

Five years on: Institutional lessons learnt in the distance delivery of a primary pre-service distance education programme.

Bill Anderson
Massey University College of Education
&
Mary Simpson
Massey University College of Education

Introduction

The institution from which this case study is drawn is Massey University - Te Kunenga ki Purehuroa – in New Zealand. Massey University (MU) is a predominantly state funded university with a national and international reputation for its distance education provision. The provision of distance education at Massey University was originally seen as a national issue and was discussed and lobbied for during the early-mid 1900's. In 1960, the concept of tertiary level distance education became a national reality overseen, at that time, by the New Zealand Government Department of Education and situated within Massey University. Extra-mural (distance) courses added a second dimension to MU offerings; a dual mode (face-to-face and distance) delivery system evolved and has continued to the present day.

Over 250,000 New Zealanders have studied by distance through Massey University. The University has favoured the use of asynchronous media in its communication with and teaching of students. Print based material has been the main medium of delivery as it has allowed universal coverage. The delivery of kits of material through the postal system has also been incorporated as part of some courses. Print has often been supplemented by audio-tapes. Some use has been made of video. Increasingly courses are using electronic media to support tuition. In 1998, the University commenced use of WebCT as the platform for online delivery of courses.

Currently Massey University has in excess of 18,000 students who study by distance. Most of these students are studying part-time, fitting their study around family and work demands. Approximately 1,000 courses are offered to students by distance delivery. Distance delivery is serviced through a central unit within the university. Services include advice and guidance on course design for staff, student liaison advisers, a student society, publications giving advice on distance study, an examinations unit that oversees examination provision and a material production and distribution centre. The university library provides a service to distance students and has designated distance librarians.

Among a number of notable achievements for Massey University is the development and delivery of the first fully distance teacher education programme within New Zealand. Known as the External Delivery Option (EDO) of MU's Bachelor of Education (Teaching) degree, the programme is a full-time three year programme of study leading to the award of the Bachelor of Education degree and to registration as a primary school teacher. As a distance delivered programme the EDO uses a mix of media and has a substantial online communication component.

The processes of developing and implementing change in educational settings, especially when it involves the introduction of new technologies, have been well described by others (for example, Inglis, Ling, & Joosten, 1999). This paper can be seen to affirm general principles of change noted in these sources. It also builds on that work by showing how a particular setting provides its own context for approaching change and resolving issues that occur. Reviewing the development,

implementation and delivery of this programme provides the opportunity to highlight a range of issues related to the provision of pre-service teacher education at a distance; it serves to illustrate how innovation can occur within the academic and administrative structures of a university; and it identifies several lessons for teaching and institutional practice.

Background to the development of the initiative

Development of this programme was possible for a number of reasons. At a national level, educational reforms that had occurred throughout the late 1980s and early 1990s engendered a climate of both responsiveness and competition. Institutions wishing to grow were, for the first time, competing for students outside traditionally agreed upon catchment areas, with distance programmes being seen as the principal mechanism for ensuring this growth. At an institutional level there were staff with distance education expertise in the in-service teacher education area, and a separate group of staff with expertise in primary pre-service teacher education. Both areas were called upon in the programme development.

The development was also responding to information from and knowledge about the communities that could best be served by a distance initiative. A survey undertaken to determine the size and nature of the pool of potential applicants not being served by traditional delivery methods identified demand for an off-campus teacher education option. A small partially distance pilot option was implemented in one region, and had served to raise expectations in the wider community. Finally the teaching community understood distance education. Teachers had been one of the initial lobby groups that had driven the national implementation of distance education at a tertiary level and large numbers of teachers had undertaken continuing education by distance.

Issues surrounding the development and implementation of the programme

In 1995, when the development of the EDO was proposed, Massey University was not itself new to the provision of distance education; nor was it new to the use of online technologies in distance education. However, the particular programme (the Bachelor of Education (Teaching), a primary pre-service teacher education qualification) had never been considered for distance delivery in its entirety, and a huge majority of teaching staff had either very little or no experience of distance teaching and none had any experience in distance teaching using the digital media. These points provided the two major issues in obtaining internal University approval for, and consensus about the development of a distance programme.

The first issue here arose as a question in the form of “Should we be preparing teachers at a distance?” Two sub-issues formed the core of the debate surrounding this particular question. These sub-issues arose as a response to questions that are raised in the literature concerning teacher education. For example, Ishler, Edens, and Berry (1996) identified the following five principles for primary pre-service teacher education that represented the foundation of arguments about the nature of the Massey programme that needed to be preserved. A programme should be:

- conceived as a fluid continuum of professional development, developed collaboratively by both public school and university professionals.
- interdisciplinary, integrated, problem oriented, socially constructed and student centered.

- suited to preparing elementary school teachers to teach a multitude of different subject matter to diverse students.
- drawing from an integrated studies approach in order to narrow the conceptual gaps between theoretical and practical training as well as between administrators and teachers.
- providing opportunities to develop technological competence, which can serve as a learning bridge for students from diverse cultures and for those who possess differing learning styles and for teachers who must assess students in multiple ways (Ishler et al., 1996, p. 372-374).

The challenge was to (a) ensure that there was adequate interaction in support of learning between students and between students and lecturers, and (b) design the distance delivery in such a way that the distance students could as easily integrate the various strands of the programme as those students on campus. The programme's four strands were seen as needing to inform each other and not be regarded as separate pieces of a puzzle. Eventually it was clear that a choice lay between bringing students on-campus at regular intervals, or incorporating within the distance programme ways to achieve equivalent ends.

The expertise of staff – and the related concerns of staff development and support - was the second issue. There was no question that staff were well equipped to work within the programme as it was delivered on-campus; they had been appointed as staff with particular expertise in the areas in which they taught. As Inglis, Ling and Joosten (1999) point out however, expertise in the subject matter may not be enough. Two other zones of expertise are potentially useful – expertise in instructional design, and expertise in information technologies.

As a dual mode institution, Massey University requires its academic staff to design and write extramural versions of the papers they teach, usually in conjunction with one of the small group of instructional designers employed by the University. In a normal situation, staff new to distance teaching are introduced to the distance culture of the university through working in programmes that are already distance delivered, and the provision of regular staff development opportunities.

In the development of the EDO there was no extant distance programme, and staff had no, or very little distance instructional design or teaching expertise. The inculcation that might normally be expected to occur had not, and yet the staff of the programme would be expected to design courses and teach them. Compounding this lacuna was the decision to involve the use of electronic means for communication within the programme for students and lecturers. This decision would require of staff both an understanding of the software from a user's point of view and an understanding of the skills involved in teaching online.

Funding issues surround all tertiary education programmes. In New Zealand at the time of development of the EDO, the Government, through the Ministry of Education, provided, on average, approximately 75% of the funding for undergraduate tuition. However, the actual level of funding was differentiated according to the type of programme and the type of delivery. In the case of the distance delivery of a teacher education programme, for each distance student enrolled, the institution would receive only two-thirds of the funding it received for each on-campus student.

The lower level of funding was provided because distance programmes were regarded as less interactive and deemed not to include real teaching time. This can be seen in a response to the initial request for full funding for the programme. The Ministry of Education declined saying "A lower level of interaction is when a delay

occurs (of more than a few seconds) such as between an email message arriving and the reply being sent.” (Ministry of Education, personal communication with Principal, Massey University College of Education, 8 October, 1996). The immediate consequence for the EDO was seen as a reduction in staffing levels in comparison with the on-campus programme.

Accreditation of the programme was an initial institutional concern. The College of Education had been an accredited teacher education provider for many years. The issue concerned the provision of teacher education at a distance. The College was confident in its own internal quality assurance mechanisms and in its understanding of the requirements of accreditation of both on-campus and distance programmes of a general nature. Would accrediting institutions see any difference between on-campus and distance provision of this professional qualification? Of particular concern was the provision of field experience, and the supervision of that experience (for a full exploration of this issue see Simpson, 2002).

A final matter for the programme was that of evaluation. The programme being proposed represented the first time that the University would require students to undertake study full-time at a distance. The decision to accept only full-time students was congruent with the on-campus policy, a policy created mainly because of an externally imposed limit on the time students could take to complete the qualification. Amongst staff familiar with the requirements of distance study there was concern about the ability of any group of students to meet the demands of a full time distance professional qualification. There were calls for close and ongoing evaluation of the programme through its initial stages.

These then were the issues that dominated the first year to eighteen months of the development of the EDO. They provided a set of constraints that had to be acknowledged by the Coordinators and the institution and its staff. The resolution of these issues was in most cases neither speedy nor straightforward; it was however seen in the light of a series of challenges that the organisation had to meet through perseverance and some creativity.

Resolution of the development and implementation issues

Questions concerning integration and interaction formed the intellectual foundation of the major concern about the development for distance delivery of the BEd (Tchg) degree, as noted in the previous section. Consequently, the development of the distance option proceeded through coordination at the programme level. A major strategy here was the move away from the normal tradition of independent course development toward a structure in which a (shared) coordination role was created, funded, and given responsibility for, amongst other matters, ensuring liaison between those developing papers and other resources, and for developing ways to create a holistic programme option. This ensured, in particular, the coherent development of course resources, and the design of online communication structures on the basis of programme year group and whole student body rather than individual papers to allow for appropriate interaction. The programmatic approach and design at that level was necessary to ensure the desired integration of material and to stabilize the development of groups for discussion (see Anderson & Simpson, 1997).

Staff development and support was considered as an ongoing issue although there was initially considerable attention paid to this area. Staff development courses in material preparation for distance education courses were available; the University’s instructional design team was on call; and academic staff preparing course material were paired with a member of the College who had experience in material preparation

and distance teaching experience. In addition the development of staff expertise was addressed through the development and use of a set of writing guidelines. Staff expertise in teaching face-to-face can generalise well to the online environment (Wells, 1995), and this expertise was built on through a series of workshops that dealt specifically with both the technical elements of accessing and using the online environment and the pedagogical aspects of teaching online.

The funding issue was not resolved through external intervention. The potential impact of the lower funding level was that the staffing levels within the distance programme would be less than its on-campus equivalent. Instead of allowing this to occur, the Principal of the College of Education eventually made a commitment that the distance programme would be staffed at the level of on-campus courses, while continuing to lobby the Government for an increased rate of funding. This decision was a major signal marking the College's commitment to the EDO and was a motivating factor for staff who would be involved in the programme.

Accreditation did not surface as an issue of major concern. The College worked to ensure a transparent equivalence between the distance and on-campus versions of the programme in both academic and professional course requirements. Reports by "Monitors" who were ensuring compliance with Teacher Registration Standards for accreditation and auditing the College's quality assurance processes revealed no concern with the distance delivery of the BEd(Tchg).

The final issue of programme evaluation was initially addressed through the construction of two types of survey. Each paper was to be evaluated at the end of the semester during which it was offered, and a programme survey that focused on programmatic issues and online aspects was planned for the end of each academic year. The University already had its own evaluation instrument, but this did not have any kind of focus on the contribution to student learning and support from the online environment.

Issues arising throughout the delivery of the programme

As the EDO has matured and its delivery has become institutionalised, a further set of issues has arisen. Some of these reflect earlier concerns or arise from the acceptance of the distance delivery of the programme; and some reflect the invisibility of distance students and the marginalisation of distance education even within a dual mode university.

Staff teaching in the EDO quickly grew to accept that it "worked" as a programme and that their interaction and consequent relationships with students seemed as natural as those they had on-campus. This successful interaction element (see Anderson & Simpson, 1998, for indicators of this success) has to some extent generated a problem for the programme. Because it was felt to be working well, the programme has failed to maintain a sense of innovation and currency with the evolving possibilities that new technologies offer in terms of material development. Two other issues that are related to early concerns have compounded this issue: the increasing fragmentation of the programme and the maintenance of staff development initiatives.

The fragmentation of the programme has an effect on integration of papers and material that was an initial requirement. Fragmentation has occurred as a result of the revision of the organisational structures of the College. Increasingly rigorous accountability requirements have led to increasingly autonomous departments and their increasing isolation from one-another. The potential to see the programme as a

whole has diminished and the formal opportunity to develop cross-departmental resources is considerably lessened.

This diminution of formal opportunities for programmatic development within the College has occurred at a time when an equivalent process has been operating University-wide. Where the University previously had a central body responsible for oversight of the development of distance material and for student support, that layer of organisation has been devolved to the University's individual Colleges. The economies of scale and sharing of expertise that were formerly a part of the University's distance operation are now not as evident at a formal level.

The question of ongoing staff development is a further related concern. The University does offer ongoing staff development in the area of material development and teaching skills for those involved in distance education. However, both the perceived success of the programme and the time demands placed on staff have militated against their ongoing involvement in staff development.

Online interaction between and within staff and student groups was originally conceived in terms of providing the opportunity for cognitive and professional growth, following Mason (1989) and Harasim (1995). Material written as the basis for the courses had a range of interaction tasks built in and student-student and lecturer-student interaction was a requirement. A communication infrastructure was developed to enable this interaction. While an initial lament was often that too much work was required of students, there was anticipation that they would eventually develop shortcuts – ways of working enabling them to minimise effort. That that has happened to the detriment of the purposeful nature of interaction is indicated by the following statement from a student

now when we answer those things most of the time everyone is just giving their opinion [okay yeah] nobody's looking at the previous guy's or girl's opinion [yeah] and saying oh yeah no, I don't agree with that or I agree with that and here's my extra bit [aha] um each person just posts, posts their own things and that's it

and from another:

But any activity where I have to collate people or where we have to work individually on the same thing and collate our answers and post it in is a complete waste of time to me. We may as well just post our individual ones in [okay] because ... often it's just a matter of getting five people's answers which are all the same [yeah] and sometimes not even synthesising them. Sometimes it's just cutting and pasting them [okay] and sending them to the lecturer. That seems to me to be a waste of time

These statements are representative of the way in which students currently report they respond to many tasks requiring interaction. At issue here is the ongoing effectiveness of the interaction, for academic purposes, required of students.

A further issue that is related to the provision of a communication infrastructure arises through consideration of the affective elements of a student support system. From the outset it was acknowledged that while the students should be expected to collaborate on cognitive tasks they might also use the communication infrastructure to maintain social contacts and supplement the support resources of the University. The issue here was the demand for affective support arising from the unique nature of the cohort of students and the, at times, extreme demands on students over the course of a full-time three year distance programme.

In an institution where on-campus students are a constant presence and distance students are marked by their invisibility, distance education is continually under pressure in two ways. First, in ongoing course maintenance and revision, emphasis on resource development is often aimed primarily at on-campus students. Despite their asynchronous but disembodied presence, the invisibility of distance students makes it easier for them to be forgotten in the ongoing interplay between lecturer and students. In the words of one EDO student:

The difference between being an EDO student and between being an internal student is a subtle one but there's an important difference, I believe, in as much as you have as an internal student you have a good expectation of what is required [oh yes] and the amount of time and what you are expected to produce [yes, yes], ... exemplars. But you may be shown an exemplar (inaudible) of course you're obviously big people now and, you know, you have to do all your own thinking [yes]. But in actual fact there are a lot of invisible exemplars that are used. These consist of the lecturer's casual asides during the lecture. 'Of course this will be about two pages long,' that sort of thing [yeah]. All of these things we miss out on [okay]. And without that you are in ... I've talked extensively to people about this, you're really feeling in the dark.

Secondly, because of its systemic nature distance education needs support from those at the highest levels of a providing institution. As key personnel at an institution's highest levels change there is a need to ensure ongoing awareness of the demands of successful distance education programmes. When a programme itself becomes invisible because of its successful implementation, the difficulty of maintaining impetus and support for ongoing development is magnified.

Lessons learnt

A combination of responses to the initial set of issues, and responses considered and being developed in relation to issues that have arisen and are still arising within the programme, gives us a set of ideas that can inform ongoing development of current programmes and future development of additional programmes. These lessons may well be relevant to other institutions and their staff taking account of their particular context and unique circumstances.

Each field of study or discipline will bring its own set of perspectives and principles to the innovation table. The key to successful innovation and change is to consider these as valuable assets in the design and development process. Distance education has its own set of requirements that must be laid alongside those of the discipline being considered. The ultimate goal is to provide a programme of study that considers and caters for the needs of all learners without compromising the demands of the discipline.

To ensure an ongoing sense of development there is a need to maintain an emphasis on faculty development. Developing understanding of new technologies, coming to terms with upgrades of software, and reconsidering ways to use media are several examples of the many ways in which staff development is essential. We have found that although courses may be offered, staff don't necessarily take them. The University has attempted to address this issue through the development of a Certificate in Flexible Learning and Teaching offered by its Training and Development Unit, which is recognised within the staff appraisal and promotion process.

There is an ongoing need to maintain a focus on the theoretical and pedagogical principles that informed the development of a programme. In the case presented here, integration and interaction can be considered two of the guiding principles of the programme. In the case of integration, for example while it may be considered a key element of a teacher education programme, the wider structures of an institution can impact on this imperative. More generally, an institution-wide organisational requirement is likely to have more force than a particular programmatic or pedagogical imperative. The response has been to work informally across boundaries to maintain communication and achieve some level of integration.

Where the problem with integration is institutionally based, the issue of interaction arises from changes in student behaviour. In this case, the ongoing evaluation and research into the delivery of the programme have led to a fuller understanding of the changes that have occurred and point to particular actions that can be taken in response.

Retention of students is an important concern for distance programmes. While there was some institutional provision of affective support – especially important for full time distance students – students also made considerable use of the communication infrastructure as a way to help them survive the difficulty and stress of 3 years of full-time distance study. They consider this ability to communicate with each other easily to be of major value in the provision of affective support (Simpson & Anderson, 1998). Although distance students are often considered or even required to be independent learners, the provision of additional means of communication with each other can lead to a level of personal support that will aid student retention in the programme.

Conclusion

This paper has considered the development, implementation and institutionalisation of an innovation. The lessons learnt are to be found at all stages of that innovation in an ongoing way. We would suggest that it is the combination of cohort based, fulltime study along with institutional, professional and external factors that makes this so. The occurrence of ongoing changes suggests that there is a need for closer maintenance and evaluation of complex programmes than has perhaps been previously recognized.

Author contact details:

Bill Anderson:

email: w.g.anderson@massey.ac.nz

Postal: Massey University College of Education
PB 11 222
Palmerston North
New Zealand

Mary Simpson:

email: m.g.simpson@massey.ac.nz

Postal: Massey University College of Education
PB 11 222
Palmerston North
New Zealand

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