Teachers Contributing to Educational Change in the 21st Century

มีชัย เอี่ยมจินดา*
(*Meechai Iemjinda*)*

Abstract

In the last two decades especially there has been a considerable body of research published related to teacher professional development and the implementation of change in teachers' practices in the classroom. In addition, there is now a large literature describing 'best practices' in professional development based on the successful implementation of innovative programmes.

This article arose from the researcher's perception of the daunting challenge faced by teachers who wished to meet the requirements of active learning, who were now expected to provide effective instruction to all their pupils. That adoption of the new curriculum would be beneficial and was urgently needed were not questioned, the critical issue was implementation: how could the transition to new methodologies be brought about most effectively?

*****Dr. Meechai Iemjinda is currently as Associated Professor Department of Curriculum & Instruction, Faculty of Education Silpakorn University, Nakhonpathom. His research is focusing on teacher development and curriculum implementation.

Introduction

For a century after the world-wide movement towards public education began, the view that dominated educational thought and policy-making in schools was one emphasising the primacy of subject matter, the importance of passing on an inherited body of knowledge to the young, the memorisation of facts, the authority of the teacher, and formal instructional methods. Although such a view prevailed in public education, it was under criticism from the followers of Rousseau and others from the start, and by the 1960s ascendency in the debate between those who asserted the primacy of subject matter against those who supported the primacy of the child had become much more hotly contested in Europe and America (see for example, Thornton, B. & Usinger, J. 2019, Simons, Linden and Duffy, 2000). As the movement from a 'traditional' to a 'progressive' view advanced internationally, the focus shifted from the subject discipline to the learner, from education narrowly defined in terms of content to education more broadly defined, especially in terms of learning processes, from formal to less formal approaches to schooling, and from educational policies designed to preserve each nation's cultural heritage to those designed to transform it (Crelin, J. 2017, Owens, 2001).

The change in perspective from a traditional passive learning to a progressive educational active learning paradigm fundamentally influenced teachers' concepts of learning and teaching everywhere. Simons, Linden and Duffy (2000) explain that there have been at least three significant ways in which classroom teachers have been influenced by the growth in attention to new ways of learning and new learning outcomes:

- There has much more attention given to the role of active, independent, and self direct learning than before. This change has grown from the increased recognition of the importance of the need for life-long learning and what are now called "learning organizations" as a result of rapidly changing societies and economies.
- There has been a much greater emphasis on the combination of active learning, so-called 'learning to learn', and collaborative learning, than ever before.
- There has been a growth of research on constructivist learning and empirical studies on active learning which provide a clear foundation for instruction, and

which teachers need to understand if they are to change their practice effectively.

A Paradigm Shift to Active Learning

The impact of this change means that teaching in every subject area is now aimed at fostering student learning processes which are characterised by active knowledge construction. The need for students to focus on this process of personal meaning-making and to be self-directed has demanded teaching theories and instructional design models which are specifically aimed at promoting learning-to-learn processes in students. The shift from the traditional view of the teacher as a transmitter of knowledge to a facilitator of learning puts a great demand on teachers. They have to know the content of their subject discipline as before, but the way it is to be organised and delivered to students can no longer be taken for granted or dictated by a narrow syllabus; they must have a clear understanding of the new pedagogy to develop what is effectively their own curriculum. They have to become comfortable with an instructional model in which learners are taught to employ suitable learning and thinking activities to construct and utilize their own knowledge (Hartley, P. & Amanda, W. 2005).

The new learning and teaching approach, which aims at encouraging and developing students' learning skills, is also known as 'process-oriented teaching'. The main principle of process-oriented teaching is to focus on the process of learning and thinking activities and to take into account students' individual learning orientations. Pratt and associates (1998) explain that learners use what they already know to filter and interpret new information rather than reproduce their teachers' understanding. Chute, Thomson and Hancock (1999) describe the five significant characteristics of this teaching-learning approach as learning facilitation, team learning, student as collaborator, instructor as guide and dynamic content (p.206). In the shift towards this new concept of learning, the teacher becomes a facilitator of student knowledge construction and utilisation rather than as someone who transfers pre-determined knowledge directly to the students. As a direct consequence, teachers need to change their teaching approach from teacher-directed instruction to student-centred learning facilitation. In the latter approach, students are typically

engaged in discussion, reflection and problem-solving – active learning rather than passive reception of information (Michael, J 2003, Williamson, 1996). The main tasks of the teachers in this approach are to initiate and support the thinking activities that students employ in their learning. The key element in such teaching-learning is a collaborative effort between teachers and students which allows students to become involved in decision-making both about the content of the curriculum and about how it is taught.

Teachers and Educational Change in the 21st Century

In developing a PDP it is critical to remember that the PDP is dealing with teachers as learners. This in fact means that that the PDP must consider the differences between adults as learners and children as learners. There are significant differences between adult and children learning processes. For example, most frequently, in their learning children rely on others to decide what is important to be learned. In the case of adults, they decide for themselves what is important to be learned. This concept is critical in any educational innovation – in these circumstances, the principle of adult learning indicated above indicates that teachers will decide what it is they will take up in their on going learning. Translated into the arena of educational reform, this means that initiatives for reform must take account of teachers as adult learners.

It further follows that any professional development programmes contributing to educational change, must take account of the principles of adult learning if they are to be effective.

If these principles are not taken into account, then the professional development programme will not make a positive contribution to the implementation of the desired or proposed change.

Many researchers (Anderson et. Al. 2019, Li, Ming & Brett, D. 2019, Knowles, 1978; Smith, 1982; Brookfield, 1986; Burns, 1995; and Tight, 1996) have described the key principles of adult learning. Among these, Brundage and Mackeracher (1980) emphasise that voluntary participation is vital to the effective engagement of adults. Voluntary participation as an element of adult learning assists in ensuring that the learners do not feel threatened and that there is a positive learning atmosphere developed. In the case of teachers this atmosphere or climate of learning would

apply to the school and to the staff of the school in their approach to their professional development. The same researchers demonstrate that the provision of regular feedback enhances adult learners in developing their continued learning.

In the teaching profession, feedback can be obtained in a variety of ways. Teachers are encouraged to be reflective in their practice. Reflective practice in itself is a form of feedback. Teachers working in collegial teams, teachers conducting peer observation, teachers in study groups and other forms of professional interaction all provide feedback to each other on aspects of their learning together. Another principle of adult learning, which is relevant to the success of any professional development programme, is that adults expect that what they are learning is immediately useful to their situation (Brookfield, 1986).

Many research and studies such as Anderson et. Al. 2019, Li, Ming & Brett, D. 2019, Knowles, (1978); Smith, (1982); Brookfield, (1986); Burns, (1995); and Tight, (1996) agree on essential principles of educating adult learners when implementing any professional development programme for adult learners. These involve:

1. An adult's readiness to learn depends on the amount of previous practice and learning. The more knowledge a person has the better able they are to assimilate new information with it.
2. The variety of past experiences a group of adult posses underscores the diversity of starting points for any educational activity.
3. To maximise learning, information must be presented in an organised fashion, proceeding from simple to complex, or organised around a concept. The starting point for organising of knowledge for adults is related to their previous experiences and knowledge.
4. Meaningful material and tasks are more easily learned and longer remembered than non-meaningful material. Any task has potential meaning. The challenge is to find ways to make it significantly related to the experiences and needs of the adult learners.
5. Intrinsic motivation produces more pervasive and permanent learning. What is learned becomes part of the learner. Building an educational activity around an adult's needs ensures more permanent learning.

6. Positive reinforcement of learning is more effective than punishment. Feeling of success and the raising of self-esteem are vital for the entry and continuation of adults in education. Positive feedback should be prompt.

7. Active, rather than passive, participation in learning activity enhances learning. Adults who are personally involved discover relationships, concepts and meaning as their own and are intrinsically rewarded. Adult educators who encourage active participation help to bring about more meaningful and permanent learning.

8. Learning, especially with regard to skill development, is enhanced by repetition spaced systematically over time.

9. Factors such as Fatigue, time pressure, criticism, context of learning, interpersonal relationships with teachers and compulsion all affect learning.

Each of these principles must be taken into account in the professional development programme supporting educational change – without taking these elements into account, the reform initiative will almost certainly fail.

Teachers As Adult learners

As learners, adults have much to contribute from their past experiences. As adult learners, teachers bring much experience to their learning. As opposed to the learning of children, adults have significant ability to serve as a knowledgeable resource and facilitators of the learning of other adults.

The concept of andragogy is an influential concept in the education and training of adults. The term andragogy was introduced by Knowles (1978). The process-based approach in andragogy, is presumed to be more appropriate to adult learners. The concept is based on the fact in their learning adults need to be treated as self-directing individuals. The concept leads to learning which is student-centred, experience-based, problem-oriented and collaborative. The key concepts of the andragogical model is summarised by Burned (1995) as following:

1. Adult learners need to know why they are required to learn something before being motivated to learn it. When this is applied to teacher learning it means teachers must know the value of the professional development in terms of the

contribution it will make to their effectiveness in achieving desired learning outcomes.

2. Adults need to be able to decide for themselves what is important to be

learned. When applied to teachers, this means that teachers need to engage in mutual enquiry rather than transmit knowledge and evaluate their conformity to it.

3. There is a greater ranger of individual differences among adult learners. Consequently, emphasis must be placed on individualised learning strategies

This means that the core methodology for adult education is the analysis of experience. Applied to teachers, this translates into professional development programmes being flexible and no single approach being applied to all teachers

4. Adult learners are problem centred. Therefore professional development

programmes for teachers must be focussed on real school situations.

5. Adult readiness to learn and teachable moments peak at those points

where a learning opportunity is co-ordinated with a recognition of a need to know. For teacher professional development this means that programmes must be take account of a variety of styles, contexts and pace of change (235-236).

Various studies have examined the characteristics of the optimal learning environments for adults. Knowles (1978) and Burns (1995) suggest the following characteristics should define a learning environment for adults:

- mutuality of responsibility in defining goals, planning and conducting activities that are based on the real needs of the participants
- participation in decision-making
- self-direction
- teacher's role as resource and facilitator
- use of learners' experiences as a basis for learning
- an open, democratic environment
- a concern for the worth of the individual and their self-concept

Again this research must be applied to the professional development programme for teachers – in effect it reinforces the view that no system wide programme will succeed or make a positive contribution to education reform.

In their learning, adults need to be granted the right to decide for themselves what it is they wish to learn. Successful adult learning therefore tends to be self-directed (Brookfield, 1986; & Tight, 1996)

Self-directed learning contains these essential elements:

- There is no prescribed content that teachers feel must be transmitted to students
- The content and the way the content is learned is determined by the interested and needs of all participants including the teacher
- What the students get out of it is measured by the extent to which they attain their own learning objectives

All of this research points strongly to the fact that teacher professional development must take account of the essentials of adult learning. Failure to do so leads to poor use of valuable educational resources and failure to implement educational change.

Managing Innovation Change in 21st Century Education

Accepting the wisdom of an international trend towards learner-centred curricula, Thailand's recent National Education Act has mandated a shift from the country's traditional approach to one which encourages active and cooperative learning, a greater recognition of individual student differences, and relating learning to 'real life', a group of features amongst others that have become associated with 'progressive education' (Owens, 2001). While Thai education has long espoused such beliefs as the importance of young people being active and of their cooperating with their teachers and each other, that schooling nurtures individual students, and that education should prepare students for life, especially in moral and practical senses, the form which progressive education takes in the classroom requires a paradigm shift in Thai teachers' thinking. What may have been an evolutionary process in American or British education over an extended period of curriculum

reform, and even natural to most of the teachers involved, is much more of a challenge to Thai teachers' established understanding of their role and that of students when the period allowed for expected change is reduced to months. And closely associated with that challenge in reconceptualizing teaching and learning is the equally demanding one of changing their teaching practice from being a knowledge transmitter to one of student learning facilitator.

Considering the impetus for educational change, Fullan (2003) proposes two main forms: voluntary – when teachers themselves choose to participate in or even initiate change, when they find dissatisfaction in their current situation and see the need to improve their professional practice; and imposed change – which comes from a source external to the classroom, normally from national education policy devised at system level and operating top-down. He argues that successful curriculum implementation is more likely when the change is voluntary (Fullan, 1992:69). In such countries as the USA, the UK and Australia the revolution that has taken place in EFL teaching has been generated both from below and above; this joining of forces has impelled these countries down the path to profound change with relative agreement system-wide. In Thailand, although educators at all levels acknowledge that reform is necessary, it is the National Education Act of 1999 which is driving innovation almost alone. Fullan's analysis of change, therefore generally would imply that it faces the more difficult task.

A range of implementation strategies and pathways from the perspective of innovation as a staged process, is reported in studies by Berman and McLaughlin (1977) and White (1988). These studies all appear to agree on there being three broad phases of the implementation process: initiation, implementation, and continuation. The initiation phase consists of that part of the process which leads up to and includes a decision to adopt or to proceed with change. The implementation phase involves the first experiences of attempting to put an idea or programme into place at a practical level, while the continuation phase refers to whether the change gets built in as an ongoing part of the system.

Fullan's perspective on innovation recognises the significance of these phases also. In his analysis, however, implementation of a new curriculum involves two major interrelated components. The first is the content of the changes; such content

involves the development of new meanings in relation to new underlying concepts, new programmes, and new sets of activities. The second involves the process of implementing and maintaining the changes (1992: 128). As described by Fullan, the successful implementation of curriculum change involves four interacting factors or characteristics: perceived need, clarity, complexity and workability (Fullan, 1991: 68-73) described in the following way:

- Perceived need

The degree to which people perceive the need for an innovation can influence the extent to which the implementation is successful**.** The need for the change, as described by Fullan, comes from either external or internal factors, or both. External factors are the social, political and economic situations which require change in education policy. This clearly applies to the current situation in Thailand. Internal factors relate to the need to change being perceived by the people involved because they are not satisfied with their present situation and are looking to find a better means of providing students with better quality learning (Fullan, 1991; cited in Bottomley, Dalton, Corbel & Brindley. 1994:33). This applies to those who are actively seeking ways to introduce new language teaching methods in Thailand – a group of innovators, mostly with international links – but by no means all in the field nor throughout the country.

- Clarity

Successful curriculum implementation requires the participants to have a clear understanding of the issues involved in the innovation in order to assist in determining its relevance of the innovation, according to Fullan. Such clarity applies to reconceptualising the specifics of teaching methods, including the purpose of the new pedagogical approach, types of learning activity, the role of teacher and learner, and the role of materials and assessment. Where these introduce unfamiliar procedures of the kind the new curriculum in EFL requires, such as organising group learning activities or assessing individual learning progress, the teacher's individual beliefs underpinning her or his pedagogical practice are bound to be challenged as well, and make rethinking the change clearly a difficult but important step to take.

- Complexity

As change is not a predictable process, it requires the people involved to understand that it is complicated, and to be prepared to modify their thinking and practice to suit specific, and changing, circumstances (Fullan, 1992). It is important that a flexible implementation plan is drawn up for the people involved, though this should not lose the virtue of clarity in doing so, if this is possible. Teacher participation in curriculum delivery at all stages is one way of maintaining clarity through a complex process. Studies related to the implementation of change indicate that participation in decision-making at all levels of an organisation helps develop a clearer understanding of the aims of the implementation and this in turn develops a sense of commitment to the innovation (Berman & McLaughlin, 1977; White, 1988). It can be inferred from this that the Thai curriculum reform under discussion here would benefit from close participation in decision-making by educators at all levels in the system, but especially by teachers, considering their pivotal role.

- Workability

Workability is described by Fullan as an attribute of changes 'that fit in well with the teacher's situation that are focused and include how-to-do-it possibilities'(1991: 72 In this sense, workability relates to planning, the mobilisation of people and resources, and the actual practices used when individuals are accommodating to change. Success in these areas determines whether the change becomes an ongoing, integral part of the system, or whether it disappears (Fullan, 1991). From this it could be argued that those implementing change need to consider carefully a range of practical issues that relate to the specific context in which it is placed. As the context of Thai primary EFL teaching is so radically different from those in the USA, the UK and other countries where learner-centred curricula have been introduced, it would seem that workability (specifically here, adaptation to the cultural context) would be a key aspect of a successful approach to innovation in Thai schools.

The question of flexibility raised under Fullan's treatment of complexity above, but which relates also to workability, deserves further comment here. Williamson and Cowley have argued for a model of implementation that involves

matching national curriculum guidelines with localized interpretation and implementation at a pace determined by the schools and their teachers:

Teachers were able to become involved in the innovation as and when they wished, and to adopt changes at their own pace. To encourage teachers to become involved and to be open to new ideas, professional development was provided as and when necessary, and teachers worked collegially on developing new programmes and resources and learning new teaching and learning strategies, with a generally supportive environment being engendered in the school. Thus, for implementation of national curricula to be successful, it is suggested that a flexibility model is preferable to an over-prescriptive model (Williamson and Cowley, 1998: 91).

One further issue raised in Williamson & Cowley's paper but as yet undiscussed here is the importance of a supportive environment for innovation. Fullan (1992) point out that when teachers are making a transition to new pedagogical beliefs, their individual and personal 'network of meaning' has to be given time to take up the new ideas and experiences. While this is happening, teachers often need support and reassurance to reduce feelings of insecurity. Because they find it difficult to carry out the change alone, isolated as they usually are with their students in the classroom, the support of a group of colleagues or an expert advisor helps them to feel more confident (Fullan, 1992: 72). Bottomley, Dalto, Corbel and Brindley (1994) note that ongoing support from administrators and skilled teachers promoting change is important to teachers' continuing commitment to the innovation This is especially applicable to new teachers. They also emphasise that implementation support should include the provision of training sessions to help teachers cope with the innovation, the resources necessary to bring it about, time allocation for attending meetings and workshops, and rewards to maintain motivation (Bottomley, Dalto, Corbel & Brindley, 1994: 84). An advocate or consultant provides vital assistance in successful implementation. It is accepted that individuals find it difficult to carry out the implementation of the innovation alone, so good consultants can help the change proceed smoothly and effectively by providing concrete, practical advice either in the classroom or in professional development workshops. Fullan (1992) emphasises that strong advocacy at the administrative level is essential for change, while Bottomley, Dalton, Corbel & Brindley (1994: 27)

demonstrate that teacher advocacy builds peer networks that impact positively on the capacity for change.

The proposed systemic reform requires teachers to change their role from being one of dominating the classroom to becoming a facilitator in a learner-centred classroom. Top-down innovation has previously proven difficult in many educational contexts, and Thai teachers would appear to be no different in this respect from their colleagues internationally. However, a coaching approach has elsewhere been found to be an effective means of assisting a smooth and successful implementation of new curricula. The article provides a detailed account of the coaching approach and how it can be used in teacher professional development.

For a change, which is major enough to constitute a paradigm shift in pedagogical theory and practice to succeed requires more of its instigators than a mental map of the new territory. It needs an effective process of implementation, with assistance for teachers as they find their way into unfamiliar and at times hazardous terrain. A coaching approach has been claimed to be valuable in supporting teachers through the challenge of innovation. Coaching can be effective for developing implementation skills in teachers by providing clear guidance on what to do and how to do it. It has also been shown to have the flexibility to assist individual teachers in dealing with the specific difficulties they encounter, to assist them to gain the management skills to cope with the complexities of change, and to provide this support directly when it is most needed.

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