspects of their course design practice that have been weakened or diminished by using Web technologies, and their perception of gaps between what they design for and what takes place in practice. Paradoxically, the gaps and weaknesses that they identified were in the same areas of course design that they referred to as having been strengthened (see Table 5-3).

Table 5-3. Issues and challenges in personal ODeL course design practice

Aspect	Weakness/Issue/Challenge
Content development	Time needed for selecting resources (P1, P2, P8)
	Developing study guides (P2, P4, P6)
Teaching strategies	Reduction of opportunities to lecture (P6, P10)
Learning activities	Over-reliance on tool and failure to consider effects on learners/learning (P3, P4)
	Learner engagement and participation (P1, P3, P6, P8, P9)
	Spontaneity and immediacy (P2, P7)
	Control of learner behaviour (P5)
Assessment	Fairness in assessment of learning (P7)

5.2.1 Issues in content development

As mentioned, one the benefits of teaching with the Web mentioned by many research participants is access to numerous learning resources in various media. However, this has also made the resource selection task of teachers more complicated (Coppola et al., 2001). Aside from more time spent on evaluating materials, the sheer volume of resources to choose from can overwhelm, resulting in poor choices of resources to recommend to learners (a problem noted by P8). P2 referred to this as the challenge of curatorship: "Actually, the problem is how to choose, the time that you have to spend for curating" (P2).

For some, the time spent on selecting resources is offset by the time saved by not having to develop instructional materials from scratch. P2, for example, noted that there are many interactive and self-instructional online materials that she can easily integrate into her course, and she no longer needs to develop her own modules:

> P2: ...I have found a lot of resources...which are really for study. These are really workshops or modules. For example, last semester I discovered a workshop for inquiry-based learning where they really go through lessons. Imagine if I had to do that for myself. And then I discovered... modules developed by.... and they are complete, they have examples, exercise sheets, quizzes....

However, as P4 noted, since many Web resources were created for some other context, it is important to develop study guides that will help learners make productive use of these Web resources. A study guide consists of a general

commentary and guide questions to help students focus on key aspects of the text. The lack of a study guide can prove to be a problem, as P6 noted:

> P6: ...I don't make study guides. But now I realise that I need to provide them for the undergraduate students.... Because I give journal articles and they miss the main point.

Interestingly, only two faculty members out of the 10 included in this study mentioned the need to develop study guides. Moreover, a cursory examination of more than a hundred course sites for courses offered in two semesters indicates that non-provision of study guides is widespread. Some faculty members (like P6) neglect the development of study guides because they are accustomed to face-to-face teaching where texts are usually discussed in class and there is less need for a written study guide. Another reason, noted by P4 in this study, is that writing study guides is associated with the older DE course development model of writing stand-alone or self-contained course materials, which is being supplanted by the newer resource-based approach to course development:

> P4: ...there's a struggle between the old way of writing course materials and the new way of producing a course package. You want students to make use of a wide range of course materials and not be dependent on this monologue that used to be part of the old course material. But at the same time.... you want all of these materials to be situated within the concept being discussed. But the problem is you don't want the discussion to be too long such that the students would no longer read the online resources and just depend on that discussion or the introductory discussion that you have written.
> ....
> And I've been getting some mixed reactions regarding the new approach that we're taking. Like yesterday there was this one guy who criticised the written modules that we had before, implying that they were too processed or simplistic. But at the same time there are other students who are quite busy with their work who would prefer a written module that they can bring around and then read even while they are travelling. So I really don't know how to approach this. In fact I want to develop a course that would strike a balance between the two [but] I don't know how that would happen.

P4's remarks underscore, *inter alia*, that it is not enough to direct learners to online resources; teachers also need to provide guidance regarding what aspects of these resources are important and how concepts and ideas from different resources might be

meaningfully integrated given particular course goals. But how much guidance to give appears to be a dilemma for faculty. There can be too little guidance or too much, both of which would be detrimental to learning.

Related to this is the issue of when to provide guidance. One of the affordances of Web technologies in DE contexts is enabling the provision of just-in-time instruction. Access to online resources that can be easily re-purposed for instruction and the availability of tools for faculty to assemble course packages on their own (Muirhead, 2005) means that course development is now more open-ended and flexible (Mason, 1998). Faculty members generally consider this to be an advantage. P7 for example noted:

> P7: ...You can even provide materials, unlike before where you will have to plan that at the start of the semester, you have to package everything before you start the course. But now, we can even introduce changes as we go along and then that's manageable now.

However, as P4 suggested, increased flexibility for teachers with regard to the posting of course materials does not necessarily mean greater flexibility for all learners (cf. Thorpe & Godwin, 2006). P4 also reported student comments about how the unavailability of all course materials at the beginning of the term limits their ability to pace their own learning.

P8 expressed a contrary view: she noted that periodic release of course materials appears to help her students keep on track with the course activities. The difference in reactions might be due to the fact that P4's students are graduate students with a stronger disposition towards autonomy, while P8's students are undergraduates who might be more dependent on teacher direction and pacing. For the current discussion, the more critical point is that pedagogical designs not only have variable effects on learners, but also the potential to throw into relief certain tensions between teaching and learning practices.

5.2.2 Issues in teaching strategies

While the design role of teachers is amplified in ODeL contexts, other teaching roles, most notably the role of providing direct instruction through lectures, are reduced (McShane, 2007). P6 expressed some ambivalence about this:

> P6: ...When you're lecturing, you're really teaching, right? You explain, you instruct, you give examples etc. In distance education, you try to anticipate questions, but you don't get questions, you don't get reactions....

These remarks by P6, and others mentioned below, suggest that the influence of face-to-face teaching behaviours on how teachers teach online is not insignificant. In some cases there seems to be the assumption that classroom-based face-to-face teaching is the standard practice not only in the sense of being the benchmark against which all modes of teaching are measured, but also in the sense of being the 'best practice' that should be emulated. In this study, this is evident in some of the faculty's statements about being able to do online what is done face-to-face:

> P9: ...they've always thought that this is face-to-face and this is online and they're two distinct [modes] and we try to bridge them.... [but] you have a resource person as well [in the online class], [so] **it's the same thing**. You know, you're getting the same.... **You're just applying it online. And it should not be different**.... (emphasis added)
>
> ***
>
> P8: Although I acknowledge that DE should have different pedagogies, I still think that **as much as possible you try to mimic the face-to-face, residential setup**. So because of these tools [like screencasting], at least the face-to-face is somehow [simulated]. (emphasis added)
>
> ***
>
> P7: ....I say to them, look, these activities, these examples can show that **even in an online setting we can do collaborative work among our students**. (emphasis added)

These statements reveal a desire for parity (Jevons, 1987), with parity being interpreted as, or confused with, sameness: "[I] would tell people that DE is something that is at par, that it's not different from residential... teaching" (P5).

However, while face-to-face and online teaching might have features in common, they also have important differences (Price & Oliver, 2006). Recognition of the differences comes with mixed emotions. The more commonly documented faculty reaction is reluctance and, in some cases, outright resistance usually in the early stages of the institutional shift to e-learning in conventional universities (Blin & Munro, 2008). Even those who take to teaching online, like the faculty included in this study, seem to have residual feelings of attachment to face-to-face teaching, as evidenced by the following:

> P6: For me the ideal situation would be that there is face-to-face, that it is primarily online but there will be face-to-face sessions for those who can come, and then we'll do something for those who can't be there, whether it's uploading the lecture or whatever. I also miss the interaction.
>
> ***
>
> P2: I think my spontaneity, my interaction with — they don't see the way I animate! [They can't hear] my voice, things like that.
>
> ***
>
> P10: ...On the other hand, the advantage of face-to-face [teaching] is, I'm really a teacher. They don't sleep in my classes. They love going to my classes. Because I am animated, and I have a lot of stories....

These remarks are indicative of teaching conceived as a performance, or something that is enacted in front of an audience (McShane, 2007). This conception of teaching seems to evoke nostalgia, especially among seasoned teachers (P2 and P10 in this study). But in some cases this nostalgic view of face-to-face teaching can lead to failure to recognise the opportunities for innovation that online teaching opens up (Haythornthwaite & Andrews, 2011). Indeed, it is important to examine the extent to which the online teaching practices that some faculty find attractive, such as Web conferencing sessions, are derived from conventional teaching and might be more transmissive than constructivist in practice, with teachers delivering lectures 'live' and students being once again positioned as the passive audience (cf. Murphy et al., 2011).

5.2.3 Issues in the design of learning activities

Fostering learner participation through diverse learning activities is said to be (by P3, P5, and P9) one of the areas of teaching that is strengthened by Web technologies. However, there is also the possibility of teachers becoming technology-centric in their design of online learning activities, such that "you don't foresee... the effect on the learning itself and how the students are using [the technology]" (P3). Here P3 was referring in particular to learners who are unable to adapt to online learning and who therefore need to be advised to move to a conventional classroom-based programme. But online learning activities can be challenging even for students who are competent distance learners. P4 and P8 have noted that collaborative

activities in particular can 'alienate' (P8) some students. Among others, having to work with a group and follow the group schedule can be difficult for some learners.

For those like P7 who consider dialogue to be central to learning, there is dissatisfaction with the lack of spontaneity and immediacy in asynchronous computer-mediated interaction. P7 said that the 'lag' or delay in feedback that is characteristic of asynchronous discussion could make some teacher responses seem irrelevant or 'inappropriate'. Immediacy refers to the sense of physical or psychological closeness arising from particular communication behaviours (Woods & Baker, 2004). In online courses, instructors can achieve immediacy by "ensuring a high degree of interactivity and participation" (Kearsley, 2000, p. 78, quoted in Woods & Baker, 2004, p. 5) through class discussion, dialogue about complex issues, group projects, and authentic learning activities. But while teachers can build in these types of activities (as P7 and others do), how the design will 'unfold' is unpredictable, as P5 noted:

> P5: ...the design more or less is stable. But when the class unfolds for instance, you would not anticipate... a heated debate on a particular subject matter.... [Y]ou want the students to debate, but not a heated debate. For instance, you can already see that they are trying to attack the personality of the person. It's not part of our design —
>
> ....But it can happen. So when it happens, what do you do? ... I suppose if there's any gap [between our pedagogical aims and what we are actually able to achieve in our online DE courses], it may be in that sense — that is, what do you do with that? To me it's more like a judgment call. Do you stop them? Do you just keep quiet? Do you remind them?... I don't know whether that can be considered a gap in the design because interaction cannot be designed really.

P5's remarks suggest the need to orient faculty not only to the technology-related and pedagogical aspects of online teaching but also to the social and managerial aspects, including "how to prevent and/or deal with inappropriate student behaviours when using the Internet and/or Web communication tools" (Kanuka et al., 2008, p. 137).

5.2.4 Issues in assessment of student learning

In section 5.1.4 I brought up the mismatch between a social constructivist approach to learning activity design and traditional, teacher-centred methods of assessment. However, none of the research participants referred to this issue. The

assessment-related challenges that were mentioned were difficulty in giving individualised feedback in a timely manner (P4) and difficulty in ensuring 'equity' and 'fairness' in assessment (P7).

The inability to provide timely feedback is ironic given the availability of a wide array of communication tools. But it is not surprising in the face of large course enrolments and conflicting demands on faculty time. While the need to provide individualised feedback to students is felt more in online learning where each student makes a written contribution, keeping track of each contribution and providing individualised feedback requires a lot of time (Coppola et al., 2001).

The concern for fairness and equity is articulated by P7 thus:

> P7: ... the equity could have been there if the setting were different... for instance if there were no option A, option B [and] everybody will be required to undergo this one process....it will always be a dilemma for me as teacher when I assess my students, whether I am being fair to everyone when I have all these options open to my students. And then there are always things that I want them to do that can't be done.
> ...
> Like... I want all of them to implement a particular [social mobilisation] program, and then for me to be there with them. Perhaps this is conventional thinking on my part because that's how I was trained. But I worry about whether I am shortchanging my students by not being with them as they go through this whole process....

P7's concern appears to be how to ensure that the different options given to students meet the same standards of quality and enable learning to the same degree. According to Beetham (2007), in flexible learning where learners have a choice of what learning tasks to undertake, what technologies to use, and what evidence of learning to present for assessment, it is important that "learners be supported in all the different choices they make" (p. 33). This is challenging "despite the capacity of technology to present a wider range of options" because "the limiting factor is the availability of skilled practitioners to provide relevant feedback and support" (p. 33). Indeed, in the latter half of the statement quoted above, P7 expressed concern about her inability to "be with" her students to observe and support them as they do their field work.

P7's comments are consistent with the 'communicative-networked learning focused' approach (Gonzalez, 2008) to teaching with the Web that she espouses. In this approach the role of the teacher is to be present and be actively involved in the students' learning (Roberts, 2003). The challenge for P7 and others is to think about

how to be 'present' to their students in the online learning environment. The concept of 'teaching presence' in the community of inquiry model of online learning (Garrison et al., 2000) and the concept of 'transactional presence' proposed by Shin (2003) may be useful here. Teaching presence in online courses is manifested through the organisation of the learning space and process; facilitating academic discourse; and providing direct instruction by posing questions, providing expert commentaries, and assessment and feedback (Anderson et al., 2001). Transactional presence (TP), on the other hand, is "the degree to which a distance student perceives the availability of, and connectedness with, people in his/her educational setting" (Shin, 2003, p. 71). A high level of teaching presence as well as teacher TP, which Shin found to impact on student-perceived learning achievement, can be established in online courses using VLE functionalities and other Web tools.

Finally, P7 alluded to her previous experiences of learning ("how I was trained") as an influence on her conception of teaching and assessment practices. Similar remarks about their disciplinary background and training were made by P5 and P6. Indeed, teachers and students bring to the online learning experience "already learned well-defined roles through years of common educational background and experience in the formal education system" (Anderson et al., 2001, p. 5). When they find that such roles are not relevant to the online learning context, they experience feelings of anomie and they are "force[d].... to explicitly define or redefine their functional roles" which, for teachers, impacts on notions of authority and power or at least their sense of being in control (Anderson et al., 2001, p. 5). In this study this can be gleaned from the following remark by P5:

> P5: Making them aware that you're the teacher — I don't relinquish [this]. To me knowledge is co-created; the teacher and the students are co-creators of knowledge. But I don't relinquish my role as a teacher, my identity and my authority as a teacher. I don't want that. I will never relinquish that.

The expectation that teachers remain in control of the learning situation might also explain to some extent the persistence of teacher-directed assessment that is described in sections 5.1.4 and 5.2.4.

In section 5.1 I noted that (i) in general, the direction of the shifts or changes in course design described by the faculty tends to be from teacher-focused and/or subject-focused practices towards more learner-focused practices; but (ii) many

faculty members appear to espouse both teacher-focused and learner-focused perspectives on course design and online teaching in general. These observations are validated by the discussion in section 5.2 of what the faculty consider to be issues and concerns in their course design practice.

Many of the faculty interviewed appear to have adopted Web technologies in their courses in order to improve student access, motivate and engage learners, enrich their learning experiences, facilitate and enhance learning, and enable learners to participate in the co-construction of knowledge. Many of the issues and concerns they described with regard to content, learning activities, and assessment have to do with being consistent with these rationales, which point to a learner-focused knowledge generation approach to ODeL. However, the issues and concerns they raised with regard to teaching strategies indicate a persistence of teacher-focused knowledge transmission perspectives. Even those who espouse a learner-centred philosophy of teaching and learning appear to be experiencing some anxiety about the changing roles of teachers in online learning contexts.

It has been pointed out (for example by Anderson et al., 2001 and by some of the research participants) that this is because teachers bring to the online learning environment teaching and learning behaviours that they have acquired from many years of conventional schooling. For DE faculty and institutions, there is also the challenge of the norms of conventional education being used as a benchmark for DE provision as evidenced by the comparisons between the two modes that are made even by DE faculty and institutions themselves. Perhaps in reaction to those who denigrate DE and online learning as an inferior mode of education, online educators like some of the UPOU faculty included in this study tend to highlight the similarities between online teaching and classroom teaching. However, this encourages a conservative approach to online teaching which is manifested in an uncritical "transfer of a particular practice from one situation to another, e.g., communication from face-to-face to on-line" (Price & Oliver, 2007, p. 19), and failure to explore new ways of teaching and assessing learning that are afforded by some online tools. Ironically, failure to adopt new online pedagogies by many faculty members was identified as an issue by some of the research participants, as discussed below.

5.3 Issues and challenges in online course design (Part 2)

This section presents the research participants' perspectives on issues and challenges in ODeL course design from a more macro and less personal view of practices across the institution. Their observations help to illumine how the challenges in their individual ODeL practice that they highlighted might be addressed more systematically.

In general, the issues raised may be classified into two: (1) the need to stimulate innovative practice among UPOU faculty who remain unengaged in ODeL; and (2) the need to support and sustain innovative practice among the innovators. Figure 5-1 shows the issues and challenges specific to each of the two groups, and issues and challenges that they have in common.

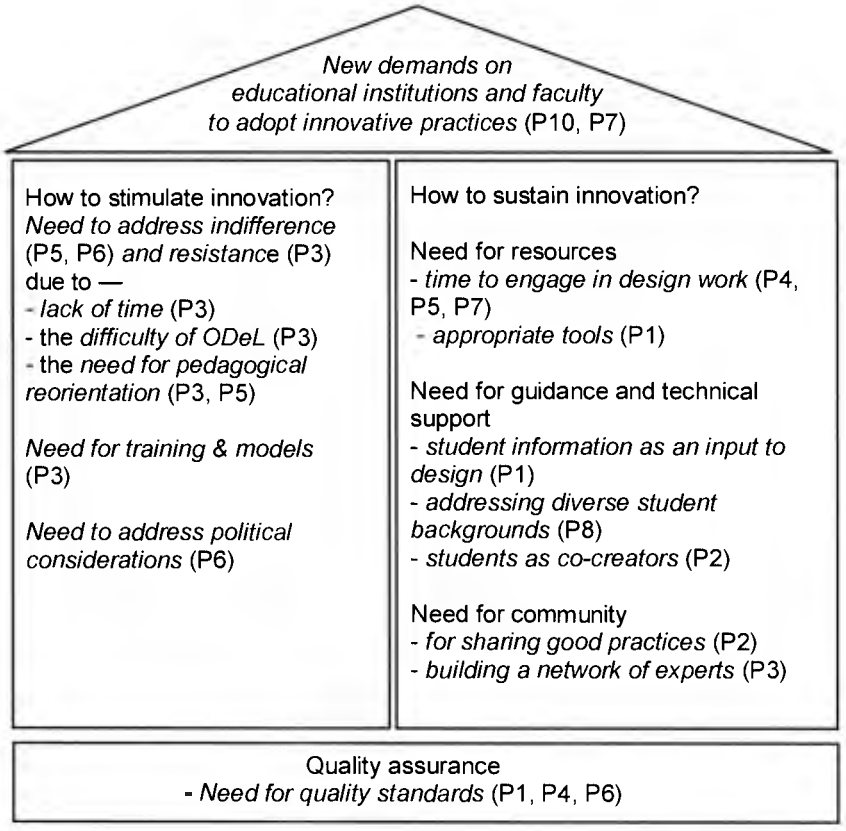

Figure 5-1. Issues and challenges in online course design across the institution

5.3.1 Stimulating innovation

The problem of faculty indifference and resistance to technology-supported teaching has been noted in the literature. But there are nuances to how this issue plays out at UPOU that may be unique to this context. For one, those who were described as unengaged in innovative practice are mostly affiliate faculty or faculty of other UP units who teach part-time at UPOU. Several research participants (notably P3, P5, and P6) referred to this group's seeming inability to face up to the demands of online distance teaching in spite of exposure to training in ODeL through UPOU-organised workshops and seminars. P3 and P5 ascribed this to the fact that ODeL requires not only the acquisition of technology-related skills but also a pedagogical re-orientation, which many academics would find challenging. As P9 pointed out, faculty members are selected to teach courses on the basis of their expertise in the subject matter, and they do not necessarily have knowledge of appropriate and effective pedagogy especially for online learning contexts. Thus they need to (re)examine how they teach, and be open to alternative ways of teaching:

> P3: ...The pedagogy in DE is very different from that in face-to-face teaching. And I think until now we haven't really succeeded in bringing about this shift in the mindset of our affiliate faculty. Until now, for them it's still using the computer, using email to address the concerns of the students as if they're in face-to-face setting. They do not know how to design learning activities meant for distance learners. That's still the very big issue. They still assume that it's the same framework when you are in the residential mode and the students see you. A lot of problems are really because of this mindset.
>
> ***
>
> P5: Because distance education is mediated by course materials in different forms, the challenge I think is in the teacher understanding such mediation and then using media as an agent, the teacher's agent, to accomplish teaching. I think they have to realise that. It's like making teachers, course writers, realise the nature of the process. They tend to blame the university for not providing them training. Yeah, that's one thing and I think that's real. But... I think you need to understand the nature of that work, to come to terms with yourself, to surface your own understanding of what teaching is.

It can be gleaned from P3 and P5's remarks that the training that faculty members get in ODeL may be inadequate. Indeed, P8 in this study mentioned "no proper orientation" as a problem that she experienced as a new faculty member. This

raises the question of how much and what kind of orientation and training is required to foster the pedagogical re-orientation that is described by P3 and P5. It would seem that faculty members need to devote time not only to participating in a training programme but also to exploration and experimentation and learning from practice. However, many affiliate faculty are not able to make this time investment to teaching online (as noted by P3, P5, and P7). They have other priorities, such as their teaching and research work in their home units. Furthermore, teaching online is not easy, as P3 pointed out: "I think the resistance is really because it's really difficult, it's not easy to teach in the distance learning environment." (cf. Collis & Moonen, 2008).

The problem is that UPOU continues to rely on affiliate faculty to teach a significant number of its course offerings every term. Although there has been a gradual realisation that UPOU needs a bigger complement of full-time faculty than its founders had anticipated, recruiting additional full-time faculty is challenging. For one, the creation of additional faculty positions needs the approval of the UP System and the Philippine government, and this approval hinges on budgetary considerations. Second, it is difficult to recruit faculty with the knowledge, skills, and disposition for teaching at a distance, as proven by recent faculty recruitment efforts.

Given UPOU's dependence on affiliate faculty for course delivery, engaging the affiliate faculty is a political issue as much as it is an administrative challenge, as P6 pointed out:

> P6: ... But sometimes I don't know what to do with courses that the same person has been teaching for years and there is no other person who will teach it. And this person has been with the university for 30 years or something. I don't know the solution to this one.
>
> Me: The faculty member doesn't want to give up the course?...
>
> P6: But who do you give the course to? And then I think about the politics.... in particular, we should be sensitive to the fact that we have two tracks.... If one day the College of.... decides that they will no longer participate, a whole track [would disappear]! They [the College faculty] distribute the teaching assignments among themselves. They have a say in these matters. I am trying to proactively maintain a relationship with them or else one day we will just be surprised that they have decided to stop [teaching with us]. [If that happens] it's a whole track that we will lose....

Indeed, breakdowns in relationships with affiliate faculty members can result in the suspension of an entire programme, as has happened in the case of two UPOU programmes. This is one of the vulnerabilities of small and medium-sized DE institutions that are dependent on the academic collaboration of campus-based sister institutions for developing and implementing their courses and programmes (Abrioux, 2006).

5.3.2 Supporting and sustaining innovation

Alongside issues related to lack of innovation are issues regarding how to support those who are innovating. The need for resources, guidance, and community, which Laurillard (2008) refers to as 'mechanisms for innovation in teaching and learning' (p. 529), were specified. Two resources in particular were mentioned — time and tools. Lack of time for design work was cited by at least three faculty members (P4, P5, and P7). As P5 noted, this may well be unique to the "particular context of UPOU" where the full-time faculty are "very much active in the administration of the university". Nevertheless, few would dispute that design is "creative work and it requires reflection... [and] quiet time" (P5) without which even teachers who are willing to innovate end up replicating old practices (P8). Equally important are the right tools for facilitating course design, as P1 observed. P1 was referring in particular to being able to access "data from previous courses offerings" and thus avoid having "to start from scratch to develop your course site and to design your course" (P1).

Academics also need technical support and guidance especially when implementing a new pedagogy. For example, a learner-centred pedagogy requires that the faculty be provided with information about learners during the course design process (Naidu, 2007). As P1 stated:

> P1: ... before you can design your course, you need information about the learners because course design may become a constraint to some students if you do not consider their profile, their background....

P1 suggested that programme chairs give faculty members who are assigned to handle courses the profile of learners. At present, this is not done consistently across all

programmes and for all courses at UPOU.[47] Also, some programmes have very large enrolments and the enrolment profile that is drawn up (by the admissions unit) covers only basic data like age, sex, domicile, educational attainment, and occupation.

But knowing learner profiles is insufficient. Beetham (2007) notes two challenges in adopting a learner-centred approach to design: knowing which learner differences matter in a particular learning context, and addressing learner differences appropriately and effectively. In this study, P8 alludes to these two challenges thus: "... the diverse backgrounds of students, the age gaps, are crazy.... There are students, classmates, who are father and son.... [Y]ou really have to design [different] materials for these [diverse] groups." P8 has expressed an interest in researching and developing adaptive learning systems for UPOU. Adaptive learning is one of two approaches to learner-centred design mentioned by Beetham. The other is providing for flexible learning. However, as suggested in section 5.2.4, there seems to be little engagement with flexible learning even among the research participants and this is clearly an area in which they need further development.

The faculty also need guidance on how to "operationalise" the concept of learners as co-creators (P2) or what Collis & Moonen (2008) refer to as 'contribution-oriented pedagogies' where "the learner is involved in the contribution of at least some of the learning resources in a course or even in the design of some aspects of the course as he or she participates in it" (p. 98). In this study, this challenge is articulated by P2 thus:

> P2: One challenge has to do with... our students as co-creators.... I want to experiment on how the inputs of the students can be used as text... for the current course. All of the text produced, all of the knowledge [created] in my previous course should input into the next one. I have not yet been able to operationalise how I will do this....

P2 is an example of a teacher at the 'invention stage', which is the most advanced of five stages in what Sandholtz et al. (1997) refer to as 'instructional evolution' in technology use. Teachers at this stage experiment with different technology-supported instructional practices, including new ways of relating to students and colleagues. To get to this stage, teachers need formal instruction in

[47] While faculty members who will be handling a course for the first time might be given a general orientation to a programme, including the background of learners, faculty members who have taught in the programme previously might not get this kind of orientation for specific courses.

technology use, opportunities for experimentation and critical reflection on practice, and active participation in a community of practice (Hughes, 2004; Jacobsen et al., 2002). This is borne out by the profiles of the research participants. P1, for example, described his development as a distance educator thus:

> P1: ...I had been a tutor at UPOU since 1996. Then I became an affiliate, and then a regular faculty member. At first I brought with me to my Web-based course delivery my teaching style in the face-to-face setting... focusing only the lecture and without consideration for the learning style of the student, focusing only on one material and with very minimal interaction with the student and among the students.... I still had this style of teaching when I transferred to OU. I did not provide for interaction, even when we began to use IVLE because I was still very much oriented to the face-to-face mode. Then I realised that there must be something wrong with my teaching style because of the poor performance of the students, and so many students were dropping out of my course. I realised that I wasn't providing the students with any motivation to learn.
>
> ... So based on my experience I diversified my approach. I did a lot of experimentation in terms of approach....
>
> .... I learned a lot from my online teaching experiences and from my interactions with some regular faculty at OU....

Membership in a community of practice gives faculty members the opportunity to share good practices and learn from each other, as P2 explained:

> P2: ....many different minds go into different tracks and many people discover different things simultaneously. Sometimes we say, hey, you're doing this so I should do it, too. Because... there are many things that do not come to my mind because it also depends on my interests. And it also depends on types of courses. Like there are things that work with theory courses.... [and] with labs and [the] clinical [practicum]....

It also provides an opportunity for teachers "to participate in new ways of thinking — or counter-thinking — in order to act according to critically informed understandings of teaching and learning" (Daly & Pachler, 2007, p. 55).

However, building a community of practice is not easy. For UPOU's full-time faculty, being geographically dispersed[48] and having multiple responsibilities

[48] UPOU has two main offices: one in Los Banos, Laguna (the headquarters) and the other in Diliman, Quezon City. It takes 2-2.5 hours travel by car to get from one to the other location. Some of the full-

(administrative work on top of teaching and research, an issue alluded to by P4, P5, and P7 in this study) are barriers to regular formal exchanges and informal conversations about teaching and learning. A possible solution to this problem and to the problem of having too few full-time faculty may be derived from P3's suggestion of a network-based approach where various experts internal and external to the institution can collaborate in teaching a course online:

> P3: ...[but] we have to look for networks that we can partner with or collaborate with... because there are only a few full-time faculty and obviously we don't have [all of the necessary expertise]. It will be very good if we can explore networks that we can collaborate with as a university. And that would strengthen the potential of coming up with resource-based learning. Because even if we say it's resource-based learning, we cannot assume that the students will only interact with the materials. A lot of it also has something to do with experts facilitating.

While P3 is referring specifically to extending current teaching arrangements to include experts external to UPOU, her use of the term 'network' suggests the idea of an online community of practice for both full-time and part-time UPOU faculty.

5.3.3 Assuring quality

While there are issues and challenges that are specific to particular groups of faculty, how to assure the quality of course design and teaching in ODeL, an issue raised by P1, P4, and P6 and implied by other research participants, confronts the faculty and institution as a whole. As P4 noted, this is an offshoot of the shift from a standardised model of DE to more ad hoc and fluid DE models enabled by the availability of various technologies:

> P4: I think right now the problem with online teaching and learning as a mode of teaching is that there are too many opportunities, there are too many options, there are too many ways of doing things such that our faculty members and course authors are confused!... we're all experimenting, grappling with all the techniques, and improvising. I think there will come a time when all of these things will settle. But right now we're in that stage of to each his own. I think that comes with new approaches and new technology and that's part of the excitement. But —

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time faculty are based at Los Banos, while others are based in Diliman. Two other full-time faculty members are based at the UPOU learning center in Manila, about 1-1.5 hour's drive (in heavy traffic) away from the Diliman office.

> ...I think the issue is about quality. How do we make sure that the students get the kind of education that they deserve and... paid for? At the same time, we also want to ensure, as much as possible, some sort of a uniform learning experience.... I think there has to be some sort of a common learning experience across programmes. Of course you have different ways of teaching depending on the discipline, but —

P6 suggested laying down minimum requirements for all FICs (faculty-in-charge) to comply with:

> P6: Teaching standards? If they are at all enforceable. But there could be minimum standards, right? Like at least fix your course site. The materials that need to be updated I think we are able to address. We do have a system for giving incentives to do that, right? You can get credit for doing that; you can get paid if you are an adjunct faculty member. We just need to do it.

These remarks suggest a 'carrot-and-stick' approach to assuring quality to which there are limitations, as P6 himself admits. Davis (2001, p. 7) notes, "Academics, being essentially creative people, prefer to devise and explore their own approaches to anything, and resent being told how their courses and programs shall be delivered." A regulatory approach also does not take into account ambiguities and tensions that faculty members experience in rapidly changing teaching and learning contexts (Davis, 2001; Hardy, 2007). In this study, P10 alluded to this issue thus:

> P10: ....But at the same time, especially people who are affiliate [faculty], they're used to the traditional mode of teaching which is the classroom. And then they were taught how to write modules and to teach using the modules. They got this idea that the module is the teacher and that they don't really have to engage with the students that much. And then here comes online learning which says, hey, you have opportunities for interactivity again but you have to do it in a different way — asynchronously. So I can just imagine the adjustments that these people have to undergo along the process.

The rapid pace of change can be confusing even for the full-time faculty:

> P1: I am looking for some standard that would give us our identity as a DE institution. Right now, we have different ways of dealing with our classes and courses. In the past I didn't even know if what I was doing counted as DE or whether it qualifies as DE pedagogy. Then I realised from discussions with other faculty members that I'm on the right

> track. But it would be good to have [a standard] on which you can anchor your practice.

Although he used the word 'standard', like P4 and P3 (who suggested providing 'models') P1 seems to be referring to a guide for good practice and, more generally, "a common framework for assessing the effectiveness of any... approach... and to draw useful conclusions for future development" (Davis, 2001, p. 13).

To conclude this section, the faculty described what for them are the macro issues and challenges in ODeL course design that UPOU's administrators should address. These include resistance to innovation, uneven innovation practice, and lack of standards for innovation. While similar issues and challenges are described in the literature[49], the way they play out at UPOU is unique to the institutional context, and the solutions suggested by the faculty have certain nuances. In general, the range of issues and challenges described calls for a holistic approach that includes a coherent framework, relevant policies and guidelines, and appropriate tools and resources for practitioners. This is discussed further in Chapter 6.

5.4 Chapter summary

This chapter presents the study's findings regarding the 10 research participants' perspectives on the impact of teaching with Web technologies on their course design practices, and issues and challenges in ODeL course design at the individual and institutional levels. 'Impact' in this study has been operationalised as change or shifts in practice.

The faculty described changes in four areas: content development, teaching strategies, learning activities, and assessment of student learning. The changes in content development and learning activities that were mentioned are consistent with those noted by DE scholars (e.g., Haughey et al., 2008; Mason, 1998; Naidu, 2007; Tait, 2010), in particular the shift from pre-packaged to resource-based content development, and from a focus on materials development to a focus on the design of learning environments and activities. These are considered to be evidence of a shift from teacher-focused knowledge transmission pedagogies to learner-focused social constructivist knowledge generation pedagogies (Goodyear, 2009; Swan, 2010). In contrast, changes in teaching strategies and assessment were described in more

[49] See Chapter 2, section 2.4.

teacher-focused terms. Web technologies for synchronous communication appear to be enabling teaching strategies which the faculty hope will foster greater teacher-learner interaction but which might also constrain learner access and participation (Murphy et al., 2011). Assessment practice also appears to still be teacher-directed, with little use being made of student self- and peer assessment, which confirms Mason's (2008) comment regarding the paucity of innovative assessment design in online courses.

The faculty's perspectives on issues and challenges in their personal course design practice point to tensions arising from the need to meet the needs of diverse learners (for example, by updating and enriching content, integrating various online learning activities, and providing timely and individualised feedback) on the one hand, and the need to define teaching roles and manage the teaching and learning dynamic (for example, through the adoption of particular teaching strategies) on the other hand. There seems to be a lingering preoccupation with face-to-face teaching and how it might be replicated or even surpassed online. Notably, this was an issue not only for the faculty who might be said to have a teacher-focused knowledge transmission orientation but also for those with a learner-focused social constructivist orientation.

The more macro issues and challenges that the faculty mentioned encompass how to promote a culture of innovation, how to help faculty members develop the integrated knowledge and skills needed for effective online teaching, how to support innovative teaching practice, and how to ensure quality across different models of and approaches to ODeL.

The next chapter provides a concluding discussion that ties together the findings presented in Chapters 4 and 5, and draws out the implications of these findings and the study as whole for practice and further research.

Chapter 6 – Concluding Discussion

Web technologies are enabling a variety of DE pedagogies with the potential to meet the educational needs of increasingly diverse learners. ODeL is one such set of DE pedagogies. The term ODeL was coined recently by UPOU's administrators to refer to the online DE model that is being implemented at UPOU. This model is characterised by the use of a virtual learning environment complemented by various open source Web applications, and a resource-based approach to course development, with academics assigned to teach courses also acting as course designers.

This study sought to examine the ODeL course design practices of 10 UPOU faculty members. Specifically, the study looked into:

1) the pedagogical perspectives and priorities that underpin the faculty's use of Web tools and resources in their courses;
2) the impact of the faculty's use of Web-based tools and resources on their course design practices; and
3) issues and challenges in the design of online DE courses from the faculty's point of view.

In this chapter, I present my conclusions based on the study's main findings and discuss their implications for practitioner development in ODeL. I also outline the contributions of the thesis to research in ODeL and conclude with some suggestions for further research.

6.1 Synthesis and Conclusions

The picture that emerges from the study's findings is one of 'change and consistency' (Burge & Polec, 2008) in course design practice at UPOU. The most obvious change is that Web technologies are now very much a part of the mode of DE delivery at UPOU, and not just a 'peripheral' or 'optional' component (Godwin et al., 2008, p. 53). This is apparent not only from the variety of Web resources and tools that the research participants use in their courses, but also from their reliance on Web-based materials and applications for both the content and the mode of interaction in the courses that they teach. There are now more 'online resource-based' and 'online discussion-based' courses at UPOU than 'distance online support' courses. This change in turn suggests that the focus of course design at UPOU has shifted from content development to the design of learning environments and activities, a trend

noted in the literature on online DE (see, for example, Burge & Polec, 2008; Calvert, 2005; Tait, 2010).

Moreover, with the new course types there is a greater variety of pedagogical approaches at UPOU. Some course designs emphasise independent learning more than dialogue and collaboration among learners, while others focus more on discussion and collaborative learning activities than on individual work. Particularly notable are pedagogical approaches that attempt to strike a balance between learner interaction and independence. These represent a change from the self-instructional approach in pre-online DE (Burge & Polec, 2008; Anderson & Dron, 2011) as well as a slight deviation from the social constructivist community-centred approach that is claimed to be prevalent in online learning (for example, by Garrison, 2009 and Swan, 2010).

Consistency in course design practice, on the other hand, is evident in the design factors that the faculty take into account. These include curricular requirements, subject pedagogies, conceptions of teaching and learning, and concern for learner access and participation. Providing equitable access to learning resources and tools and equal opportunities for participation in course activities requires special attention in DE contexts. The strategies described by the faculty in this regard range from limiting online resources and activities to those that all learners are likely to be able to access, to providing for redundancy of resources and, to a lesser extent, allowing for choice of resources and activities in diverse formats. Improving learner participation also underpins efforts to take up new Web applications that will facilitate communication and dialogue both asynchronously and synchronously.

The integration of synchronous online learning in some courses may be said to be a new development in course design at UPOU. At a recent roundtable discussion on synchronous pedagogies in ODeL[50], faculty members cited the following pedagogical rationales for using synchronous communication tools: to mitigate the DE student's sense of isolation by providing opportunities "to socialise"; to monitor student progress in large classes; and to facilitate convergence of meaning especially around abstract ideas and concepts (cf. Hrastinksi, 2007). However, synchronous pedagogies in DE contexts might also be interpreted as evidence of consistency, or lack of change, in teaching practice, to the extent that they are motivated by a desire

[50] The roundtable discussion was held on 18 June 2012 at the UPOU Oblation Hall.

to replicate online conventional classroom-based instruction in the belief that the latter represents the 'ideal' form of teaching and learning. Instead of change in practice, technology integration in this instance results in teaching strategies for conventional classrooms being uncritically transferred to the virtual classroom. One reason for this is that the faculty do not know how else to teach, and they are emulating ways of teaching that are familiar to them based on their personal experiences as learners and as former classroom teachers. Or they might realise that changes in the way they teach are called for but they find making the change difficult.

That learning how to teach online is complex and challenging is also apparent from the findings of this study. Not only do teachers have to learn new skills and new teaching practices but they also have to assume new teaching roles some of which impact on their professional identity of teachers (MacShane, 2007). Whether it is the independent learning model or the collaborative learning model that is implemented, distance learners must take responsibility for their own learning and exercise some degree of autonomy, and DE teachers must not only allow this but also design for this to happen. As Beetham (2008) puts it, "'Good' designs may be precisely those that encourage learners to develop their own intentions and capacities for learning, while 'good' designers may be those who eventually design themselves out of the picture" (p. 4). This "radical blurring of boundaries between teachers and learners as directors of learning" (Beetham, p. 4), which I argue is felt more in DE contexts, is challenging even for teachers who espouse a learner-centred social constructivist teaching philosophy. From this perspective, there is consistency between the downplaying of independent learning as an aspect of ODeL by some faculty members, attempts to replicate classroom-based teaching strategies, and the persistence of teacher-directed assessment practices and lack of experimentation with new ways of assessing student learning which have been noted in Chapters 4 and 5.

On the other hand, I should point out that there is recognition among the faculty members included in this study that ODeL calls for new pedagogies, particularly in light of the increasing diversity of learners in terms of geographic location, age, educational background, and occupation and/or profession, among others. At present, these faculty members tend to address learner diversity by what I would call the 'least common denominator' approach of establishing a standardised experience for all learners in a paced, cohort-based scheme, rather than through individualised and differentiated learning. As with the persistence of classroom-based

pedagogies, this is due to the faculty and institution's lack of experience with alternative pedagogical models in DE, including the traditional DE model of independent study characterised by continuous enrolment and completion of course activities at the learner's own pace and in any sequence, as well as contemporary networked-based models that integrate cooperative and collaborative learning with learner-paced study using personal learning environments that enable social networking among learners (Anderson et al., 2005).

It may be noted that at least for the group of UPOU faculty and administrators included in this study, there is no lack of interest in and willingness to explore new practices and new directions in ODeL. But they admit that they constitute a minority, and they cite as a continuing challenge how to foster innovative teaching and learning practice across the institution as a whole. This is reminiscent of Collis & van der Wende's (2002) characterisation of higher education institutions "now transferring from a period of rich and mostly bottom-up experimentation to a phase in which institution-wide use of ICT is being encouraged" (p. 8). Such institutions go through three stages of ICT implementation: 1) "the establishment of institution-wide technological infrastructure"; 2) "rich pedagogical use of this infrastructure"; and 3) "strategic use of ICT with a view to the different target groups of higher education" (p. 8). While many institutions are likely to have completed the first stage, the second stage "is in many cases still in development" and the third stage "has in most cases not been considered explicitly yet" (p. 8). This appears to be the case with UPOU, as this study's findings suggest. The next section presents some possibilities for addressing ODeL issues and challenges for individual faculty and the institution as a whole.

6.2 Implications for Practice

The study's findings have implications for academic developers and administrators at UPOU, particularly with regard to the design of faculty development programmes, provision of faculty support, and strategic planning for ODeL implementation across the institution.

First, practitioner development programmes in ODeL for academics should aim to develop a comprehensive range of ODeL skills in a systematic and coherent way. Teaching effectively online requires more than technology-related skills (e.g., how to use Moodle). In Table 6-1, I list the skills required for teaching in ODeL

contexts that were directly mentioned by the research participants in their reflections on the impact of teaching with the Web on their teaching practice and the corollary issues and challenges[51], and skills that I inferred or extrapolated from these reflections (shown in italics). The skills are grouped into the four areas — content development, learning activities, teaching strategies, and assessment — around which the faculty's descriptions of their course design practice can be clustered, as discussed in Chapter 5.

Table 6-1. ODeL teaching skills framework

	Basic	Intermediate	Advanced
Content development	• updating course content using Web resources • selecting Web resources with learning outcomes in mind • writing study guides	• selecting Web resources in all media types, based on an understanding of media affordances and constraints • *selecting resources for supplementary study (aside from core resources)*	• selecting Web resources to cater for different sets of learners • *producing OER/ developing and sharing resources with other teachers*
Design of learning activities	• designing online learning activities to engage learners and facilitate understanding of content • writing activity guides	• designing online learning activities to foster dialogue and a community of inquiry	• *designing network-based knowledge generation learning activities*
Teaching strategies	• providing "direct instruction" online • organising the course site • managing workload	• establishing teaching presence • organising and conducting online discussions	• adopting participatory pedagogies (working with students as co-creators) • teaching with others ("teaching with networks")
Assessment	• designing summative assessment • writing assignment guides (including criteria for marking) • providing timely and useful feedback	• designing formative assessment • *ensuring a balance and coherence between summative and formative assessment* • *using alternative assessment, including student self- and peer assessment*	• *designing individualised assessment / customising assessment for different learners based on learning achievement*

[51] This is presented and analysed in Chapter 5.

Based on the principle that effective teaching with technology requires the integration of knowledge of content, pedagogy, and technologies for learning, the ODeL teaching skills framework does not list technology skills separately from pedagogical skills and content-related skills. Instead, the skills listed for each of the four areas in each level of expertise are TPACK skills. For example, 'selecting Web resources with learning outcomes in mind' requires a course designer to integrate knowledge of a particular course and its target learning outcomes vis-à-vis a programme of study (i.e., subject matter expertise, curricular knowledge), knowledge of how the course is best taught and/or how particular learning outcomes are best achieved (pedagogical content knowledge), and knowledge of how to locate Web resources (Internet skills and information literacy) and evaluate their relevance to the subject matter and their usefulness for helping learners achieve the target learning outcomes (subject and pedagogical knowledge, and media literacy).

The framework also specifies levels of expertise (basic, intermediate, and advanced). Basic level skills are the minimum set of skills that a faculty member who is new to teaching an online DE course should have, or should be helped to develop. With appropriate training and guidance in ODeL, faculty members should progress from this basic or beginning level of ODeL teaching practice to the intermediate and advanced (or proficient and expert) levels, and develop *all* of the skills listed for all three levels. At this point, it should be noted that the framework presented in Table 6-1 lists only the key skills derived from the findings of the current study and other key skills may be added as needed.

The second implication for practice that may be drawn from the study's findings is that a training programme is not sufficient for practitioner development in ODeL. It is clear from the research participants' descriptions of how their course design practice has evolved that professional development in ODeL is a complex process requiring "exposure to a range of models of technology use" to develop the "understanding [of] differences in interaction with technology and how this affects learning [which] is crucial to designing effective activities, content and learning goals" (Price & Oliver, 2007, p. 25); continuous engagement in design work; critical reflection; and participation in a community of practice. Thus, course design and other workshops should be part of a holistic and integrated faculty development programme in ODeL that would include not only workshops but also opportunities to undertake experiments, to learn alone or with a partner or a small group, and to share

experiences and critical reflections as well as 'products' of innovation, using a range of tools and resources and with appropriate and effective administrative and research support.

For UPOU, adopting these mechanisms would require policy and administrative changes, some of which might prove to be particularly challenging. To support innovative teaching practice across the institution, this study's findings suggest a need for among others: 1) a significant expansion of the pool of full-time faculty to allow for a re-distribution of administrative workloads to free individual faculty members for course design work; 2) the establishment of a unit that would implement the professional development programme described above; and 3) a reconceptualisation of support structures and services for course development and delivery which at present remain oriented towards a print-based mode of delivery.

Even if it maintains the current policy of having affiliate faculty handle a good percentage of its courses, UPOU needs additional full-time faculty members given the very small number of full-time faculty at present and the large number of programme offerings (relative to UPOU's size). As for working with faculty from other UP units, some thought needs to be given to how the affiliate faculty can be better motivated and equipped to engage in ODeL, not just for political reasons (i.e., UPOU needs to maintain collaborative arrangements with other UP units for as long it wishes to remain part of the UP System) but, more importantly, for pedagogical reasons. That is, UPOU should be concerned about ensuring that all of the faculty, whether full-time or part-time, can teach online and at a distance effectively and well. It is true that engaging part-time faculty can be challenging (as some of the research participants have noted), but this might be addressed by a more comprehensive and innovative approach to faculty development.

In general, UPOU's leaders should recognise the need for strategic policy development and organisational restructuring for ODeL to be effectively implemented. Collis & van der Wende (2002) note that "policies are crucial for institutions...to define what will be their next stage of development...and how to get there" (p. 66). They recommend in particular that a university intending to implement e-learning "should develop a strategic plan relating to the relative importance to the institution of... different types of learners" (p. 66) and "profile itself around several instructional alternatives and develop pedagogical models and templates for its course management system that support those models" with an eye towards "efficiencies and

scalability" (p. 72). Which 'pedagogical profiles' in ODeL should UPOU explore, and how should it "optimise flexible delivery of these profiles" (Collis & van der Wende, p. 72)? The following questions adapted from Bates (2001) may be used as a guide in the strategic planning required for these bigger questions to be addressed:

- On which target group/s should UPOU be focused (e.g., high school leavers, working adults, lifelong learners, overseas Filipino workers, etc.)?
- How should the mix of ODeL approaches vary, depending on the target group?
- For which teaching and learning goals should asynchronous and synchronous strategies be used?
- Which particular technologies are needed?
- How should faculty be supported?

As for organisational restructuring, this is needed because as Annand (2007) reminds us —

> organisational issues rather than learning theory significantly determine practice. Underlying beliefs about the relative importance of learner autonomy versus social interaction in the learning process are largely informed by adult educators' experiences within particular organisational structures. (p. 1)

At UPOU this is apparent in the largely uncritical adoption of the paced cohort-based model of ODeL — i.e., it is not only based on the "classroom-based learning [that] predominates in universities" but also "easier to support within the processes of the organisation" (Annand, p. 1), including *inter alia* the semestral system, staffing patterns, and course scheduling schemes. If new pedagogical models are to be adopted, then it is necessary to put in place organisational arrangements that would support each of these models. For innovative practice to gain traction, "the commitment of some dedicated individuals will not suffice" and "the institution itself must make a commitment (i.e., for support, resources and personnel) and... develop a targeted implementation strategy" (Collis & van der Wende, p. 10). In implementing flexible learning, for example, there is a need for a system-wide "technological architecture, tools and functionalities" such as "a database driven system that allows easy tailoring and adapting of (portions of) courses to serve the needs of different groups of students" (Collis & van der Wende, p. 8).

With regard to the question regarding which pedagogical profiles UPOU should adapt and implement, while some profiles might be drawn from the findings of this study, perhaps the more critical point that should be emphasised (also based on the findings of this study) is the need for a plurality of pedagogical models based on an understanding of pedagogical priorities. The increasing diversity of distance learners coupled with the availability of various technologies suggest that UPOU should support several well-articulated ODeL models, including hybrid approaches that would allow for flexible learning that balances to some extent, or at least takes into account, the sometimes conflicting interests of accessibility, instructional quality, and cost-effectiveness (Daniel et al., 2009; Kanuka & Brooks, 2010; Power & Gould-Morven, 2011). (Notably, in this study the research participants referred only to accessibility and instructional quality as course design considerations. However, cost-effectiveness should also be a concern for small institutions like UPOU which have limited faculty and staff resources and relatively small enrolments.)

6.3 Contributions of the Study

The study makes some modest contributions to research in online learning and DE. One of these is formalising 'open and distance e-learning' or 'ODeL' as a focus of research. ODeL refers to the convergence of the open learning philosophy of education for all, DE methodologies for teaching and learning any place any time, and e-learning technologies. Unlike other hybrid approaches to DE which attempt to replicate the conventional classroom-based teaching and learning experience and thereby reduce or eliminate distance (see for example Power's blended online learning design; see also Garrison, 2009), ODeL points to the continuing relevance of distance as a focal point for efforts to enhance the teaching and learning experience using e-learning technologies. Instead of disregarding distance, ODeL practitioners must keep it in mind in order to avoid adopting strategies and methodologies that make learning opportunities inaccessible to many learners and/or which hinder their full participation in the learning process — i.e., making education less open and flexible.

The study provides a synthesis (in Chapter 2) of course design principles, frameworks, and models from DE and e-learning theory and research that can be used by others who might wish to investigate course design and related aspects of ODeL. Based on this synthesis an approach to analysing pedagogical perspectives and

priorities in teaching with the Web in a DE context (Chapter 2, Figure 2-4) has been proposed, as well as a framework for analysing the impact of teaching with Web technologies on course design practices in ODeL (Chapter 2, section 2.3.2). Use of these analytic frameworks is demonstrated in Chapters 4 and 5.

The study found that teachers' use of Web tools and resources relates to the importance that they give to independent learning and collaborative learning. However, the study also found that teachers hold orientations to teaching and learning with Web technologies that do not necessarily conform to the extremes identified in the literature. Rather than subscribing to either an independent learning approach or a collaborative learning approach, which are presented in some studies and theoretical discussions as opposing approaches underpinned by contrasting orientations to learning, some teachers adopt different pedagogical approaches for different learning contexts, and/or they attempt to balance seemingly oppositional pedagogical approaches. This flexibility comes from their having multiple orientations to learning, which develops from an awareness of the need to take into account, and address tensions among, a range of design factors. This flexibility in design practice may also be understood as a manifestation of the convergence of an open learning philosophy, distance education pedagogies, and e-learning technologies.

Based on the study's findings and the literature review, an ODeL teaching skills framework (Table 6-1) has been proposed. The framework, which is described in section 6.2, specifies teaching skills needed for a flexible approach to ODeL, or an approach that combines independent learning with collaborative learning. It can serve as a guide in the design of a professional development programme in ODeL course design at UPOU, and it can be tested and adapted for use in similar ODeL contexts.

Lastly, in the preceding section some key points for institutional strategic planning for ODeL are laid out for UPOU's administrators and faculty to consider.

6.4 Limitations and Areas for Further Research

This study is exploratory in nature. Its aim was to explore the perspectives on ODeL course design of a group of practitioners in one institution, in order to identify and describe the pedagogical factors, issues, and challenges that impact on ODeL course design practice in that particular context. To this end, a small group of 10 faculty members was selected to participate in the study. While these 10 research participants comprise a small cross-section of UPOU faculty and they may not be

typical of the total population of UPOU faculty (which is comprised mostly of affiliates), following the norms of qualitative research they were purposively selected for their extensive experience and expertise in ODeL which would allow them to provide insights into ODeL course design practice at UPOU.

Nevertheless, the study is limited in that it looks only at the ODeL course design practice of one group of faculty members. Extending the study to other full-time faculty members, including one or two who have only recently joined UPOU and who are using adaptive media like games and simulations, as well as affiliate and adjunct faculty, including those whose practice of ODeL is minimal, would result in a fuller picture of ODeL practice in the university. It would also be an opportunity to test and refine the conceptual frameworks proposed in this study for the analysis of factors that influence ODeL course design practice.

The interview method was deemed suitable for the current study given its focus on the research participants' reflections and perspectives on their course design practices, rather than the actual process of course design. However, in any interview, but perhaps especially in insider research as in this case, it can be difficult to elicit from interviewees the relevant information in sufficient detail and specificity. The relationship between the interviewer (myself) and the interviewees (my colleagues) outside of the research context could influence in a negative way how the latter respond to questions, and how the former receives and interprets the responses. I sought to address this limitation through the following strategies:

- prior to the interview: providing a clear explanation of the purposes of my study, and formally requesting consent to participate;
- during the interview: posing specific questions and follow-up questions to elicit thick description and to encourage deeper reflection on particular design practices, and repeating back to the interviewee specific statements noted and conclusions drawn to give them an opportunity to clarify, modify and/or elaborate on these statements and conclusions; and
- during data analysis and report writing: developing an awareness of my personal biases, being attentive to 'counter-examples', and rigorously applying the study's analytic framework to avoid reductive interpretations.

These strategies 'worked' because my colleagues were/are what Merriam (2009) refers to as 'good respondents', able to "express thoughts, feelings, opinions

— that is, offer a perspective — on the topic being studied" (p. 107) by virtue of their being experienced, proficient and expert practitioners of ODeL. Paradoxically also, while my being an insider-researcher posed difficulties, it afforded me sufficient familiarity with my colleagues' course design practices to elicit fuller, more detailed descriptions and explanations, and to make sense of these in terms of the institutional and practical context as well as the theoretical context. However, if the study were to be expanded to include novice ODeL practitioners or academics with limited engagement (in terms of time and effort) with ODeL course design, a survey and observation of practice might be more suitable means of collecting data than interviews alone. A longitudinal study would also be more appropriate for observing changes in the course design practices and pedagogical perspectives of academics who are learning how to teach effectively with technology.

With regard to scope, the study explores variation in orientations and approaches to, and perspectives on, ODeL as it is practised in one university. UPOU implements a cohort- and term-based predominantly asynchronous type of ODeL. While the aim of the study was not to describe and understand all ODeL course design practices but to explore the course design practice of a particular group of ODeL practitioners in a specific context, it may be argued that a better appreciation of local practice might be derived from a comparison with faculty perspectives on course design in other ODeL models. The latter would include the self-paced learning model and the connectivist networked learning model implemented through massive open online courses (MOOCs).

In closing, it should be noted that this study provides only a snapshot of current course design practice at UPOU, a small single-mode DE institution with the mission to "democratise access to quality higher education" within a conventional university that prides itself in being the 'premier university' in a country with more than 2,000 colleges and universities. Taken with a particular lens and from a particular vantage point, the snapshot shows a multifaceted practice of distance education, online learning, and open learning (ODeL). It provides a mixed picture of innovation and stagnation, experimentation and muddling through, and change and continuity in pedagogical perspectives, priorities, and practices in teaching with Web technologies in a distance education context made more complex by new demands for increased openness and flexibility. It remains to be seen how this picture will change.

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Appendix 1. Interview Schedule

1) What Web-based tools and resources have you used or are using in the courses that you teach at UPOU?

2) Please describe how you use each of these Web-based tools and resources in the courses that you teach.

3) What are your pedagogical purposes for using these Web-based tools and resources? *(may cite different purposes for different tools and resources)*

4) How important is each of the three types of interaction — learner-content, learner-learner, learner-teacher — in your online DE courses? (Probe: Is there a particular type of interaction that you consider more important than others? If so, which one?) How do you design for the type(s) of interaction that you consider important?

5) In your online DE courses, how important is independent, self-paced learning on the part of the students? How do you design for independent, self-paced learning in your online DE courses?

6) What (other) factors do you take into account when you design your Web-based or online DE courses?

7) How has your course design practice evolved from your early years of teaching at a distance to the present?

8a) How does the use of Web technologies impact the way you teach? More specifically, what aspects of your online distance teaching practice are strengthened by your use of Web-based tools and resources?

8b) What aspects of your online distance teaching practice are weakened or diminished by your use of Web-based tools and resources?

9) What gaps, if any, have you observed between your pedagogical aims and what you are actually able to do or achieve in your online DE courses? What do you think would explain these gaps?

10) What do you think are the issues and challenges in designing and developing online distance education courses at UPOU?

11) How do you think should these issues and challenges be addressed?

Appendix 2. Questionnaire

Please type your answer after each question.

1) Have you experienced being an online distance learner? If yes, please write your impressions of the design of the online course/s you participated in.

2) What kind of training, if any, have you received in designing and developing online DE courses? Please describe this training.

3) What others form/s of continuing professional development in online course design and development, if any, have you experienced? Please describe.

4) What is online distance teaching and learning to you? Or what is your concept/idea of online distance teaching and learning?

5) How would you characterise your online teaching style?

Basic Information

1) Name *(for the researcher's records only)*:

2) Faculty rank:

3) Program and Faculty affiliation:

4) Subject area specialization *(degree/s earned)*:

5) Number of years of teaching at UPOU:

6) Courses taught at UPOU in the last two years:

7) Web tools/applications and resources that you use often in a personal (non-teaching) context *(please list as many as you can think of)*:

Thank you for taking the time to answer this questionnaire.