Innovation in teacher education in Thailand: the KMUTT MA programme

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Abstract

MA TESOL programmes have played an increasingly important role in the professional development of English language teaching (ELT) personnel for several decades. However, there has been surprisingly little conceptualization of what effective MA TESOL programme design involves, especially from the perspective of innovation theory. This chapter therefore explores the thinking behind the design and the implementation of the long-standing KMUTT MA in Applied Linguistics for EST in Thailand. In doing so, key features of these aspects of the programme are illuminated in terms of a number of central areas of innovation theory. Conclusions are also drawn regarding the wider implications for MA TESOL programmes in general.

Keywords: MA TESOL, innovation, design
Introduction

In recent years it has become increasingly common for ELT professionals to undertake a programme of study at the MA level. Such programmes typically offer a relatively in-depth introduction to academic research and theorising about the nature of the English language, language learning and teaching. They also usually attempt to equip participants with the skills and understanding needed for carrying out small-scale research projects into aspects of ELT practice of personal interest.

MA programmes therefore increasingly act as a substantial component in the ‘continuing professional development’ (CPD) of English language teachers. As such, they obviously have the potential to act as a significant force in the development of thinking and practice in the field, both in terms of the ideas they introduce participants to and the subsequent contributions that they, in their turn, may make to its further development.

It is therefore somewhat surprising that, to date, so far as is known, there have been no formal studies of the design and workings of MA TESOL programmes. There is, of course, a substantial literature on a variety of aspects of the content and methodology of CPD for English language teachers (see, for example, Garton and Richards, 2008). A good deal of this work is of obvious relevance to aspects of MA TESOL design and delivery. However, as in all matters, the MA TESOL ‘whole’ is obviously rather more than the sum of the parts. There is therefore a need to attempt to conceptualize and analyse the MA TESOL programme as a teacher education structure not just in terms of its potential particulars, but in overall terms as well – to explore the possibility, in other words, of constructing and illustrating an argument for the rational choice of the main components of such a programme, their coherent integration, the optimal natures and workings of each such ‘sub-structure’, and so on.

The main concern of the remainder of this chapter is to provide such an explication. In doing so, an innovation theory perspective has been chosen as the main heuristic. This framework has been adopted because the vehicle used for illustrating the ideas that follow - the King Mongkut’s University of Technology Thonburi (KMUTT) MA in Applied Linguistics for English for Science and Technology (EST) - was a major innovation in the provision of MA-level teacher education in Thailand at the time of its introduction (1984). In what follows, the unfolding of the design and workings of this programme will be explained by describing a number of the key decisions that were made during its initial development phase (1983-87), illuminated in each case by relevant aspects of innovation theory.

The basic plan

From the outset of beginning to plan the overall shape of the KMUTT MA in Applied Linguistics for EST, two main concerns were uppermost in the minds of the design...
The first of these was the need to make sure that the programme was seen to be of a nature that would give it academic credibility. It had to be recognisably the kind of entity that would be associated in the minds of interested parties with an MA-level programme of study, in other words. There therefore needed to be, we reasoned, a suite of courses on topics which were typical of language teaching MA programmes elsewhere in Thailand and in other parts of the world at the time.

The first such sub-group of courses we identified were those which we conceptualised as belonging to the ‘academic’ category. Of course, there is sense in which any MA-level course can be characterised as ‘academic’, but by our use of the term we meant, more specifically, courses to do with areas such as linguistic descriptions, language learning theories and research methods – the academic ‘background’ to language teaching, in other words, or as we preferred to think of the matter, courses which would provide participants with some of the information and techniques needed for communicating about and evaluating EST teaching ideas. Such courses ended up comprising approximately 20 per cent of the total.

The second category of courses which we saw as being part of the core fare of most MA programmes at the time was what we referred to, somewhat loosely, as ‘pedagogic’. By this we meant courses concerned with ‘how to teach’, that is, ones on language teaching methodology. It was (and remains) normal for an MA programme to include an ‘overview’ course of this kind. However, our own thinking about the details of this component was strongly influenced by the second main guiding principle that was involved in the overall design of the programme: the importance of attempting to ensure relevance to the perceived needs of potential participants. In this respect, a series of short in-service training courses which had taken place previously at KMUTT had indicated that teachers of EST of the kind that were likely to make up the audience for the new MA needed, above all, to upgrade the quality of their classroom teaching skills. It was therefore felt that, for the KMUTT MA programme to be sufficiently needs-based, it was important to give greater weight to its ‘pedagogic’ component than the amount normally accorded. This was done by deciding to devote approximately 40 per cent of the total programme contact hours to it, rather than the more normal amount of around 15 per cent.

The third category of courses to be included in the overall MA design framework were ‘professional’ ones - that is, those closely related to, but going beyond, ‘how to teach’ – and their addition involved a similar line of reasoning, as follows. At the time, some MA programmes elsewhere were beginning to include the courses on ‘professional’ matters such as course and materials design. We ourselves felt that it was important for KMUTT MA participants to also be introduced to this kind of topic, since the demand for relatively specialised course design and materials in an area of ELT such as EST was likely to be strong. By the same token we also felt that there was every possibility that at least some among the KMUTT MA audience would

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3 The ‘design team’ included those members of KMUTT staff who were to become MA tutors, and myself, as an ‘academic advisor’.

4 Space does not allow the full rationale for the categorization of each type of course to be provided, and others, of course, would also be possible. Also, in any case, despite the separation here between categories of courses - for the sake of clarity - the intention in practice was always to encourage as much cross-fertilization as possible, especially in terms of attempting to establish two-way interconnections between theoretical and applied aspects of the subject-matter.
have other important future ‘professional’ needs as well, such as becoming involved, in their own turn, in the training of other teachers, or undertaking ELT management responsibilities, such as curriculum development and co-ordination. We therefore decided to offer (elective) courses on these (and other related) professional topics as well. As a result, this programme component came to occupy approximately 20 per cent of the total, meaning also that, taken together with the preceding component, around 60 per cent of the programme as a whole was designed so as to be primarily concerned with the study of ‘applied’ aspects of ELT, a significantly higher proportion that other MAs in existence at the time, and, indeed, most current ones. Also, this form of conceptualisation meant that approximately three times as many MA contact hours were devoted to these aspects as to ‘academic’ ones, once again something of a departure from the norm for other MAs.

Finally, a fourth main category of courses was introduced into the design – ‘orientation’ ones – which were concerned with helping teachers to make the transition to becoming successful academic learners. It was reasoned that many potential MA participants, however well-qualified in other respects, would need to further develop their ability to handle the forms of English and the skills associated with academic study at the MA level. It was therefore felt necessary, in other words, to also offer a ‘learning how to learn’ component, comprising an initial, relatively brief overall MA ‘Orientation Programme’ followed by two full-length language and study skills courses. The thinking behind the inclusion of this programme element was based solely on our second main guiding principle (perceived relevance to needs), and was largely novel, in that we were not aware of anything comparable being offered by other MA programmes at the time (nor is such fare usually included as an integral part of the programme in more recent MAs, for that matter).

What further light can be shed on these design processes from the perspective of innovation theory? Firstly, they can be illuminated in terms of the ‘re-invention’ concept (Rogers, 2003). Briefly, on the basis of his study of the success or otherwise of thousands of innovations of many kinds, Rogers (ibid., pp.180-188) was able to identify a small number of innovation ‘characteristics’ that were found to correlate either negatively or positively with the potential for adoption of an innovation. The last in this list of characteristics was ‘re-invention’, that is, ‘the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation’ (p.180). Rogers points out that there is evidence that ‘a higher degree of re-invention leads to a faster rate of adoption ...[and] a higher degree of sustainability of an innovation’ (p.183). Re-invention can be seen as having occurred in the design of the KMUTT MA in the form of the main adaptations that were made to the perceived standard fare of other MA programmes – for example, by the inclusion of a relatively greater number of ‘applied’ courses, both at the classroom level and beyond, and the provision of a suite of ‘orientation’ courses.

An important related matter, however, is the issue of determining the degree of re-invention of an innovation which is likely to be optimal. Another concept from innovation theory - the ‘Zone of Innovation’ (Stoller, 1994) - is helpful in throwing further light on the design of the KMUTT MA in this respect. In her research, Stoller analysed a variety of innovations in US higher education Intensive English Programs (IEPs) in terms of a number of innovation criteria associated with innovation success or failure, such as Rogers’ ‘characteristics’ (see Waters, 2009, pp. 426-427 for further
information). The results of her analysis showed (inter alia) that what she refers to as the ‘Balanced Divergence Factor’ (consisting of, for example, ‘Explicitness’, ‘Complexity’ and ‘Originality’) was found to positively affect potential for adoption if the overall ‘Zone of Innovation’ (ZoI) represented by its constituent attributes conformed to the ‘Goldilocks Principle’, that is, so long as their size was neither too small nor too large, but ‘just right’. In other words, it is important for the re-invention of an innovation not to diverge either too little or too much from the perceived norm.5

The design of the overall framework for the KMUTT MA can once again be illuminated from this theoretical perspective. On the one hand, as already explained, a guiding principle informing the design was the need for it to have overall credibility in terms of the assumed ‘norms’ concerning what an MA in language teaching should ‘look like’. In other words, it was felt important that its features should not diverge too far from the ‘straight and narrow’ of accepted traditions. On the other hand, the other main guiding principle of its design was to innovate as necessary in order to attempt to meet the perceived needs of potential participants as fully as possible. In striving to accommodate these two potentially conflicting design criteria, it can be argued that the resulting KMUTT MA design was able to identify a ‘ZoI’ of appropriate size, by avoiding being too radical, on the one hand, and by also being offering the right degree of novelty, on the other.

Trainer training

Another major way in which the establishment of the KMUTT MA was innovatory was in terms of the impact on its cadre of trainers. At the start of establishing the programme, none of the MA tutors-designate had had any prior experience of MA-level teaching, nor, for that matter, of any other form of teacher training either. Their primary expertise was in the teaching of EST, of which they all had considerable experience in the KMUTT context. The innovation issue facing the MA design team in terms of staffing was therefore how to build on this basis of knowledge and skill so as to enable teachers of EST to become effective trainers of other teachers of EST.

One way in which this was tackled was for all the tutors-designate to undergo MA training themselves in the UK. This upgrading undoubtedly helped to improve the their understanding of up-to-date ELT theorising and practice. However, since the kind of MA they undertook was concerned with ELT in general, rather than more specialized branches of it, such as EST, this form of training still left something of a bridge to be crossed by the trainers in this respect. But more fundamentally, the UK MA was focused on language teacher rather than language teacher trainer training. This means that although it provided useful input on the content side of the kind of teacher training the trainers themselves were going to undertake on their return to KMUTT, it did not also provide direct input about the methodology of how to conduct such training.

Furthermore, although a limited amount of informal ‘mentoring’ of these staff was arranged, it was logistically impossible for the academic advisor to the programme

5 It needs to be borne in mind, however, that IEPs, of their nature, may have a greater propensity towards innovation than other kinds of ELT programmes.
(myself), due to the workload involved in establishing the first cycle of the MA programme itself, to also provide a thorough-going trainer training programme. As a result, it was decided that the adviser, in the course of designing and teaching the initial run of a number of the MA courses, should also prepare sets of ‘training materials’ – course ‘units of work’ – that could be used in subsequent iterations of the same courses by KMUTT staff. The training materials in question typically consisted of ‘input’ – an overview of the course topic - along with a series of related training activities. Whenever possible, a member of KMUTT staff who was designated to eventually teach the same course on a future occasion also observed the advisor teaching the materials, and follow-up discussions were held afterwards between the adviser and member of staff to discuss the experience. Although not an ideal solution (realistically it would have been much better if an additional post of ‘staff development advisor’ had been created, in order to provide a much more comprehensive and intensive form of trainer training), this strategy appeared to work well, with all the MA courses eventually being successfully taken over and taught by KMUTT staff by making use of the training materials.

As with the design of the overall programme for the KMUTT MA, an innovation theory perspective can shed useful light on the operation of its trainer training aspect as well. Firstly, there is the importance for effective innovation development of distinguishing between what Markee (1997, pp. 172ff) refers to as ‘primary’ innovations, on the one hand, and ‘secondary’ innovations on the other. By a primary innovation is meant, for example, a new teaching approach, a new set of language teaching materials, or, as in the case in hand, a new form of teacher training. A secondary innovation is the provision of additional resources needed to enable the primary innovation to be successfully developed and implemented - for example, a programme of training in the use of new teaching methods and/or materials, or, as in the case in hand once again, a programme of trainer training.

In Markee’s own ‘CATI’ language teaching project, the teaching assistants – who were concurrently undertaking MA studies in the same institution – were involved in the design of teaching materials for the project as part of the work they did on their MA materials development course. However, the timing and other aspects of this course meant that although the teaching assistants ‘could DEVELOP materials, they had few opportunities to USE them’ (p. 165, original emphasis). This situation resulted in low levels of project ‘ownership’ on the part of the teaching assistants (Markee, 1997, p. 164). In order to solve the problem, a considerably expanded and re-sequenced materials design component was introduced into the MA programme. As Markee explains, it was the creation of this ‘secondary’ innovation (a redeveloped training course) which was seen to account for a considerable amount of the success of the ‘primary’ innovation (the CATI language teaching project). In a similar way, the trainer training arrangements (a form of secondary innovation) made for the KMUTT MA (a primary innovation) can be seen as having been crucial to its success.

However, a more important reason for regarding the KMUTT trainer training strategy as vital to the effectiveness of the development of the MA – and a matter which can once again be illuminated by an innovation theory perspective - relates to the particular form which it took. As already pointed out, in an ideal world a more developed KMUTT MA trainer training programme would have been desirable. However, in focusing primarily on the provision of training materials rather than other
forms of support, it was possible to create a relatively ‘concrete’ and ‘bottom up’ kind of trainer training. Evidence for the particular importance of such support for the workings of the ‘Transition Curve’ (Bridges & Mitchell, 2000), a further aspect of innovation theory. In this conceptualization of the innovation process, individuals attempting to come to terms with a significant innovation initially experience what Fullan (2001a, pp. 40–41) calls an ‘implementation dip’, that is, a decline in competence. However, assuming this phase eventually ‘bottoms out’ as a result of acceptance of the need to persevere further in coming to terms with the innovation, the individual begins to gradually learn how to cope more effectively, and increasing competence occurs. (It is because of this overall ‘U-shaped’ pattern of a decline followed by an increase in competence that this process as a whole is termed the transition ‘curve’.)

The second main part of the transition process (the upward swing of the curve) consists of several stages, the first of which – the ‘recipe-book’ phase - represents a ‘half-way house’ between the nadir of the individual’s competence and its subsequent eventual zenith, and is thus a phase of particular importance. At this stage, as it name indicates, individuals typically have a strong desire for practical, down-to-earth, clearly-structured guidance to support their attempts to grow in competence. In due course this foundation is used to create more personalized forms of increased competence, but it is the initial provision of a firm enough basis in ‘concrete realities’ that is the key to this outcome. Looked at from this perspective, the MA course trainer training materials can be seen as fulfilling a function akin to that of the ‘recipe-book’ phase in the transition from teacher to trainer undergone by the MA staff. They can be seen, in other words, as providing the essential practical structuring necessary for successfully negotiating the ‘transition curve’. Additional forms of training support would no doubt have also been very useful in facilitating the process, but the training materials can be seen as having played a crucial role in this respect.

Unit and Syllabus design

Having already discussed some of the KMUTT MA ‘macro-level’ design decisions (see ‘The basic plan’ above), and analyzed them in terms of a number of relevant aspects of innovation theory, some of the equally important ‘micro-level’ decision-making that was also involved will now be considered and similarly appraised. In doing so, the focus will be on the ‘nuts and bolts’ of individual MA course design, illustrated with reference to some of the courses at the heart of the programme, namely those comprising the ‘pedagogy’ component, that is, ‘Teaching Techniques in EST’ 1, 2 and 3 (hereafter referred to as ‘TT1’, ‘TT2’ and ‘TT3’ respectively).

One of the main issues to do with the design of these courses was the question of ‘unit structure’. A ‘unit’ in this sense meant the input and activities associated with a syllabus topic, such as ‘teaching vocabulary’, ‘error treatment’ and so on. An initial ‘model’ for the structure of such units of work gradually emerged, largely by a process of trial and error, as part of the ongoing task of developing the initial run of the courses. This early model consisted of i) around two hours of study involving a certain amount of formal input on the topic in question, along with a number of related ‘tasks’, and ii) a subsequent further two hours or so of ‘microteaching’, in which participants practice-taught an aspect of the ground covered in the first part of
the unit to a class of EST learners, and afterwards discussed the experience among
themselves and with the tutor.

This first version of the unit model seemed to help a lot with the production of further
units of training materials, since it seemed to function well when applied to all the
other course topics as well. This meant that, instead of constantly having to ‘re-invent
the wheel’ in this respect, it was possible instead to spend more time and energy on
developing the input and activities for each unit, as well as the ways in which the
microteaching was handled. From an innovation theory perspective, this phase in the
development of the TT 1-3 courses can be seen as akin to what has been mentioned in
the previous section about the ‘recipe-book’ stage in the ‘transition curve’. In other
words, the identification of a basic structure for the development of course units
provided a concrete ‘formula’ on which to base further experimentation and
innovation.

Such an outcome occurred both with respect to being able to pay more attention to
what was going into units of work, as already mentioned, but eventually also in terms
of refinement of the model itself. With respect to the latter aspect, it came to be
increasingly felt that, for each of the TT 1 – 3 course topics, there was a need to give
the participants a more concrete form of initial guidance and a less steep ‘learning
curve’ when it came to the transition from the ‘input and tasks’ section of the unit to
the ‘microteaching’ component. Accordingly, in the later version of the unit model, a
‘sampling teaching’ element was introduced as a follow-up to the input and activities,
whereby a demonstration was provided by the tutor or a third party of the aspect of
teaching being focused on, accompanied by related follow-up discussion. In addition,
a ‘peer’ microteaching element was introduced after the ‘sampling teaching’, in which
participants first of all had a chance to peer-teach the area of teaching in question and
discuss the results, before subsequently undertaking the ‘live’ microteaching.

From the perspective of innovation theory, in addition to what has already been said
about the importance of developing structures of a kind that can facilitate the ‘recipe-
book’ phase in the innovation process, the sequence of events surrounding the
development and refinement of the TT 1-3 unit model can also be seen as illustrating
what Trowler (2003, p. 136) refers to as an ‘implementation as evolution’ approach to
innovation development. This kind of approach involves viewing the optimal form of
innovation not so much as a ‘fixed entity’ but as one which emerges from a process of
‘mutual adaptation’, whereby the need for a tangible innovation ‘product’ is viewed
as a moveable rather than a fixed ‘target’, thereby allowing for the influence and
interplay of factors that may not have been sufficiently understood or taken into
account at the time of earlier iterations on the innovation. This was very much the
process undergone in the development of the TT 1-3 unit model: an initial version of
it was designed, but this became not just an end in itself, but, rather, a means of also
providing sufficient structure to create the potential for continuing experimentation,
carried out in the light of an ever-increasing awareness of MA participant learning
needs.

Such a process can also be seen as closely-related to another important concept from
innovation theory, the ‘change strategies’ model (Chin & Benne, 1970). Briefly, this
framework sees methods of attempting to bring about change as consisting of three
main kinds, namely ‘power co-ercive’ (the use of force – a one-way and ‘top-down’
strategy), ‘rational-empirical’ (the use of reason and other forms of evidence – also one-way and top-down in orientation) and ‘normative re-educative’ (mutual negotiation – a two-way and ‘bottom-up’ approach). All of these three change strategies have their respective strengths and weaknesses, of course. What is therefore likely to be optimal in any given innovation situation is a composite strategy based on elements of all three, contrived so as to minimize the weaknesses and maximize the strengths of each – in other words, one which contains both ‘top-down’ and ‘bottom-up’ features, and which is both in some respects ‘one-way’ as well as ‘two-way’. The innovation strategy underlying the development of the TT 1 – 3 unit model can be seen as approximating to such an approach, with the initial version of it providing something of a one-way and top-down ‘template’, ‘forcing’ the ‘mold’ out of which the first iteration of the courses was constructed. But at the same time, this foundation was subsequently used as basis for further awareness-raising and negotiation, especially in the light of the picture of participant learning needs that began to emerge - a much more bottom-up and two-way process, and one which led to further development of the model.

To turn next (and last) to the other important part of the KMUTT MA ‘micro-level’ design process to be discussed - the optimal configuration of the syllabus of topics for courses such as TT 1 – 3. Initially, the syllabus for TT1 was organized around a series of ‘classroom management’ topics. These topics were conceptualized as comprising aspects of teaching such as voice, gesture, bodily position and movement, handling materials and other aids, creating rapport, and so on, and were regarded as potentially underpinning any given teaching ‘technique’, such as introducing a reading passage and so on. TT2 consisted of work on the four ‘macro-skills’ (reading, etc.), and TT3 took the form of an extended period of supervised teaching practice.

However, we soon found that it was hard in practice to make the form of syllabus organization used for TT1 work satisfactorily. The topics were hard to connect to each other and also, and above all, to the teaching ‘techniques’ they were supposed to relate to, since most of the work on that aspect was covered separately, in TT2. We therefore decided, by the time of the second iteration of the TT1 and TT2 courses, to re-think their forms of syllabus organization. The fundamental principle that was adopted was to spread the work on the ‘four skills’ and other main teaching techniques throughout both TT1 and TT2, and to intersperse or combine them with work involving the most important and ‘meaty’ of the classroom management topics. In this way we were able to establish a much better level of inter-connectedness between the two levels of topics (classroom management and teaching techniques). For example, the work on ‘giving instructions’, which has originally formed a separate classroom management topic in TT1, could now be included in a unit on the use of pair and group work in the teaching of speaking. Such an arrangement also enabled us to establish an improved level of inter-connectedness with the way we believed out participants tended to conceptualize language teaching. This was felt to be primarily in terms of the ‘four skills’, since most language teaching courses of the kind they were involved in were organized around a single main skill area. Thus, as a result of making this form of organization the main one throughout TT1 and TT2 (and comprising around three-quarters of the topics), we were able to construct a type of
syllabus for both courses which participants would find easier to identify with and therefore hopefully facilitate their learning of the subject-matter.

By the same token, an internal logic was developed for the ordering of the teaching techniques topics, so that units concerned with reading came first, as we felt this was the skill area most participants were most familiar with. Next came the topics concerned with the teaching of speaking, both for the sake of variety and because we felt that such an important area of teaching should not be postponed further. Then came the work on the teaching of listening, which it was felt if left till later would be harder to link to the work already done on reading, a ‘sister’ area of comprehension teaching. Last came the topics concerned with the teaching of writing, partly to provide a contrast with the preceding oral/aural work, and partly to reflect its traditional role as the last of the skills to be taught in a typical teaching sequence, in order to provide a basis for assessment. In this way too, thus, we felt that the overall organization of the revised TT1 and TT2 syllabuses would appeal better to the way the participants own inner ‘maps’ of teaching topics were configured.

From an innovation theory perspective there is of course, first of all, an obvious connection between the redevelopment of the TT course syllabuses in this way and what has been said earlier on about the importance of adopting an ‘implementation as evolution’ approach to innovation. But there is an even stronger connection to be made to a further aspect of innovation theory, by returning once again to Rogers’ list of innovation attributes, but this time to another of them, the ‘compatibility’ characteristic Rogers (op. cit., pp. 15-16). As Rogers explains, ‘the [greater the] degree to which an innovation is perceived as being consistent with the existing values, past experiences and needs of potential adopters’ (p. 16, my interpolation), the greater the likelihood of innovation adoption. The work that was done in the KMUTT MA development process in terms of redesigning both the unit structure and the syllabuses of courses such as the TT suite can obviously be regarded as an attempt to introduce increased levels of compatibility between these elements and participants existing understandings of teaching, with an overall aim of enhancing the potential for learning. As such, it can also be seen as having been a key element in attempting to ensure the success of the MA as an innovation.

Conclusion

The KMUTT MA has now been running successfully for almost 30 years. It is therefore clearly an innovation which has stood the test of time, that is, achieved a high degree of ‘institutionalization’ (Fullan, 2001b, p. 51). It seems reasonable to conclude that at least some of this highly positive outcome has been due to the heed given, during its design, to the lessons of innovation theory.

In particular, careful attention was paid to the need for the MA content to be sufficiently balanced in terms of both ‘face validity’ and perceived relevance to participant needs, thus taking into account what is understood about the importance of getting the size of the ‘ZoI’ right; also, ‘trainer training’ focused not only helping trainers to acquire sufficient knowledge of the training content, but also on the methodology for imparting it, and in a manner which attempted to provide as much as practical, concrete support as possible, in this way reflecting an understanding of the crucial nature of the ‘recipe-book’ stage in the innovation ‘transition curve’; and the
design of course units and syllabuses was conducted in such a way as to take account of the importance of adopting an ‘implementation as evolution’ approach to their development, especially with a view to maximizing the potential for innovation ‘compatibility’.

It is therefore hoped that the ‘worked example’ of the KMUTT MA that has been presented here will be of help in stimulating further thought and discussion about how elements of innovation theory can be advantageously used to inform the design of other MA programmes elsewhere, especially given the increasingly prominent and important role played by this form of teacher education in our profession.

References:


