An exploratory study of the school-based curriculum development journey of a Hong Kong primary school

Lam Tak Shing John

Dept. of Curriculum and Instruction

The Hong Kong Institute of Education

Email address: jlam@ied.edu.hk

Tel. no. 29487540

Fax no. 29487563

Introduction

In this article, the curriculum development of a case school in Hong Kong is used to illustrate the changing path of its school-based curriculum and the developmental phases that emerged. This study is predicated on both teachers' learning as well as organizational learning theories. In this study, a case study method is used to document the change of the school's curriculum development over the last nine years. Two site visits were done, one in 2003 and one in 2007, to investigate the patterns of curriculum development that prevailed and the change that had been observed. It was found that the school had changed from a deliberative mode of curriculum development at its early phase to its present 'rationalization' phase in which the school and teachers tried to accommodate to the demands exerted from external curriculum and assessment reforms. The success of the school's curriculum development was found to be attributed to the school's tactful manipulation of the school ethos, organizational arrangements and professional relationships and running on a deliberation model. At the end of this study, it is found that the school has developed into a learning organization that utilizes the 'double loop' learning mode in its sustainability and renewal endeavour. Also the researcher argues that a life cycle perspective or historical method is best suited to studying the efficacy of a school's curriculum development in its life path. Some further emergent themes that arise out of this case study that have implications for future studies on organizational change (in our case school curriculum change) are put forward alongside relevant organizational change theories for scholastic discussion and stimulation. The findings of this study has implications for schools wishing to understand the 'what', 'why' and 'how' of using a deliberative mode in their curriculum development. Also the school's journey in their school-based curriculum development should inform readers that a school's success in curriculum development should be seen in an evolutionary light and assessed against the

changing needs in the current local socio-economic and socio-political conditions the school is in.

The case school

The case school is a subsidized primary school in the New Territories of Hong Kong, Special Administrative Region. The school has a history of about nine years. It has a Christian religious background. The school is situated in the lower socio-economic status region of the northern part of Hong Kong, with most of its students coming from newly-arrived immigrant families from Mainland China. The school is renowned to the educational community in Hong Kong as having various successful and high-impact curriculum and assessment initiatives. The Headship is a democratic and open-minded figure in his early forties and most of its teaching staff are young energetic teachers and eager learners in professional development.

Research methodology

In this study, an ethnographic case study methodology is used to investigate the curriculum development process of the case school. Ethnographic research is a qualitative methodology which requires the researcher to interpret the real world from the perspective of the informers in the investigation (Dobbert, 1982). The central role of ethnography is a concern with the meaning of actions and events to the people the researcher is trying to understand. In this light, ethnographic research means *learning from* people instead of *studying people* (Spradley, 1979). Usually the objectives of the ethnographic case are (1) to link theory with practice, (2) to use onw knowledge and research to develop understanding of people, and (3) to learn about an individual and the environment he or she is in. In general, in doing ethnographic case studies, inferences are made from three sources: (1) from what people say, (2) from the way people act, and (3) from the artifacts people use (Spradley, 1979). In this manner, this ethnographic study is at the same time a perception study of teachers' retrospective and current view of their school's curriculum development. A total of 8 teachers were interviewed and several classroom observations were made. The study was conducted in two phases, one in 2003 and one in 2007. The purpose of the second visit is to observe how the school's curriculum development patterns has changed over the years and to ask the informant teachers to validate and comment on the initial findings of the first visit.

Teachers' workplace learning and organizational learning

Stenhouse (1975) posits that a school's curriculum development implies teachers' professional development. In other words, for a school to succeed in its curriculum endeavours, teachers have to be given the space and place to do curriculum theorizing and making (Miller, 1990; McCutcheon, 1995). Research shows that teachers' professional learning comes more from the school context instead of from formal in-service experiences (e.g. Darlind-Hammond, 2000, 2006; Goldernberg & Gallimore, 1991; Lieberman, 2000). 'The most powerful forms of teacher development are fostered most directly and powerfully by conditions unlikely to be found outside the school' (Leithwood, Jantzi & Steinbach, 1999, p. 150). Knight (2002) also argue that 'the quality of teachers' learning comes from the quality of their departments and/or schools as learning organizations' (p. 293). One of the most significant school factors that have positive impact on a school curriculum development is the school culture. Hodkinson, Biesta, & James. (2008) view culture as a social phenomenon, or a practice '…constructed through interactions and communications between the members and the operational contexts of an organization.

In this study, we view teacher learning as a socio-cultural phenomenon. It means that teacher learning is constructed through discourse. In this study, we see how a school culture creates opportunities for teachers' everyday informal professional learning and development. To observe and understand how teacher learning is constructed and changed over time, we need to observe teacher conversations as they learn, in the place they learn, and ask them to talk about their learning.

When researchers focus on interactions and relationships that manifest teacher learning, they also look into the school context. In Dyson & Genishi (2005) study, they find that informal professional learning comes from school cultural factors like the community the school is in, buildings and classrooms, schools' philosophies, traditions and the general school population. These cultural factors are at the same time contextual factors.

Nevertheless, an organization can not learn and grow if there is only teachers' learning in the context, as an entity it should also launch its own learning and inquiry machinery in order to survive or thrive. Here dawns the notion of 'organizational learning' which is defined by Leithwood & Aitken (2000) as:

> '…a group of people pursuing common purposes with a collective commitment to
> regularly weighing the value of those purposes, modifying them when that makes

sense, and continuously developing more effective and efficient ways of accomplishing those purposes (p.63)

Organizational learning is seen as a journey rather than a destination for a school to inquire its future pathways. It involves learning by individuals, learning by groups and learning by the organization itself (Mulford, 2005). For an organization to learn, some kind of human interaction and communication mechanisms should be in place to effect the kind of cultural change that would help the school see successful change. MacGilchrist, Mortimore, Stedman, and Beresford (1995) have propounded a framework that highlight *professional relationships* and *organizational arrangements* as the two means a school employs to create opportunities for teachers and the school to learn Jurasaite-Harbison & Rex (2009) also outline five factors that teachers find providing them with opportunities for informal teacher learning: They are (1) school mission, (2) traditions, (3) architectural features, (4) organizational arrangement and (5) professional relationships. The two studies together share some similarities in illuminating that organizational arrangement and professional relationships are two crucial school cultural factors that facilitate teacher learning and is conducive to a school's curriculum development. Together with school ethos or culture, the functions of the three contextual factors that have impact on school curriculum development are outlined as follows:

Organizational arrangements
Organizational arrangements include any arrangement that can facilitate in our case school based curriculum development, e.g. rescheduling of preparation times and venue for teachers to get together for informal learning and lesson planning, encouraging teachers' participation in workshops and conference, and identifying/inserting outside experts, in-school mentors, group leaders into various curriculum committees and teachers' task force.

Professional relationships
School traditions, physical environments, and organizational arrangement each play an important role in creating opportunities for informal learning. They provide cultural context for the professional relationships through which collaborative learning can thrive. In a context of productive professional relationships, teachers can tinker, transfer knowledge, research their practice, and engage with middle managers in facilitating their collaborations (Hargreaves, 1999). It means that the professional relationships within schools should be enthused with a culture of collaboration, valuing individuals, interdependence, openness and trust. Teachers are expected to develop and help their colleagues develop. Teachers are motivated to experiment in their classrooms (tinkering)

and borrow ideas from each other (transfer of knowledge). The school culture also empowers the teachers to make decisions including what, when and how they are going to learn.

School culture

  The term 'Culture' has been defined in a variety of ways, emphasizing different elements. As a broad definition of 'culture', Schein (1992) defines it as 'a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration ….(p.12). Schein identifies that culture can be manifested in the form of artifacts, espoused values and basic assumptions which are the core organizational values that shape the behavior and social relations of participants within a particular context. In other words, culture stands for and explains'…this is the way we do things here'. It provides the bases for cohesion among all members (Firestone & Louis, 1999).

To encapsulate the relationship between the three, it is evident that a school culture encompasses the interaction and communication among its school members. Axley (1996) characterizes this interdependence between culture and communication: 'Communication gives rise to culture, which gives rise to communication, which perpetuates culture' (p.153). In other word, the school culture can have implications for organizational arrangement and professional relationship aspects mentioned above. For example, a school culture that prides itself on its staff potentials and expertise will naturally employ various organizational channels and means to tap on, disseminate and utilize them. Needless to say, a school culture that prides itself on staff expertise is also one that implicates professional relationships like equity, collaboration, mutual learning, trust and valuing individuals And these communicative behaviors and ethos will also naturally permeate in all the school's organizational arrangements and ways of 'getting things done'.

Findings in the 2003 site visit

The researcher first visited the school in 2003 in a span of two to three months and interviewed eight teachers and the Principal. The eight teachers were mostly teachers who joined the school at its very first day of establishment. Some classroom observations were also done at the request of some of the 8 teachers. Two major findings were found. One concerned the emergence of a 3-phase development process in the school's school-based curriculum. The other is the researcher's interpretive attribution of the school's

curriculum success to three factors, namely: (1) the school's ethos and culture, (2) the school's organizational arrangement and (3) the school's professional relationships among its staff. The two themes are in an interplay manner, with one framing the other. This will be explained in more details in the following paragraph.

1. The experimentation phase

Teachers were given autonomy and space to try out new curriculum innovations at class or grade level. Action research, individually or collaboratively done, was the order of the day. It was discovered that teachers were given an ample temporal space of four to five years for their curriculum experimentation (Elliott, 1993) before some kind of formal curriculum evaluation set in. This enhanced teachers' curriculum agency and space and place for experimentation (Miller, 1990)

2. The discursive phase

During this phase, formal and informal communication channels were set up and utilized for teachers to disseminate and share their own curriculum experimentation stories among colleagues and invite others' feedback. In a deliberative sense, all the teachers could participate in the discussion on an equal footing and useful feedback came both from the top and the bottom.

3. Institutionalization phase

When the school management saw that a curriculum experiment had come to a maturation phase and had received adequate whole school deliberation, the school management would see that it go through some kind of final consensual committee meetings. The deliberated curriculum outcome would then become an institutionalized matter to be supported and implemented by all staff concerned.

The figure below shows the three- phase curriculum development model of the school.
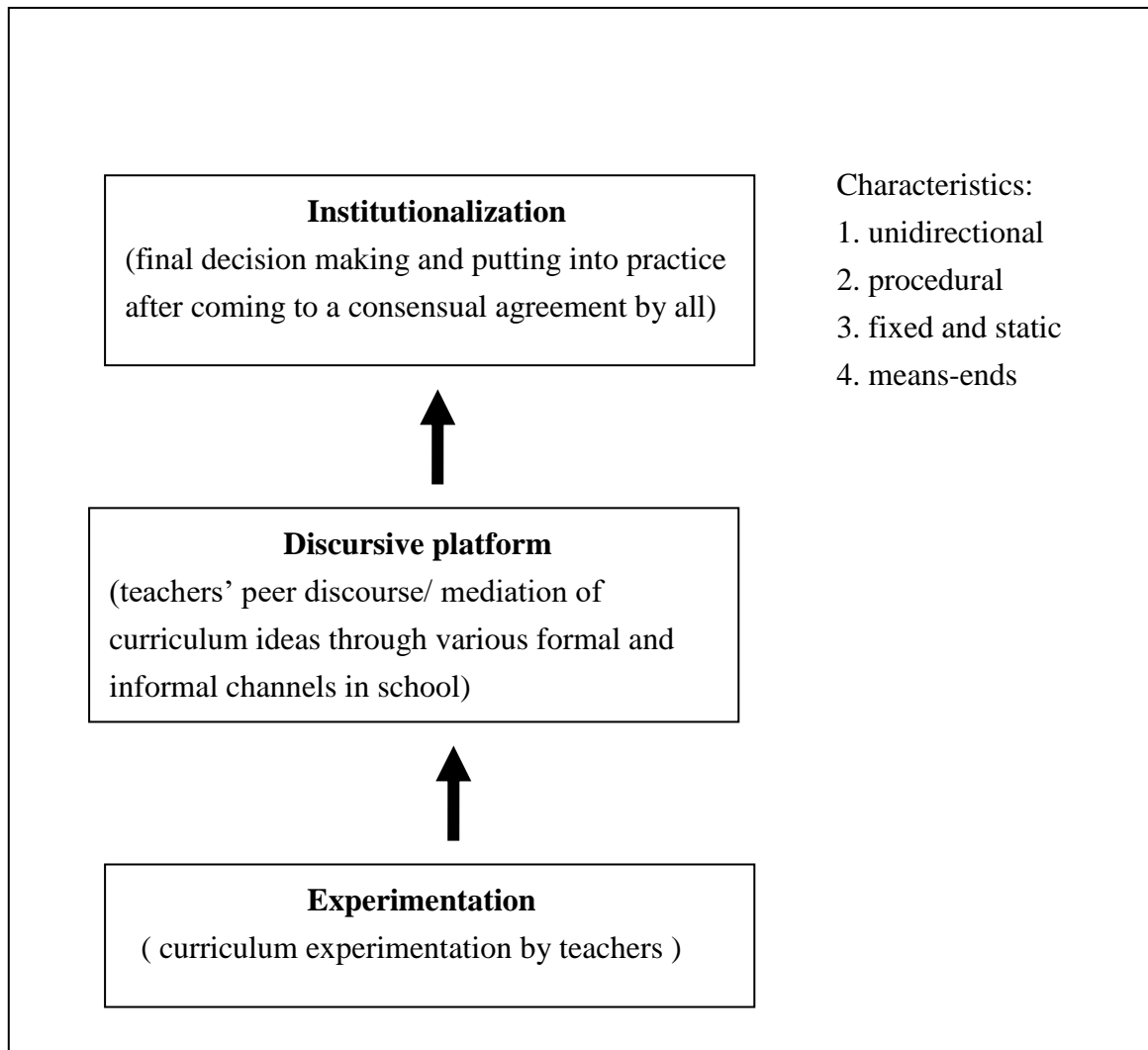
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│                                                                   │
│   ┌──────────────────────────────────┐      Characteristics:      │
│   │      Institutionalization        │      1. unidirectional      │
│   │  (final decision making and putting into │  2. procedural       │
│   │  practice after coming to a consensual   │  3. fixed and static │
│   │  agreement by all)                │      4. means-ends          │
│   └──────────────────────────────────┘                            │
│                     ▲                                              │
│   ┌──────────────────────────────────┐                            │
│   │       Discursive platform        │                            │
│   │  (teachers' peer discourse/ mediation of │                     │
│   │  curriculum ideas through various formal and │                 │
│   │  informal channels in school)    │                            │
│   └──────────────────────────────────┘                            │
│                     ▲                                              │
│   ┌──────────────────────────────────┐                            │
│   │         Experimentation          │                            │
│   │  ( curriculum experimentation by teachers ) │                  │
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Figure 1:   The 3-phase deliberative curriculum development pattern seen in the 1st

visit of the case school

The school ethos or culture

In the interviews, the principal was heard repeating his belief in the immense potential
value in human capital and expertise found among his staff, students and ancillary staff in
his school. He said:

> *Every soul in this school is an asset to me and to the school, including both*
> *students and teachers…they all have something to contribute to the school…*
> *(The Principal, interview excerpt, 2003, P/01/2003)*

This visionary statement resonates with the 'distributed leadership' perspective held by academics like Spillane et al. (2003, 2004) and Harris (2005). It implies that the institution exploits the professional and personal knowledge of each individual teaching staff, regardless of their seniority, ranks and years of teaching experience. The school principal depicts in the following remark the mutual benefiting way when eliciting the wealth of professional knowledge and experience from both novice and experienced staff. It is the case when the school first embarked on its venture of doing integrated curriculum development in the early foundation years.

> *The young teachers were energetic and eager to learn new things from reading and doing courses, they were also keen on experimenting new ideas in their own classroom… whereas the experienced teachers, some of them coming from other schools, with their experience in doing integrated curriculum previously, contributed by giving sound advice on the logistic side of things and alert the novice teachers of the what and how on the practical side…*
> *(The Principal, interview extract, P/02/2003)*

Thus the school's culture plays an analogous role just like the ideational 'platform' phase posited by Walker (1971) (see figure 2) in which the ideas, beliefs and visions that different individuals have brought to bear in the beginning deliberation phase. The ideas are freely and equitably proposed, weighed, exchanged, counter-proposed, modified and finally condensed in the 'deliberation' phase into a common ideational stand that is ready for subsequent institutional implementation (the final 'design' phase).

The school's ethos also saw the school provide equitable and ample opportunities for each willing staff to contribute his or her expertise, thus constituting one of the scenarios in which the school management needed also to pay attention to the way the school 'got things done'—the organizational arrangements. This will be discussed in the following section.
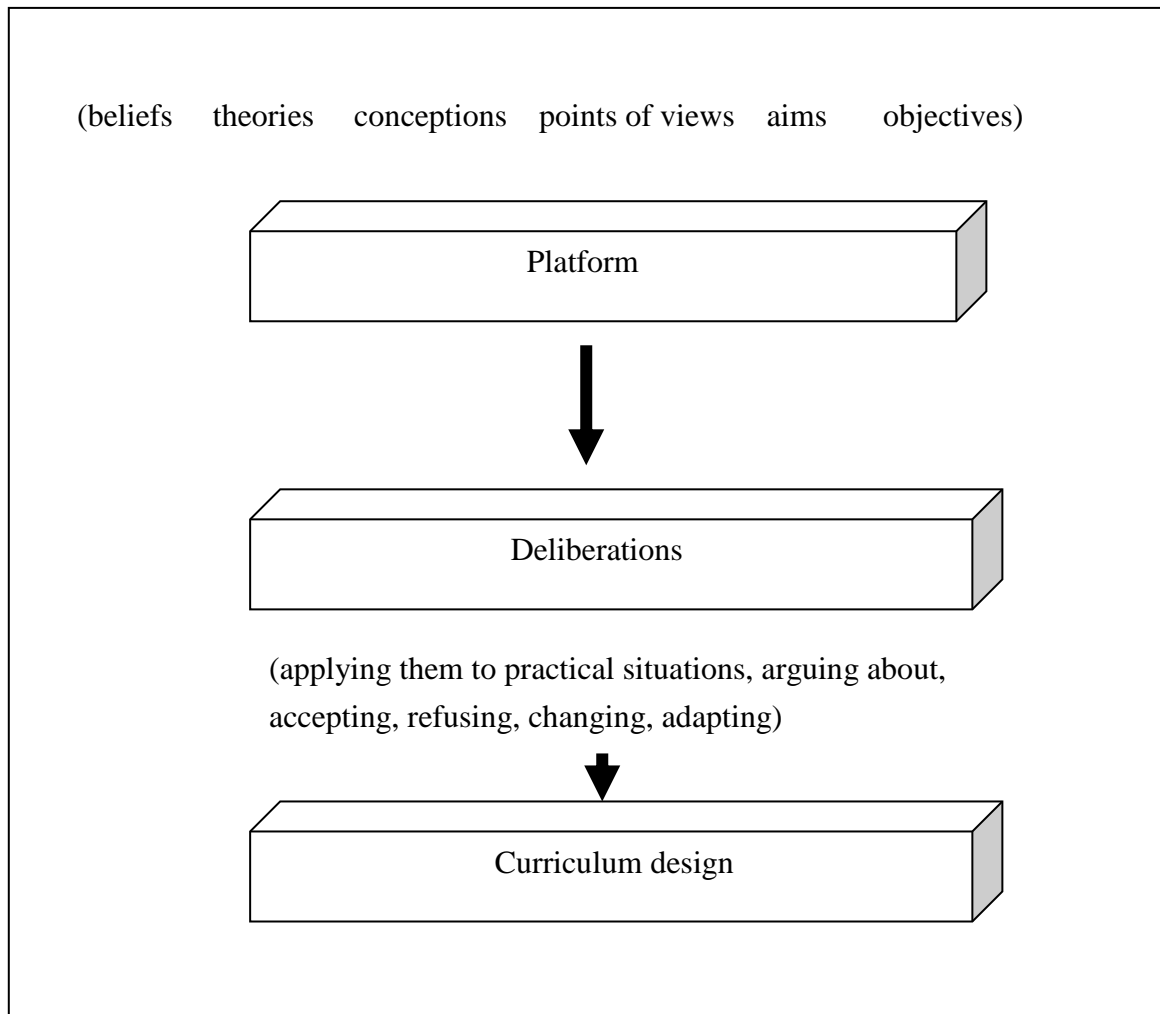
(beliefs   theories   conceptions   points of views   aims   objectives)

Platform

Deliberations

(applying them to practical situations, arguing about, accepting, refusing, changing, adapting)

Curriculum design

Figure 2: Walker's 'Naturalistic' Model of the curriculum process

Source: After D. Walker, 1971.

The organizational arrangements

One thing that distinctly characterizes the school's organizational arrangments that have good impact on the curriculum design, implementation and management is its fluid yet structured, participatory, 'experimentation' and 'ownership' characteristics. In a way, the school's organizational arrangements speak for the school's intention to handle the school curriculum matters in the best agreeable and productive way.for both the school and the teachers. The following are the observations made on the school's organizational arrangements. They are mainly related to the flow and communication of curriculum ideas in the school's organizational structure..

1. It is *fluid* in that informative feedback and evaluation can go up to higher level(s) or down to the grass root level at any time that is deemed fit.

2. The flow and exchange of ideas is *structured* and sustained by various formal and informal information channels that are built into the school's organization and timetable scheduling. For example, the school has a Curriculum Development Committee (which holds meetings every Tuesday) which oversees the whole school curriculum development. Then for each grade level, there is a Grade-level Curriculum Committee. It provides a platform for teachers of the same grade level to try out and disseminate new ideas collaboratively or individually. The Grade-level Curriculum Committee is made up of any interested and willing teachers, irrespective of their years of teaching experience and years of service in the school. Feedback can be got both from colleagues of the same grade level or from colleagues from other grade levels when the idea goes up to the school's Curriculum Development Committee for scrutiny. Curriculum ideas worthy of inquiry or try out can come either from the top or the bottom. There are times when the curriculum leaders in the Curriculum Development Committee intentionally introduce some worthy curriculum ideas downward to the grass root teachers for their deliberation. Also teachers of the same grade level sit together in their respective grade level teachers' room to facilitate a better communication. Each of these teachers' rooms can be found on each of the six storey of the school. There are teachers' informal sharing sessions on every Wednesday afternoon in the week when teachers causally share their curriculum stories with their colleagues. Hence, curriculum ideas in the school are structurally but fluidly channeled up or down or laterally in order to get the optimal collegial support or feedback..

3. It is *participatory* because any teacher who thinks he or she has a good curriculum idea can have the space and place (Miller, 1990) to let other colleagues know and get their feedback. This helps to nurture and exploit teachers' personal professional knowledge and expertise, to the benefit of the whole school and the students.

4. It nurtures an *ownership* ethos among teachers when dealing with their school curriculum problems. Teachers are arranged to teach in only one grade level each year. In this manner, teachers can quickly develop a mastery feeling as well as an ownership disposition over their own curriculum in the quickest possible way. Westbury (1994) also points out that an 'ownership' feeling frees the energy necessary for effective, collaborative curriculum problem solving. The school's Curriculum Development Committee is responsible to oversee the vertical linkage of the school curriculum.

5. It encourages curriculum *experimentation* among the teachers in the form of individual or collaborative action research with peers or university academics. In this way, teachers' professional curriculum knowledge can be best exploited, put to the test and refined for the benefit of the whole school.

The professional relationships

In this study, the school's professional relationships can be seen in terms of a school's arrangement of tasks and persons, including lines of authority, responsibility, and communication. The school's 'professional relationships' system is marked by a participative, collegial and equitable nature. It is very much influenced by the school's (or the principal's) belief that every child and every person in the school has something to contribute to the well being of the whole school.

In the school's foundation phase, the principal handpicked and worked together with a group of young aspiring teachers who together shared very similar educational beliefs like democracy, equity, wide participation and collegiality. This easily precipitates a deliberative ethos of discourse and decision making. One teacher remarks on the school's democratic and deliberative kind of curriculum decision as follows:

> *In our beginning year, the Principal and some pioneering teachers wanted to experiment with a new integrated curriculum to replace the subject-based curriculum. They had a lot of meetings and later on decided to let colleagues experiment freely three possible ways of implementing the integrated curriculum. One is to try it out in one individual teacher's class, the second one is to compare and contrast the results when two classes implement an integrated curriculum, and the third one is to let the whole grade level to try it out. After one year of experimentation, the school decided to let teachers decide which mode of implementation should be forged ahead in the coming years. They had some informal and formal meetings and later on, after some voting by all teachers, the whole-grade mode of implementation was agreed upon by the majority of the teachers to become the prima facie model for the school's integrated curriculum development. In this way, it became a formal curriculum policy for the school. (Teacher A, interview excerpt, A/02/ 2003)*

In such a deliberative ethos, every teacher is only accountable to his or her personal professional experience and knowledge. The line of authority does not come from the top above but emerges from individual's personal professional knowledge and expertise.

Communication channels, informal or formal, that facilitate upward, downward and lateral dissemination of ideas and reciprocal feedback are easily found wherever and whenever they are needed.

Findings in the 2007 site visit

Wanting to find out how the informant teachers and the Principal responded to the researcher's interpretive framework of the school's curriculum development (the 3-phase model as stipulated above), and also to see if any other significant change in the curriculum commonplaces of the school had taken place, the researcher returned to do the second site visit in July 2007 and interviewed the same eight teachers.

The most frequently heard response from the informant teachers when the researcher showed them the model is that the deliberative curriculum development process is not procedural, unidirectional and static. Instead it is dynamic, eclectic and sometimes the thrust of change comes from the top and sometimes from the bottom. It is clearly different from the curriculum development mode at the beginning phase of the school when most of the changes originated from the frontline workers. The reason given by the teachers and the principal is that now the school is in its ninth year of development, more of the school's curriculum focus is on evaluating the efficacy of existing curricula and sustaining the 'output' of these curricula. What is found to be doing well should be sustained and supported, and what is not should be terminated and redressed. In this manner, the school seems to have undergone from a 'total deliberation' mode at the beginning phase to its present 'maturation' or 'consolidation' mode. A maturation mode is here interpreted as characterized by the school setting up curriculum committee (comprising of both novice, experienced and curriculum co-ordinators) for making the decision and dishing out the responsibilities for staff who are in charge of curriculum matters and staff who work up front. It is in dire contrast to the fully experimental, autonomous and experiential nature of deliberation in the beginning years when frontiers teachers were given total autonomy for curriculum development.. Still innovations from the bottom up are still welcomed. It is in a way very similar to the school's early days, but the scale and frequency of those formal and informal channels is now slightly scaled down due to the teaching staff's growing maturity in professional and curriculum development. This slight change in the deliberation model also signifies the school's change in its development phase—from an all-out experimentation to a more structured or systematic maturation model.

After years of curriculum experimentation, the Principal and some teachers began to pay more attention to the teachers' teaching efficacy and the students' learning outcomes instead of still launching extensive curriculum innovations. In other words, this is the time of consolidation and monitoring in lieu of the previous age of autonomy. Adopting a system approach of monitoring the school's various curricula, teachers examined the input, the process and the output of their school curricula closely in order to seek further improvement.
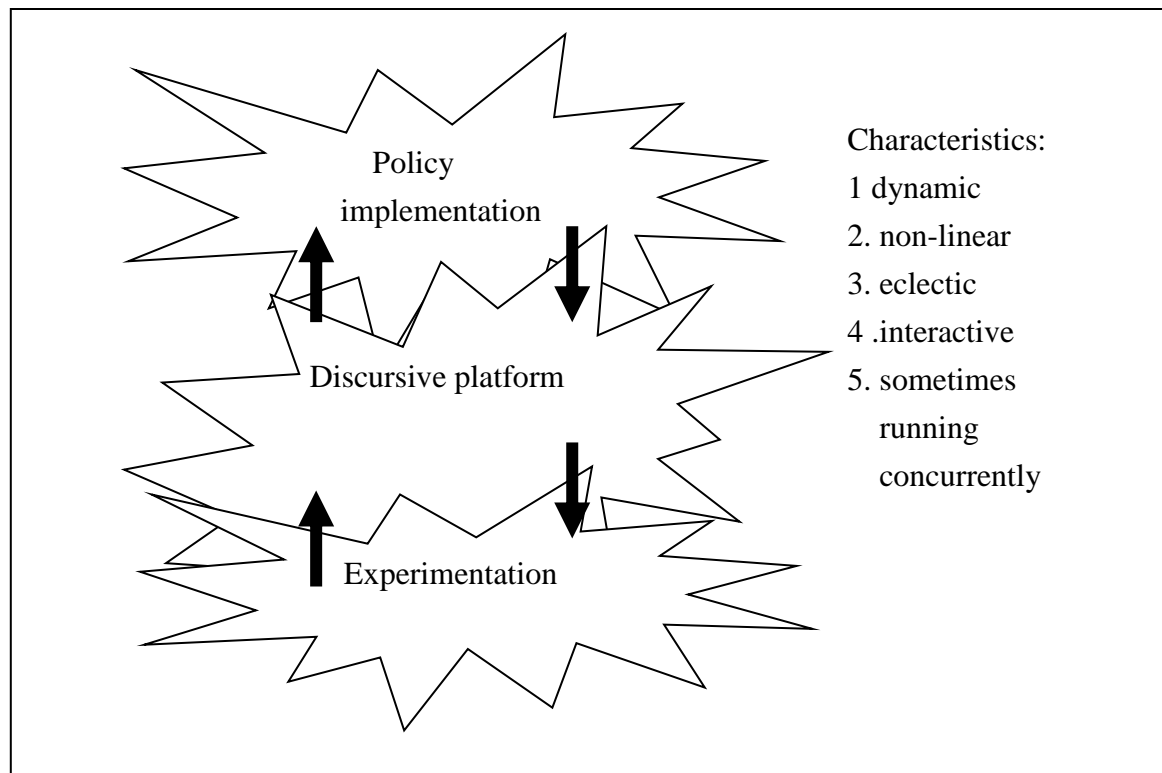
Figure 3: The school's deliberative curriculum development pattern seen in the 2ⁿᵈ

visit

As can be seen from fig. 3, deliberation can be a two-way tussle in which individuals' original platforms either alter others' or be altered in the process. The informant teachers unanimously referred to the relationship between the 3 phases as *eclectic* and *interactive,* albeit unidirectional and static.

From deliberation to rationalization

In this second visit, it is evident from the data collected that the kind of deliberation mode seen in the first site visit is different from the second one. One reason to explain this is that the school has evolved over the years. In its early foundation phase, a kind of 'total

deliberation' was the order of the day. Each person was asked to contribute his or her expertise to help carve out the school curriculum. All were expected to experiment with whatever innovative pedagogical and curricular practices that were seen to be conducive to their students' learning and personal needs. A free-flow exchange of and an equitable deliberation of peer ideas was considered to be the best method to generate collegiality, collaboration, identity, and most important of all, synergy to push the school forward. Nevertheless, as the school at present entered a more mature phase at its ninth year of establishment, there are certain curriculum issues that the school sees as needing no further ground for deliberation and on the other hand there are issues that the school sees as emerging problems to be tackled. In other words, the experimentation phase has evolved into the present consolidation phase. But at the same time this consolidation phase is also facing a lot of challenges from external factors, resulting in a substantial impact on the school's curriculum. The major ones are the Basic Competency Assessment (BCA) and the related Territory system wide Assessment (TSA)[1]. The outcome perceived is that the autonomous deliberation and experimentation phase has given way to a kind of compromise to the external curriculum and assessment reform demands, so much so that the teachers seem to rationalize these external pressures into something that is 'good' for the school curriculum. These will be elaborated later on but first of all a brief introduction of the Hong Kong's recent curriculum context will provide the background knowledge to understand the change the case school has to undergo.

Local school curriculum development context

Most of the curriculum reforms in the world actually have multiple purposes and are the product of much negotiation and compromises among the various stakeholders, Hong Kong is no exception to the rule. Morris and Adamson (2010) argue that after the 1997

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[1] In line with the new curriculum reform that is entitled 'Learning to learn' in 2002, the Education Commission of the former British colony (the highest order educational decision making and governance body) proposed the Basic Competency Assessment (BCA), with two components termed 'Student assessment' and 'territory-wide system assessment' (TSA)'. The regional test covers the three subjects of English, Chinese language and English language. The former component is an on-line system that provides feedback to students and teachers for improving learning/teaching efficacy. The latter component of TSA is a pen and paper assessment that the Hong Kong central education authority wants to collect information on school standards in key learning areas for the purpose of school improvement and providing needed support. Though the assessment scheme never intends to compare one school against another and that it is not a high-stake test, as claimed by the local education authority, there are a lot of newspaper coverage of 'washback' effects of the test in which some local schools and teachers are forced to teach to the test, lest their students fail badly in the test and hamper the school image.

handover of the former British colony to China, the impetus for reform in Hong Kong came from three different sources; the political and social agenda of the newly established government of the Hong Kong SAR, the serious economic downturn that many parts of Asia suffered, and the multifaceted forces of globalization (p.181). Along with globalization came also the global attention to acquiring competencies in learning and at work and also the standardization of these basic competencies at certain key stages of a student's learning cycle (Primary 3, Primary 6 and Secondary 3). Also the new Learning to learn curriculum framework advocates helping students learn to learn, thus embracing notions like learning generic skills, independent learning. Life-wide learning and lifelong learning.

> *Our overarching principles is to help students Learn to learn, which involves developing their independent learning capabilities leading to whole-person development and lifelong learning. It is hoped that these will result in an overall improvement in the quality of education. Broadly speaking, the means for bringing this about will include:*
>
> - *The development of generic skills (e.g. critical thinking, creativity, communication skills etc.) in the context of Key Learning Areas and other relevant contexts*
> - *The use of different methods of learning and teaching to achieve learning targets*
> - *The development of students' own interests and potential*
> - *The widening of students' learning space for whole-person development....*
> *(Curriculum Development Council, 2001, p.10)*

Curriculum standards and washback effects of the TSA

Along with globalization came the international trend of having national assessment and international assessments (e.g; PISA and TIMMS) in many a country in order that the government can monitor the quality of their education systems (Kennedy & Lee, 2008; Kellaghan & Greany, 2001))

In the case of Hong Kong, it is this trend of accountability or quality assurance that led to the setting up of the Basic Competency Assessment (BCA) and the resultant Territory wide System Assessment (TSA) by the Education Bureau, the administrative body of the local central education authority. The purpose of this setting up is to indicate curriculum targets and objectives students are expected to master at the three Key Stages of P3, P6,

and S3. In contrary to BCA, the purpose of the TSA is to provide government and school management teams information on school standards in the subjects of Chinese, English and Mathematics. The TSA is focused on identifying which aspects of school curriculum and instruction need improvement. Schools which are found not to be doing well will be given school-based support so as to raise student performance.(Brown & Ngan, 2010). System assessment have been shown to have significant and usually deleterious influences on curriculum and teaching (Darling-Hammond, 2003; Darling-Hammond & Wise, 1985; Firestone, Mayrowetz, & Fairman, 1998; Hamilton, 2003; Klein, Hamilton, McCaffrey, & Stetcher, 2000; & Linn, 2000). In Hong Kong, although the TSA is meant to be a low risk mechanism or tool for informing teaching and learning and feedback, some of the schools and teachers think otherwise. They are afraid that once the TSA reveal the weaknesses of their students' learning, they are vulnerable to parents' and the central education authority's accountability attack. Yu, Kennedy, Fok, and Chan (2006) research has recently revealed that the TSA has posed some threats to many local primary schools. As a result, many schools and teachers have to change their curriculum focus and 'teach to the test' in order to survive in the recent wake of school closure which was brought about by insufficient student intake due to the population shrinkage[1]. The deleterious impact of TSA on the school curriculum is best depicted by the following teacher's remark:

> *The TSA has thwarted our usually successful school curriculum practice. ....in the past we had a good space in our school curriculum design, our school's integrated curriculum is one such successful attempt. Now, there is very little space for us left in curriculum after TSA is introduced.*
> *(Teacher D, interview excerpts, B/03/ 2007)*

This teacher who is the Curriuclum Leader in the school went on to say:

> '*The TSA affects us in two ways…in one way, it narrows down our curriculum…We have to teach to the test though the central education authority would always pleads us not to do so…We have to face the reality…if our school's*

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[1] The TSA has been much criticized for having adverse effect on students' learning and extra-curricular activities. A study by the Hong Kong Primary Education Research Association in July 2008 revealed that local teachers and parents feel that too much assessment (TSA being one of them) is forcing schools to drill Primary 6 students, placing them under study pressure and limiting their opportunities for extra-curricular activities. (from an article entitled 'HK schools corrupted by too many tests' published in South China Morning Post, 2008-07-16)

> *TSA scores are not good enough, local parents would stop sending their children to our school*
> *(Teacher D, interview excerpts, B/03/ 2007)*

This same teacher also sees the other side of the coin of TSA. The test let him and the school know where they stand in terms of some essential competencies and outcomes of their students' learning when compared with other schools and the local curriculum standards and focus. He said in a rationalizing manner:

> *On the other hand, the TSA helps us to focus more on those curriculum content and competencies that the whole local education sector sees as 'core and critical' areas to be covered. In a way, it helps us to take a second look at our school curriculum and see if it needs any re-shaping.'*
> *(Teacher D, interview excerpts, B/03/ 2007)*

In order to cope with the basic competencies testing of TSA which emphasize acquiring and performing generic skills, the school has recently launched some curriculum measure along that line. For example, they held different life-wide learning projects for their students recently. The P.4 students went to Macau for a cultural study, the P.5 students went to Singapore to see and experience the multicultural dimensions of the place and people and the P.6 students went to Guangzhou (in Southern China) Whampoa Military Training College summer camp for students to train up their perseverance and resilience ability. In a way, these life-wide learning projects aim at aligning the generic skills to be tested in TSA with the school's subject curriculum needs. For example, in English, the reading, speaking, writing and listening skills involved in TSA tests were given systematic mapping and appropriate assessment before, during and after these overseas trips. The input-process-output approach mentioned above will closely monitor the acquisition and assessment of the TSA-related generic skills and can inform future improvement practice.

Afterthoughts—Two themes emerged

Two main themes emerged out of this case study. One concerns the life cycle of the school as well as its impact on the school-based curriculum development. The other has to do with teachers' rationalization (or pseudo-rationalization) of curriculum reform.

Rationalization or pseudo-rationalization

From the interview excerpts, we can see that on the one hand, teachers at the case school voiced out their concerns with the 'washback' effect of the TSA on their teaching; on the other hand, teachers like teacher D gave it a positive note by saying that TSA helps him to rethink the potential alternatives of the prevailing school curriculum and the curriculum gap the school has to fill in to meet the external curriculum demands. Is this a manifested scenario of teachers succumbing to the external curriculum demands or teachers' autonomous reflection or rationalization at its best? This kind of dilemma exists in the minds of many a teacher who thinks and reflects like Teacher D. The local media and research arena are replete with stories and research evidence of the teachers' woes over the deleterious effect of TSA on curriculum and teaching (Yu et al. 2006, Brown and Ngan 2010) Is this a genuine and professional way of teachers' rationalization of the impact of external factors like system assessment on schools' curriculum development or is it a contrived or pseudo kind of rationalization? The answer is not an easy one to beget but surely another micro-analysis that is more geared towards unveiling the tensions, dilemmas, constraints and inner thoughts of teachers toward curriculum reform is warranted.

Contemporary patterns of educational change present educators with changes that are multiple, complex and sometimes contradictory. All these can make teachers and schools feel that the system they are working aren't just complex but chaotic. There are many curriculum theorists like William Pinar (2004) who thinks that the present educational scene in many countries of the world is dominated by political agenda that are in the service of 'accountability', 'quality assurance' and 'schooling as business'.

The result of this is the emergence of a monolithic curriculum which is very much tied to prescribed standards and learning objectives, leaving little room for teachers and schools to transform the mandated curriculum into one that can be more attuned to the school conditions, students, facilities, programmes, classes, politics and so on. The above list of consideration factors constitutes what Kirk and MacDonald (2001) say is the sphere of teachers' expertise and where teachers' authoritative voice is derived. In situations when teachers are torn between following mandated curriculum/ external demands and adhering to their professional authority, Dalin (2005) has this as an advice:

> *'Take external pressures and demands seriously, but always analyze these forces (as with internal forces) in relation to your mission and objectives. Be sure it means development and not a watered down curriculum. (p.35)*

What Dalin said here inevitably reminds one the notion of 'mutual adaptation' mode of curriculum implementation. The term 'mutual adaptation' was first used by Dalin and McLaughlin (1975) to describe curriculum implementation in which adjustments are to be made to both the curriculum innovation external to schools and to individual school's setting. Berman & MaLaughlin (1975) also suggest that in order that any curriculum innovation will have the greatest benefits for students, all planned curricula in reality will need to become modified during the process of implementation. It is essential that such modifications are made to suit the specific and changing situations faced by the teachers as they are the ones to enact the curriculum..

For teachers and schools to rationalize external curriculum reform and to follow it closely in a kind of fidelity approach (Fullan and Pomfret, 1977) necessitate a great amount of teachers' thinking and organizational thinking. On the other hand, it also takes a lot of teachers' and the school's effort in thinking through and deliberating whether to adapt or modify the external curriculum to suit the school setting and the students.

All these also implicate that discourse must be had between teachers, students, parents, school administration and the community. It also means the school should launch an organizational inquiry or learning to see if it should redefine its curriculum task and missions in the face of a changing environment. Mitchell (1995) researched into an effective organizational learning case in an urban Canadian elementary school and he identified distinct phases of organizational learning. The phases are built upon three basic assumptions, Mitchell contends. First, each individual is responsible for the welfare of the group and the success of the school. Secondly, diversity among individuals should be recognized, honoured and valued. Thirdly, a sense of psychological safety should be had in times of group deliberations.

All these hark back to the insights gained in the two site visits of the case school. The school believes in the human capital and personal professional knowledge found among its staff. Organizational arrangements are made such that informal and formal communication channels are established to share and disseminate bright curriculum ideas and to minimize diversity. The school also nurtures professional relationships that features equity, collegiality, collaboration, acceptance, security and consensus.

Nevertheless, a school development is never static and changes are bound to occur. Changes from outside and within the school can result in school renewal and in the case of curriculum development, curriculum renewal. As a school gets older, it will develop a life cycle of its own. The life cycle theory of school's development also has implications for its curriculum development. This will be dealt with in the following theme.

The School's curriculum development life-cycle

Quinn and Cameron (1983) review nine models of organizational life cycles from the literature and they construct a summary model of life cycles stages that incorporate the features of these nine models. Each model is seen to contain 'an entrepreneurial stage (early innovation, niche formation, creativity), a collectivity stage (high cohesion, commitment), a formalization and control stage (stability and institutionalization) , and a structure elaboration and adaptation stage (domain expansion and decentralization)' (Quinn & Cameron, 1983, p.40). The first three stages correspond to the case school's 'experimentation', 'discursive platform' and 'institutionalization' phase. To the researcher, the fourth phase of 'structure elaboration and adaptation' is not accurate enough to portray the present situation of the case school. It has now entered a crisis stage in which the school has to decide whether to adhere to their successful way of curriculum design and enactment or be 'bowl over' by the TSA requirements. In this light, we should look at those organizational learning theories that portray how schools should stand up against change which is seen as continuous. Here, the researcher would like to borrow Hurst's (1995) two-loops infinity model to construct a model that depicts how the case school should carve its future organizational pathway in curriculum development (see fig. 4).

   This model is built on Hurst's model which consists of two loops that intersect to form the shape of an infinity symbol. One loop stands for the conventional life cycle of organizational change. The other is the renewal cycle which smacks of 'death' and 'reconception'. (p.104).Using the ecocycle of a forest as an analogy, Hurst describes how an organization changes like the phase of birth, growth, destruction and renewal of a forest. The constructed model is premised on the equilibrium-disequilibrium plane and incorporates the three phases discerned in the school's curriculum development (Experimentation—Discursive platform—Institutionalization). At an early stage of curriculum development, the school perceives a curriculum goal to attain or a problem to solve, then it goes through the discursive stage when all the stakeholders engage in an ideational exchange platform. Good curriculum idea(s) will be screened out in consensus

for implementation in the institutional phase. Then the phase of equilibrium sets in and the curriculum will go through the elaboration and consolidation process. (It is characterized by the notion of 'doing what we know and do best'). In the event that there emerges a curriculum crisis or challenge from either inside or outside the school, the school will again launch an organizational inquiry process to find solutions and contemplate ways of trying them out. Again like the Equilibrium cycle, the ideas will go through extensive discourse and scrutiny from peers and school leaders. Those ideas with greatest perceived potentials and educative value will receive the majority's blessing and thus will easily become an institutional practice. Here the disequilibrium phase will rejoins the equilibrium phase again, making the whole process become an ever-evolving and ever-renewing cycle of growth. Because the cycle is a continuous one, the numbering of the phases is arbitrary, and the numbers are used only for ease of reference.

This two-loop model naturally implicates a kind of action learning cycle in which the organization, in face of a challenge or crisis, will try to look for solutions and if necessary will change its norms and usual practice in order to solve the problem. In other words, the school is a self-reflecting and self-renewal school. This is similar to 'double-loop learning' promulgated by Argyris and Schön (1978) which is critical to the success of an organization, especially during times of rapid change.
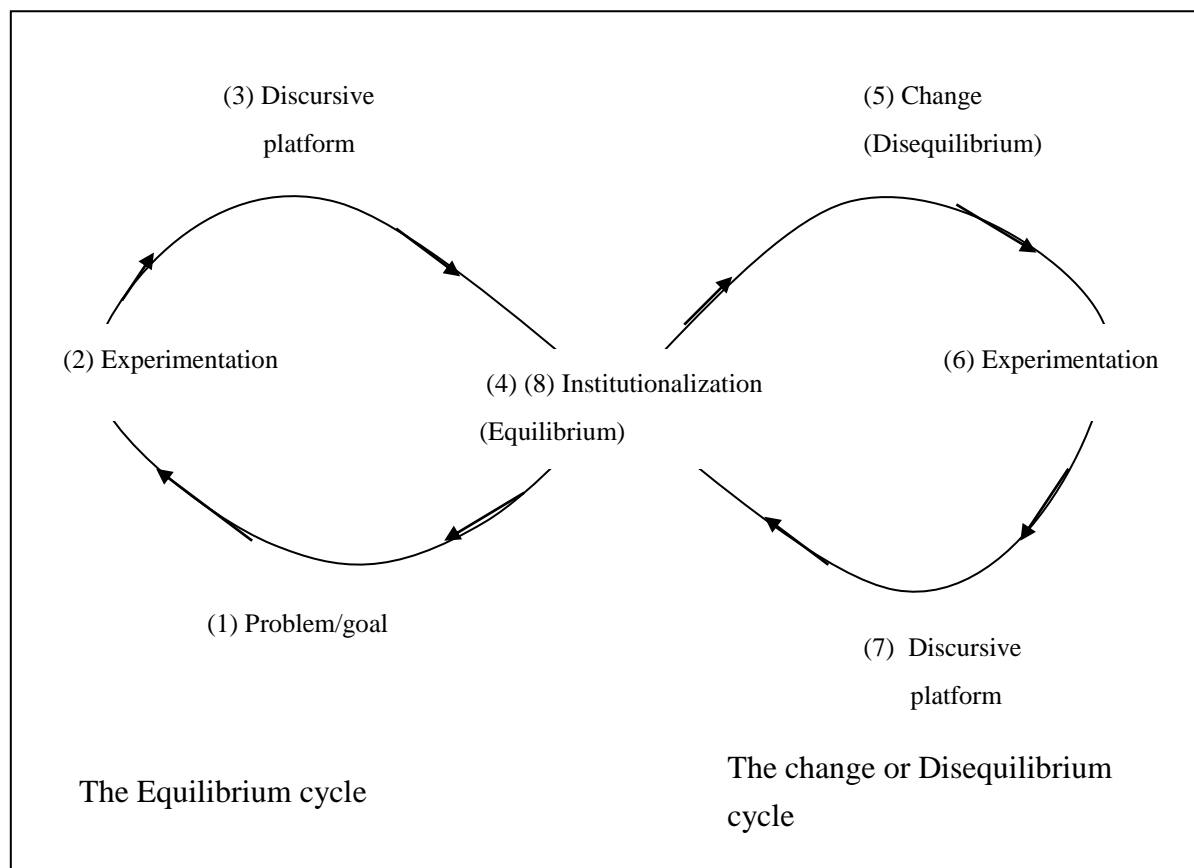

(3) Discursive platform

(5) Change (Disequilibrium)

(2) Experimentation

(4) (8) Institutionalization (Equilibrium)

(6) Experimentation

(1) Problem/goal

(7) Discursive platform

The Equilibrium cycle

The change or Disequilibrium cycle

Fig. 4 : The school's curriculum development life cycle

Recommendations

In view of the fact that a school like the case school will experience crisis(es) or face challenge(s) in its life cycle, it is recommended that the school should continue to function like a learning organization which is bent on deliberation (solo, group and organizational) and organizational learning and renewal.

The following are some other recommendations the case school can contemplate in order to sustain its successful curriculum development and be prepared for the future change:

1. Maintain and enhance solo, group and organizational deliberation as the molding catalyst between teachers' individual learning and organizational learning
2. Strengthen the four contextual factors that foster organizational learning propounded by Fiol and Lyles (1985): culture, strategy, structure, and environment
3. School leadership is about building a shared sense of direction for the school and influencing people to move in that right direction. In this connection, school leaders should set directions, develop people and develop the organization (Hurst, 1995).

Conclusion

The researcher would like to conclude this case study report with the following research observations and emergent themes:

Deliberative curriculum development works
We see in this case study a very succinctly clear and successful example of how a deliberative approach can bear fruit for a school's curriculum development by exploiting teachers' professional knowledge and integrating it with the school's organizational and curriculum needs. The success of its curriculum development can be attributed to the school's tactful manipulation of its ethos or beliefs ('That every body is an asset to the well-being of the school'), organizational arrangements and professional relationships.

Study of the life cycle of a school's curriculum development: implications for further research

We also see how the school's curriculum had developed from a total deliberation model to a rationalization or pseudo-rationalization model over the course of nine years and in response to the external assessment reforms (TSA). We also see how the school has turned into a learning organization that utilizes 'double-loop' learning cycle to brace itself with challenges outside and survives.

Another important corollary theme that emerged out of this case study is the issue of how to study the effectiveness of organizational change-- in our case the school's curriculum change--over time. On this aspect, the researcher has turned to the scholarship on organizational change for insights. Organizational change scholars like Pettigrew, Woodman & Cameron (2001) contend that theoretically sound and practical useful research on organizational change should explore the contexts, content, and process of a change together with their interconnectedness over time. They also assert that the most difficult research questions regarding organizational change and the ones that are least studied by change theorists are the temporal and situational issues. In this connection, the researcher would like to make use of the findings in this case study to illuminate on the temporal and process issues to fill in the knowledge gap and to stimulate more academic discussion henceforth. It is also because enough has been said on the context and content of the case school's curriculum development above.

When studying a school's curriculum development from a life cycle perspective, the following pondering questions might arise, some of which can be answered here while others beget further research attention:

1. How do we judge whether the school's curriculum has developed in the right direction? And right direction for whom?
2. When studying the process of an organizational change, is there a kind of right sequencing of change events? In other words, does the order of things influence he way they turn out?

In answering the first question, Mulford (2005)'s caution warrants our attention. He notes that understanding how effective school has progressed may mean that it will be evaluated differently depending on the stage the school has reached (p.350). In other words, actions taken at one stage by a school may be deemed inappropriate or even counterproductive at another stage but in the long run it might turn out to be conducive to the school development. In this manner, researcher should not view a school's curriculum

development success in a single snap-shot manner or in an atemporal manner. Instead we should assess it in an ongoing, evolving and cumulative manner. In fact, Pettigrew et al remark that there is a growing research interest in the historical investigation of industrial, institutional, and organizational change (Jeremy, 2991; Kieser, 1994).

Thus, viewing from a more historical or life cycle perspective, the case school might find meaning in rationalization of the TSA's 'washback' effect on its curriculum and the resultant medication of the school curriculum focus. In other words, teachers in the case school may find adequate logical sense in revamping the school's existing integrated curriculum and replacing it with one that is targeted toward competency-building and whole-person development (in the form of Life-wide learning activities).

As to the question of 'effectiveness' to whom, we can turn to the retrospective or longitudinal way of studying the overall perceptions of the school's stakeholders on the school curriculum efficacy. The stakeholders should naturally include the teachers, students, parents, community figures, school administrative personnel, the principal as well as the external or internal curriculum evaluator. The advantage of this is that it will give rise to a cumulative, dynamic, holistic and consensual evaluation outcome. Judgments about success are also likely to be conditional on who is doing the assessment and when the judgments are made (Pettigrew et al, p. 701).

Another crucial aspect to look for when examining the life cycle of an organizational change is the sequence of change processes. Pettigrew et al cite research done by Kanter (1983) and Hinings and Greenwood (1988) to illuminate the interesting fact that 'it may be more important to alter some elements of an organization before altering others' (p. 705). Questions like 'Does the order of things influence the way they turn out?' should be given more scope of attention by scholars studying organizational change. In other words, whether it is more appropriate to sequence one kind of curriculum mode after another in terms of a school's curriculum development course (for example, implementing an integrated curriculum after trying out a subject-based curriculum) is very much dependent on the situation as well as on the context, content, history, process and personal realm. It is also true, for example, when examining whether professional development should come first before a curriculum initiative or things can turn out just as well if it is vice versa. A single snap-shot case study can capture the 'what' or 'outcome' aspect but not the 'process'. A longitudinal or historical method would capture both the outcome and process of the sequencing matter over time. Also it is worth listening to Dalin & Rust (1983) advice that it is fatal to assume that the school is learning only if it is undergoing change. More crucial, they say, is 'its ability to monitor its own system constantly, and

accept as well as reject new practices and new products as they are found to be appropriate and inappropriate' (p.91).Lastly, to conclude, there is evidently plenty of room for collaboration and cross-fertilization if curriculum researchers could also turn to organizational change theorists for inspirations when filling in the knowledge gap concerning the context, process, content, pacing of change and temporal factors of school curriculum development and curriculum change. Further local and cross-cultural studies in this area are much warranted.

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