

## **Faculty Development and the Structure of Lifelong Learning : an overview**

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### **ABSTRACT :**

This Paper introduces the use of a four-stage model as a scaffold to illustrate the structure of faculty professional development. From Stage 1 reflection on one's own practice to Stage 2 identifying the theory behind some aspect of one's current practice in Stage 2, then consider alternative theories and argue these through to discover a new way that holds potential for improving or expanding one's teaching repertoire of skills in Stage 3, and then into testing out this new way in public in one's own lessons as Stage 4. To assist the individual, the various motivations to learn, and especially to lifelong learning, were presented and discussed with respect to when they are each appropriate and how a helper might act to initiate these intrinsic motivations. Finally some potential impediments to faculty professional development were considered, and some solutions were suggested.

## 1. INTRODUCTION :

### 1.1 Background for faculty development

The aim of this Presentation was to illustrate how teachers could approach their own professional self-development in an autonomous or autonomy-preserving and autonomy-enhancing way. Using powerpoint slides, a model was presented as a framework to scaffold and help explain the structure of the learning process that constitutes faculty professional development. Most teachers enter their profession already fully qualified, and it is sometimes difficult to see why teachers should have to go back to being themselves students again. In Asia especially, it was discussed, that society (the public, the students, other teachers and so on) expects that anyone starting teaching is already a fully mature and qualified person (see BOX 1, for a quotation by Zeichner 1987 : 38).

In Japan, and S.E. Asian, we find that

“the view of the majority of teachers and administrators is that any fully-licensed teacher should be a ‘completed’ teacher, fully capable of meeting all the obligations and demands of the classroom”

Zeichner et al 1987

**BOX 1**

So teachers who overtly display that they are still learning risk public suspicion. Institutional and peer support for continuing development is also not overtly offered. Here, then, in this context of uncertain support, this model of development can help a teacher proceed through the various stages of reflection on own practice, theorizing about one aspect of practice, collaboratively and critically examine in theory (through reading or discussions with peers) the merits and de-merits of alternative ways of practice to discover a new improved way that might be worthwhile exploring in practice, and then to test out this new way in one’s own context classroom. Which aspect in one’s own teaching should one examine first ? Any aspect will suffice. Teachers generally have reported to me (Kawachi, 1995 ; 2000 ; 2003a) that they prefer to move from their present safe and reliable way only in small steps. Then - if the small change does not work out so well as claimed or expected - they can easily and competently revert back to their tried and tested method of teaching. Teachers said this was especially the case in the

current complex technological environment where new ways which have been suggested by others to work well in far away different contexts might not transmit so smoothly into the Asian classroom. Students for example might not be willing to accept increased responsibility for their own learning, and the public or taxpayers might frown on the teacher handing over too much responsibility onto the young and inept students.

To give the basis underlying the model to be presented, two previous models of critically-reflective learning were first presented and discussed.

## 1.2 Previous models of learning

To date, there have been only two significant models that have been proposed to identify the essential steps of learning critical thinking skills ; one by Dewey (1933) and another by Brookfield (1987). These were discussed in turn.

Dewey proposed five phases (see Box 2) for reflective or critical thinking ; -

- 1) suggestions, in which the mind leaps forward to a possible solution ;
- 2) an intellectualization of the difficulty or perplexity that has been felt (directly experienced) into a problem to be solved, a question for which the answer must be sought ;
- 3) the use of one suggestion after another as a leading idea, or hypothesis, to initiate and guide observation and other operations in collection of factual material ;
- 4) the mental elaboration of the idea or supposition (reasoning, in the sense in which reasoning is a part, not the whole, of inference) ; and
- 5) testing the hypothesis by overt or imaginative action.

Dewey 1933

**BOX 2**

Brookfield proposed also five phases (summarized in Box 3) to develop critical thinking ; -

- 1) a triggering event ;
- 2) an appraisal of the situation ;
- 3) an exploration to explain anomalies or discrepancies ;
- 4) developing alternative perspectives ; and
- 5) integration of alternatives in ways of thinking or living.

Brookfield 1987

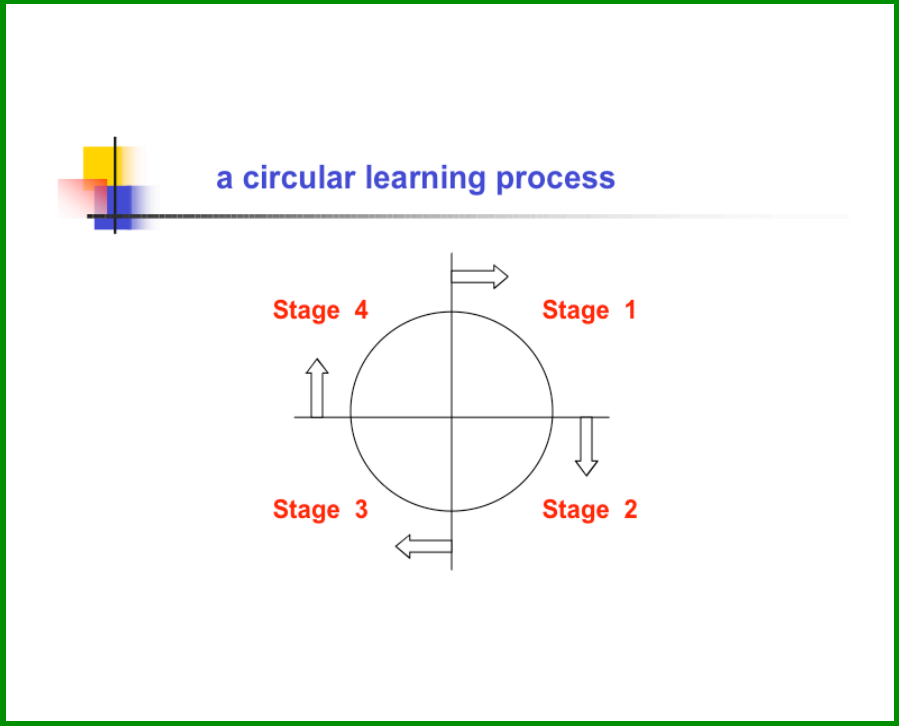
**BOX 3**

However, it was discussed that the steps given in these two models do not correlate with each other. The steps are not clearly distinguishable, and indeed their processes need not be sequenced linearly. So these models are not sufficiently clear to constitute the basis of a scaffold. A new clear and practical model is needed to provide the theoretic basis for acquiring reflective critical thinking in faculty professional development.

### **1.3 The model for faculty professional development**

This model was presented with much emphasis on it being useful for teachers in their own autonomous learning and development. It was emphasized that top-down directives – no matter how well intentioned or beneficial – rarely are taken up by those involved : that this model was not the prescribed way that teachers should follow, but rather a suggested framework that might rationalize the various steps being taken by those who are engaging their own learning and might wish for scaffolding support to their own studies and reflections.

A four-stage model was presented, and illustrated in powerpoint slides.



These Stages are characterized briefly in BOX 4 below.

STAGE	CHARACTERISTICS
<b>Stage 1</b>	: self-introductions, sharing of prior experience and knowledge, brainstorming
<b>Stage 2</b>	: theorizing, developing metaphor, creative and lateral thinking
<b>Stage 3</b>	: guided exploration of alternative theories, hypotheses testing, vertical thinking
<b>Stage 4</b>	: testing out a new way, experiential, widen repertoire, taking up, making public or practical the theory chosen from Stage 3.

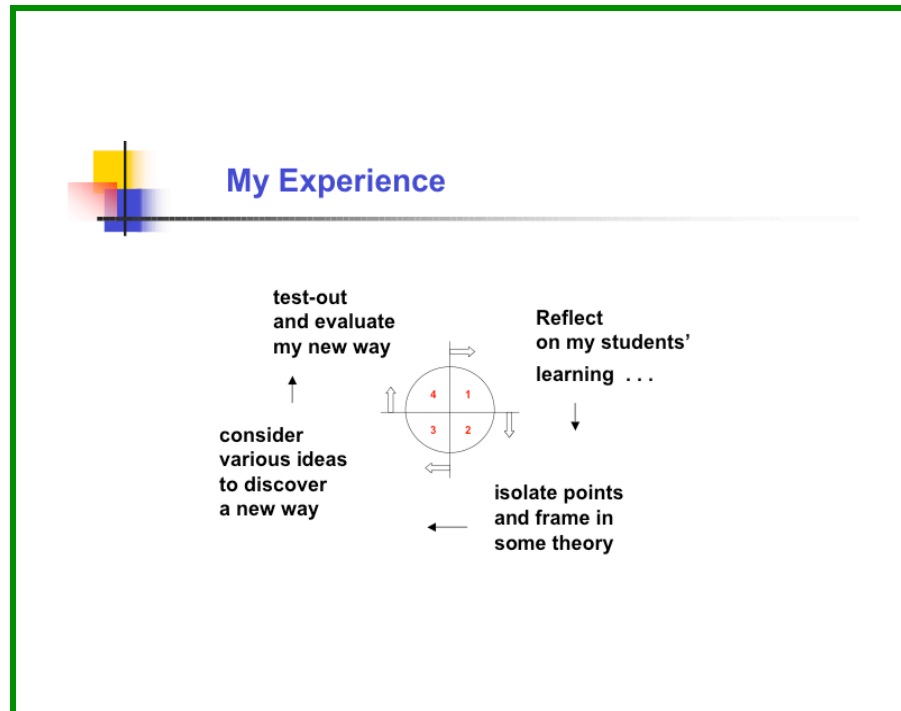
Kawachi 2003c

**BOX 4**

## 2. DEVELOPMENT :

### 2.1 Practice into theory

These four Stages were then discussed using my own experience to give an illustration of how the process worked (and works) in practice. This is shown in the following powerpoint slide.



These four stages exemplify professionalism for teachers as defined by Stenhouse (1975 : 144) (summarized in BOX 5).

Professionalism means

to systematically question one's own teaching,  
to acquire the skills to study one's own teaching,  
to test out theory in practice,  
to allow other teachers to observe one's work, and  
to discuss it with them on an open and honest basis

**BOX 5**

Stenhouse 1975

It was also explained how I used this model to guide my teaching and monitor my own students' learning. Much of my teaching involves students studying in small groups at a distance using technology-mediated communications and computer-based learning technologies such as the internet and email. In these classes, the appropriate choice of technology was crucial to scaffold the different learning interactions instrumental to achieving the tasks specific to each respective Stage. The four stages in sequence move the learner from maximal transactional distance through to minimal transactional distance, where transactional distance is based on Moore's Theory (1993). The following TABLE 1 summarises the optimal media appropriate to each Stage with transactional distance described in terms of educative Dialogue (D) being present (+) or not (-), and Structure (S). The appropriate media is given in terms of the optimal way of learning in each specific Stage as cooperative or collaborative, then the media as synchronous or asynchronous. The synchronous media used were face-to-face, or synchronous computer-mediated conferencing. The asynchronous media used were the world-wide-web, email, and asynchronous computer-mediated conferencing such as bulletin board.

In Moore's (1993) Theory of Transactional Distance, maximal psychological distance between the student and the teacher was described as being at (D- S-), followed by (D- S+) at less distance, then (D+ S+) at even less distance, and finally by (D+ S\_) at minimal transactional distance. These are explained in more detail in Kawachi (2003c).

TABLE 1 : The Appropriate Media for Each Respective Stage

STAGE	APPROPRIATE MEDIA
<b>Stage 1</b> D- S-	: cooperative, synchronous
<b>Stage 2</b> D- S+	: collaborative, asynchronous
<b>Stage 3</b> D+ S+	: collaborative, asynchronous
<b>Stage 4</b> D+ S-	: cooperative, synchronous

Kawachi 2003c

The distinction between cooperative learning in a group and collaborative learning in a group is important, and was explained as follows.

## **2.2 The distinct ways of learning**

A summary of the four distinct ways of learning were presented ; - (a) alone independently, (b) alone individually, (c) in a group cooperatively, and (d) in a group collaboratively (Kawachi, 2002a ; 2003b ; 2003c). Learning alone individually through two-way transactions with a text and learning in a group collaboratively through two-way interactions with other learners both share the same critical hypotheses-testing process.

It was explained that in learning in a group cooperatively (sometimes described as ‘connected’ learning) there is someone in the group (usually the content deliverer – the teacher) who already knows the content not yet learnt by the others and to be learnt by the others. In cooperative learning, there is sharing of this old knowledge, and this process is characteristic of foundational knowledge acquisition typical during the school years in adolescence.

In contrast, and on the other hand, in collaborative learning in a group there is no-one who knows the information yet to be discovered and then learnt by all participants. Learning occurs through critique, and hypotheses testing. A participant being open to the value of constructive criticism publicly articulates an own opinion, perspective or possible solution. The others listen and examine the merits and de-merits using their own knowledge of the topic testing out how well such solution fits into their own cognitive knowledge network, and then in a carefully measured and considered manner offer up reasoned support or counter-opinion. In this reflective process, ones own knowledge network might be found to be weak or inconsistent, and so some de-construction is necessary to fit the new information more deeply within ones pre-conceived knowledge. Such de-construction can be painful, and both affective and cognitive factors will motivate for or against such de-construction. Hence there will be a need (discussed later) for initiating all possible intrinsic motivations to learn. All the participants co-construct as owners the new knowledge together as if in a virtual shared space in a meeting of minds. Collaborative learning in a group is suited to graduate learning through research of non-foundational new knowledge.

Next, the various motivations to learn were introduced, together with when these may be initiated most appropriately to promote the critical learning described in the four-stage cycle Model. In particular aesthetic social intrinsic motivation is introduced for iteratively driving the cycle for lifelong professional development.

## **2.3 Intrinsically motivating the teacher to learn**

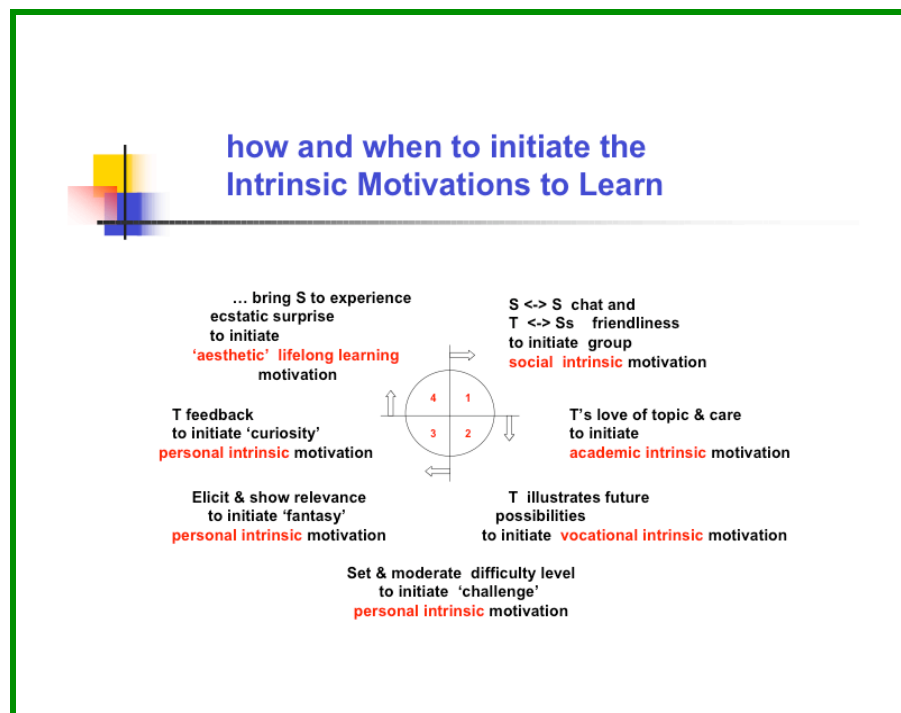
The four motivations to learn were introduced ; vocational, academic, personal, and social. Each of these has extrinsic and intrinsic sub-types, while it is the intrinsic sub-type that leads to deep-quality long-lasting learning. The four intrinsic motivations for teachers to learn were then elaborated on. These are presented in TABLE 2 below. In particular, the social intrinsic motivation drives lifelong learning.

TABLE 2 : The Motivations to Learn

MOTIVATION		COVERAGE
Vocational	Extrinsic Intrinsic	: seeking qualification for a better job : acquiring skills for own future desires
Academic	Extrinsic Intrinsic	: want to pass exams, get good grades : pursuing own intellectual interests
Personal	Extrinsic Intrinsic	: prove one's capability to others : desire for self improvement
Social	Extrinsic Intrinsic	: extracurricular sports, club activities : integrative, affiliative online and lifelong learning

Kawachi 2003a ; 2003c

The following powerpoint slide shows which motivation should be initiated, how, and when (in which sequence during a critical learning cycle). In the case of teachers' learning, then the teacher-trainer, teacher-group leader or other guide can serve to initiate these motivations in the teachers.



As explained above, Stage 4 learning is characterized by experiential learning, when the teacher tests out some new-found theoretical way in his or her own class, to see how well it works. Whether it works well or not, then informs a following iteration with the practical experience now becoming a new Stage 1 in a following cycle of learning. It can be expected that most teachers do not find any well-perceived new idea worthwhile trying out in their own context class, and the end of a short-course, for example, may simply be to return to their old ways of teaching and thinking in class. This is not the most economic use of teacher resources and human development resources. The instructor or guide should strive during a short-course (or any teacher development programme) to initiate aesthetic social intrinsic motivation that drives the teacher to continue and take up lifelong learning.

## **2.4 The aesthetic motivation to learn**

The nature of aesthetic social intrinsic motivation to lifelong learning was illustrated with examples. It was discussed that the teacher or teacher-trainer during the learning cycle should bring the participant to experience positive or negative *jouissance* to initiate this motivation. This *jouissance* was explained as a bursting of a bubble from outside intervention, where the bubble is the Self or cultural sphere of one's life and experiences. So the student is brought to the bounds of their experience and then hopefully some unexpected incident will occur to surprise them ecstatically and through bursting their bubble drive them addictedly to continue lifelong learning. While the adolescent is still learning about his or her own culture and developing a socially-constructed cultured and mature Self, it is impossible to experience this *jouissance* – more simply put, any such possible occurrence would simply be taken as part of the acculturation process. Only after someone thinks they know their world, can this occurrence of ecstasy happen. An analogy was given as illustration, of a expert fisherman who in a struggle to wind-in a fish could suffer a fleeting moment of angst to discover only a tiny common fish or the line breaking (negative *jouissance*), or could be surprised to land an unexpectedly huge rare fish (positive *jouissance*). In either case, the fisherman's world was shattered momentarily, then the *jouissance* becomes owned and part of the fisherman's experience, and he continues to do fishing. The *jouissance* experience drives lifelong learning, no matter the weather and hardships – not in hope to repeat some past experience but believing that life at the boundary might bring unexpected *jouissance* in some new as-yet-unknown form. Aesthetic motivation is addiction.

A few eager questions from the audience were received afterward asking for specific classroom examples of aesthetic motivation. It was concluded that any incidence of *jouissance* was intrinsically individual and not easily manufactured by an outsider. In one's own hobby, such experiences occur that drive the individual to continue throughout life. When a teacher studies her own topic, or own students who she thinks are so well known to herself, then the balloon is stretched and the teacher is inside at the periphery. It is then easy to appreciate that it would take only a small sharp incident such as to discover for example the reason why students were tending to make a similar but rare error was do to a misprint on a website or in their text. (This is not such a good example, but it may help to illustrate how something totally unexpected suddenly explains what had become an intractable struggle of one's mind among all known causes in one's experience.)

### **3. RESULTS & RATIONALE :**

#### **3.1 My own experience compared with that of others**

The results achieved in my own experience of my own classes using this model as a scaffold to guide the teaching and learning processes were shown. Briefly, only closely-guided small classes of graduate-level students could successfully move through the collaborative Stages 2 and 3 to complete the learning cycle. The larger classes and undergraduate classes generally tended to not progress much into Stage 2. Piaget (1977) in extending his theory of learning to include adults has reported that most adults reach about the middle of Stage 2 of framing their own practice in some theory, only, and do not progress to Stage 3 of critically evaluating alternatives. McKinnon (1976) found only half of all USA college students in seven universities reached into Stage 3, while Renner (1976a ; 1976b) found only 81% of final year law school students in America could reach Stage 3. Hence there appears to be some universal difficulty in progressing through the difficult collaborative learning Stages. Various scaffolding approaches were suggested. In particular the above model of four stages was recommended as providing insight and guidance to teachers in their own efforts in personal professional development.

#### **3.2 Rationale for faculty self-development**

Next, there was some discussion on why teachers need to engage continuing professional development. The following eight reasons (given in BOX 6) were collated from Collis (1998), Pajo & Wallace (2001), and Farrell (2002), and presented.

Why should we do 'Faculty Development' ?

- to adhere to principles of good teaching,
- to update strategies and increase flexibility,
- to serve the increasing diversity of students  
and our students' modern needs,
- to improve the quality of our students' learning,
- to compete against rival colleges,
- to broaden open access for more students, and
- to develop now and save \$ money in the future

Collis 1998 ; Pajo & Wallace 2001 ; Farrell 2002

**BOX 6**

In discussing these, reasons were elicited and presented for why we need to broaden our flexibility – given the conservative view that we might feel we are already sufficiently flexible and competent. It was suggested while teachers often have their preferred way of teaching, and maybe students have a preferred way of learning, that everyone must develop their less-preferred ways to adapt to the requirements of the modern world.

One method was then suggested for how to do faculty development. This was to reflect and improve one aspect of our own current course – one aspect at a time step-by-step ; - to make the course more flexible, to more engage our students, to get students more-focused on interactions, and to more-finely tune our teaching through providing more closely guided scaffolding to our students to increase their learning autonomy.

#### **4. DISCUSSION :**

##### **4.1 Considerations and suggested solutions**

Much of what we read and hear about teacher or faculty professional development is rooted in Western concepts of learning (Kawachi, 1995 ; 2000; 2002c ; 2003e) and these are not always the same as those in Asia. In particular, individual preferences are different according to culture. Despite, a Western emphasis on reflection-in-action (Schön, 1983 ; 1987 ; 1988), in Japan and South-East Asia, university teachers prefer to watch and learn from others – following an Apprentice Model – and to join small local focused study groups which are context-relevant and cooperative in way of learning (Kawachi, 1995 ; 2000). Their minor preferences were to study abroad for one year – also following an Apprentice Model – and to read and study alone which is also context-relevant and cooperative. This mismatch between the traditional cultural ways of learning in South-East Asia and the Western new technological style of interactive learning has also been identified by Ziguras (2001).

The problems we encounter in trying to engage professional self-development were illustrated in a closing powerpoint slide. At the same time, solutions were suggested in this slide. Perhaps through our reflecting on the subject matter of this Presentation and on the four-stage model of the structure involved, then teaching faculty may find some ideas and inspiration for their own professional self-development.



## What stops us from promotional 'Faculty Development' ?

'far-transfer' : the teacher needs to see  
a **desirable future** self  
and the advantage to be got

'near-transfer' : the teacher wants to make  
the movements in **small safe steps**

( to retain compatibility with  
own current ways of teaching )

--> **and also wants own efforts to be valued**  
by other Ts, the Ss, the College, and the Public

Rogers (1983)

The above powerpoint slide summarises some important considerations for faculty administrators. 'Far-transfer' for example can be instituted by promoting better teachers to higher rank, and have such promotion carried out in an equitable and transparent way so all teachers can see and through their own efforts actually achieve such promotion. Seeing others put in the effort and so succeed provides an excellent role model for junior faculty and also for new faculty who are trying to learn the formal and informal cultures of their teaching job. 'Near-transfer' is more to do with the affective factors of motivation. Even if a teacher can see a role model excelling, if the gap between oneself and the desirable future is too great, then various affective factors impede the teacher to leap forward. In such cases, especially of innovation of new learning technologies, teachers (I have found, generally) want to self-develop in small safe steps. Administrators could design uptake of new technologies in small safe steps to help their faculty professional development. And lastly on this powerpoint slide, I note that teachers want others to value and honour their efforts and achievements. Lifelong teaching provides of course its own personal rewards to the individual, but an award (for example) for ten-years' service still helps put public recognition to these efforts.

In closing, faculty were exhorted by a quotation from Rudduck & Hopkins (1985 : 83) :-

**"It is not enough that teachers' work should be studied :  
they need to study it themselves."**

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