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Introduction

This chapter describes aspects of teachers' professional growth during a two-year professional development programme in Guangdong, China. The project was a part of national curriculum reform in Mainland China. One component of this curriculum reform is to integrate values education across the curriculum while simultaneously helping teachers to adopt current theories of learning and teaching about the curriculum area itself, and it is this aspect that was the focus of the trial in Guangdong Province.

The approach to professional development that was used for this part of the project was a combination of seminars and action research to investigate solutions to a series of problems that arose as the participating teachers explored the reform. This kind of approach was chosen because of research that has clearly identified lack of appropriate professional development as being one of the most serious obstacles to fully integrating new teaching approaches into the curriculum, and one-time-only workshops as ineffective in making teachers comfortable with new approaches or integrating them into their programmes (NCREL, 2003). This project aimed to incorporate all the elements of professional development that have been found to be important: a connection to student learning, hands-on practice, a variety of learning experiences, curriculum-specific applications, new roles for teachers, collegial learning, active participation of teachers, ongoing processes, sufficient time, assistance and support, administrative support, adequate resources, continuous funding and built-in evaluation (NCREL, 2003).

An essential pre-requisite to teacher change is motivating them to want to know about the change and explore how it can affect their practice (Hord et al., 1987). Action research can be a successful way to provide this motivation to persevere with the adoption of teaching reforms, not only to convince teachers of the value of the reform, but also that problems and obstacles can be overcome if they persevere with adapting the new ideas to fit within the constraints of their particular situations.

Teacher growth is facilitated by doing, exploring, trying, failing, changing and adapting strategies, overcoming obstacles after many trials, sharing failures and successes and techniques that work (McKenzie, 2002). However, it is the process of failing and facing obstacles that often causes teachers to give up. Research on teacher growth has identified a number of such obstacles. Some come about because of insufficient attention being given at the beginning of the initiative to issues such as teachers' inclination, philosophy, readiness and support (McKenzie, 2002). Foremost amongst the obstacles that have been documented are financial constraints, resistance to changing roles and communication problems (Bullough and Kauchak, 1997). Another can be a lack of sufficient emotional support, from peers or others, at the difficult times (Cole, 1992). A further obstacle to sustained teacher growth is that the initiative can often fall apart when the main instigator or supporter leaves (Mullen and Sullivan, 2002). In order to overcome these obstacles, teachers need the support of different people, including school leaders, outside experts and their

own peer networks (Bullough and Kauchak, 1997) at different times, and there needs to be considerable involvement and sharing of responsibility by all partners (Hough, 1975). Hence, for the project reported here, it was considered essential to have a team of partners who were all able to contribute in different ways at different phases of the teachers' growth, according to the obstacles they were facing at those times.

While we wanted to encourage the teachers to learn about current theories of learning and teaching, and to actually consider **using** these in their own classrooms, we knew all too well that there were obstacles which would probably prevent this from happening. In Chinese primary schools, these obstacles include large class sizes, time constraints, pressure to cover the syllabus and achieve high examination results, and the fact that each subject specialist teacher is responsible for several classes. We were confident that the teachers **understood** what we were teaching them and that most of them probably had a genuine **belief** in the value of the teaching approaches we were discussing, but we knew that when it came time to implement the ideas in their own classes, many of them would simply revert to the traditional methods of teaching they were used to and by which they had, themselves, been taught.

The curriculum reform was still very new at the time of this project and, even though moral and civics education have traditionally been taught as separate subjects, the teachers had only ever experienced the idea of a teacher-led, examination-driven and text-book oriented approach to teaching in their subject areas. In other words, these teachers were being asked to adopt some changes that were vastly different from their existing conceptions of teaching.

Owston (2004) has proposed a model for sustainability of classroom innovation that identifies essential and contributing factors. This model has been utilised in the design of the project described here because it gives useful insights into the ways in which different partners can make different contributions. Figure 1 shows the essential aspects of this model, and the corresponding partners in the present study who were able to contribute to each of these aspects. For this project, there were five key partners. From the educational perspective, the partners were the local district Education Department, the curriculum reform expert who is a professor in a university in Mainland China and two teacher educators from Hong Kong with expertise in the curriculum areas of Mathematics and Chinese Language combined with expertise in the integration of values education into these subjects (hereafter referred to as the subject experts). In addition, a Hong Kong-based charitable organisation provided funding for the project, including for administrative support. Financial incentive to participate was given by the sponsoring body and the Education Department gave further incentive by acknowledging the teachers' participation for purposes such as promotion. Finally the teachers themselves were considered to be key members of the partnership. A sixth group, the school principals, are considered to be important but to date their involvement has been to provide tacit support rather than an active involvement. However, the support of school leadership is acknowledged as extremely important and the plan for the next phase is to showcase to the principals what their teachers have been doing and to invite them to suggest how they can expand this work in their schools in future.

Figure 1: Partners able to contribute to various aspects of sustainability of initiative

Conditions of Owston's sustainability model	Essential or contributing condition	Partner in this study most able to contribute
Perceived value of innovation	Essential	Education Department officials

		Curriculum reform expert
		Colleagues
Teacher professional development	Essential	Subject experts
		Curriculum reform expert
Administrative support	Essential	Education Department
		Principals
		Sponsoring Body
Innovative champions	Contributing	Subject experts
		Curriculum reform expert
		Teachers' peer group#
Supportive plans and policies	Contributing	Curriculum reform expert
		Education Department
Funding	Contributing	Sponsoring Body
Support within school	Contributing	Teachers' peer group##
Support from outside school	Contributing	Education Department
		Sponsoring Body
		Curriculum reform and subject

Project Background and Methodology

This professional development programme was implemented over a twenty-month period from July 2002 to March 2004, with twenty primary school teachers. It was a joint project supported by the South China Normal University Department of Curriculum and Instruction, the local District Education Department, and the Institute of Sathya Sai Education of Hong Kong. As mentioned earlier, the project was connected to the introduction of curriculum reforms in China that aimed to incorporate values education into subject curricula along with a shift from teacher-centered to student-centered learning. Specifically it aimed to:

- guide a group of teachers to develop, implement and evaluate a values education curriculum embedded within their subject teaching, consistent with the current curriculum reforms in China, and
- monitor and evaluate the phases in teachers' developmental growth in the implementation of teaching reform in values education.

In this chapter we will describe the major obstacles that the participating teachers encountered at different stages of their journey. In particular we will examine how the combined input of the five partner groups helped them to overcome these obstacles and eventually reach a stage where they could contribute ideas and leadership in the curriculum restructuring.

Participants

The participants were twenty teachers, nominated in pairs (one Chinese Language and one Mathematics) from ten selected primary schools in the Qujiang district of Guangdong Province. They were selected by the District Education Office because they were regarded as leading teachers in their schools. They were experienced teachers and had all taught for at least five years. The teachers met with the programme facilitators for 2-4 days four times during the project and carried out some small-scale action research investigations in their schools during the interim periods.

The Theoretical Framework for the Project

The theoretical framework for the project was based on the model of effective strategies for the stages of learning/adoption used by Sherry and Gibson (2002). This model is summarised in Figure 2, which also describes the strategies that were utilised for this project.

Figure 2: Effective strategies for the stages of learning/adoption (Adapted from Sherry & Gibson, 2002).

Developmental Stage	Effective Strategies	Corresponding Action in this Project
Stage 1 *Teacher as Learner* In this information-gathering stage, teachers learn the knowledge and skills necessary for performing instructional tasks using [the new innovation]	Training: demonstrations of promising practices, ongoing professional development by peers rather than one-shot workshops by outside experts; in-service sessions that stress the alignment of the initiative with curriculum and standards	Teachers were paired, i.e. 2 teachers from each school to enable peer discussion and support First seminar: • Introduction to terms and concepts of values education • Specific examples of integration into subject area • Demonstration lesson/s by expert mentors **Setting of first school-based problem task** • **Explore ways of altering aspects of existing curriculum materials to reflect values education** Post First Seminar: • School visits by project team: classroom observation and individual interviews (formative evaluation)
Stage 2 *Teacher as Adopter* In this stage, teachers progress through stages of personal and task management concern as the experiment with the innovation, begin to try it out in their classrooms, and share their experiences with their peers.	Resources, access to help and support; teachers who can mentor newcomers and provide them with care and comfort as well as information.	Second seminar • Talk by expert teacher who shared his experiences. Further clarification of concepts by project team • Demonstration lessons • Time made available for discussions between colleagues in cognate groups • Ongoing provision by workshop leaders of resources and materials **Second school-based problem task** • **Prepare best three sample lesson plans and reflections on strategies such as use of silent sitting** • **Identify problems/issues for potential action research investigation**

Stage 3 *Teacher as Co-Learner* In this stage, teachers focus on developing a clear relationship between the innovation and the curriculum, rather than concentrating on task management aspects.	Workshops and resources with strategies for enhancing instruction and integrating the new approach into the curriculum; collegial sharing of integration and assessment ideas	Seminar 3 • Some revision of key concepts and philosophies of session 1 and more in-depth study of these, particularly to address issues raised previously by teachers (visiting expert and peer) • Demonstration lessons with time for teachers to give feedback and discuss • Teachers asked to bring with them a reflection on issues that have arisen – time allowed for discussion **Third school-based problem task** • **Commence classroom-based action research on issues of own concern** Seminar 4 • Further resources provided in response to issues raised by teachers (e.g. assessment and discipline)– time for discussion and personal reflection on these • Further demonstration lessons with time for reflection and discussion
Stage 4 *Teacher as Reaffirmer or Rejecter* In this stage, teachers develop a greater awareness of intermediate learning outcomes. They begin to create new ways to observe and assess impact on student products and performances	Administrative support: an incentive system that is valued by adopting teachers. Raise awareness of intermediate learning outcomes such as increased time on task, lower absenteeism, greater student engagement; evidence of impact on student performances	Seminar 4 • Reflection and discussion with mentors and between peers about action research outcomes • Criterion-based reward system: All teachers who achieve a certain set of criteria will receive the same level of reward **Fourth problem task** • **Group problem-based learning task to explore issues of assessment and discipline**
Stage 5 *Teacher as Leader** In this stage, experienced teachers expand their roles to become active researchers who carefully observe their practice, collect data, share the improvements in practice with peers and teach new members. Their skills become portable.	Incentives for co-teaching onsite workshops; release time and other semi-permanent role changes to allow peer coaching and outside consulting. Support from an outside network of teacher-leaders; structured time for leading in-house discussions and workshops. Transfer of skills if teacher goes to another school	• 2 or 3 outstanding teachers identified as mentor teachers to share their experiences with beginners • release of 1-2 teachers in each cognate area to prepare suitable materials – find stories, re-write textbook problems etc.

Planned as an ongoing process over the next 1-3 years

Values education framework

The values education framework adopted for this project was the Sathya Sai Education in Human Values (SSEHV) model. This model is supported by national education department policies in several countries. It is a secular model that is concerned with putting back character development and values into education and developing all domains of the student's personality: cognitive, physical, mental, emotional and spiritual. It is based on five human values that are universal and inter-dependent, Truth, Right Conduct, Peace, Love and Non-violence, and is concerned with eliciting these values that are already inherent in all of us. The fundamental principle of SSEHV is that all teaching is based on love and that the teacher's example in living the values is the most critical component of values education. Its goals are:

1. *To bring out human excellence at all levels: character, academic, and "being";*
2. *The all-round development of the child (the heart as well as the head and the hands);*
3. *To help children to know who they are;*
4. *To help children to realise their full potential; and*
5. *To develop attitudes of selfless service.*

Data collection

The data reported in this chapter were collected from notes taken by the researchers during teachers' discussions about problems in the workshops, observation of demonstration lessons and reflective notes in which the teachers were asked to record their experiences, particularly their ability to adapt the new ideas to classroom situations. Since all discussions and written records were in Chinese, the transcripts have been paraphrased from the translations into English for reporting in this chapter.

The obstacles teachers encountered at different stages

This section will consider the most common obstacles that teachers experienced at different phases of their journey, and which of the partners were best able to help them at each stage.

Stage 1 Teachers as learners

The first obstacle that the teachers encountered at this stage was understanding the concept of values education. In their reflections about this stage of their growth, typical comments were:

What's different about education in human values and moral education class – at first I didn't think there were any differences – now I realise it is a different style of teaching different values to develop character.

Lack of understanding of values education was a great obstacle. But with the help of the professors [curriculum and subject experts] and teachers [fellow participants in the project], I could solve the uncertainty.

In the early stages I found it hard to understand the difference between general studies and values education. The professors and the teachers helped me a lot.

The professors gave me a lot of information in order to help me understand the values education in more detail. I could learn a lot from the real working process and the teachers' discussions.

Here, the subject experts were the dominant partners. In particular, they had to give very specific examples of the opportunities to talk about the five values during Mathematics and Chinese lessons. When the teachers gave demonstration lessons, it was necessary for the subject experts to be very direct in giving examples of opportunities for talking about values that arose during the lessons. Some examples of this kind of feedback are shown below, with the vocabulary describing the values highlighted in bold:

Figure 3: Examples of facilitator feedback given to help overcome first obstacle (understanding the concept underlying the reform)

Aspect of lesson	Comment about Mathematics teaching	Comment about education in human values/suggested key vocabulary to use with children
Introduction of a problem about China's wild animals as a fraction of the world's wild animals	Sets a real-world context for the problem	**Non-violence**: Creates awareness of the environment. You can talk about the dangers for some animals of becoming extinct and **what each of us, as individuals, can do to help** to protect them (e.g. using plant-based rather than animal-based medicines)
Concept of 'one' or 'whole'	Very important to establish the idea of a fraction as a part of the whole	Peace**:** What do we need to do to become **whole** people? Can we feel whole and complete if we have a lot of material possessions? (Lead them to the idea that we can only really feel whole and complete if we have **inner peace**.)
Asking students to find different ways to get the same answer	This is a good practice to encourage, to get them to think mathematically.	Love**:** There are many different ways of arriving at the correct answer. The same applies to life. People have different ways of doing things but we cannot judge them if their ways are different from ours.
Group discussion to help students who still did not understand	Often children can understand something explained by their peers better than an explanation by an adult.	**Love: teamwork**. If one group member is unable to understand, it is the group's responsibility to help him/her.
'Mirror' problem	Good use of estimation and problem-solving skills	Right **Action:** This could be a good chance to talk a little bit more about mirrors (perhaps in a silent sitting at the end) – tell them that other people are mirrors of our behaviour and that when we see something we don't like in another person it often means we have to look at ourselves to see if it is really something in our own behaviour we have to change.
Story about flood and story about Shao Hua and Shao Li donating money for children who cannot afford to go to school	This relates to a real-life event, which helps children to see that Mathematics is a tool for describing real-life.	Love**:** Developing a sense of **compassion** towards those who have been unfortunate to suffer in a flood; helping these people by giving seeds to them. (Could this lesson be followed up by asking the children to sacrifice something that they like – e.g. buying candy or going to the game parlour – and using the money they save to donate to the flood victims? In SSEHV we call this

		"Ceiling on Desires".)
Percentage: comparing statistics of China and other countries; comparing with another class the students who are good in study, sports etc.	Again, this use of real-world examples encourages children to think more widely about Mathematics and how it is a tool that helps us to understand our world.	**Love**: This is a very important aspect of helping children to develop **self-acceptance** and **self-esteem** as well as **tolerance** of others. We need to emphasise repeatedly that **everyone has his/her special gifts/talents** and help them to think how they can use these for the good of society. We also need to encourage them to be tolerant of others and to look for the good things that others can do, not at what they cannot do.

This process was probably more difficult for the Mathematics group than for the Chinese group because the latter were dealing with curriculum material that already focused to some extent on the values inherent in the traditional Chinese culture, whereas the Mathematics teachers did not have even suitable examples in their curriculum material to draw on. They were also inhibited by the fact that they had never previously been permitted to change even the wording in the examples in the textbook. When the facilitator suggested that they could begin by changing the wording of textbook problems to reflect values like sharing and helping others (see Figure 4 for an example) they were incredulous and actually asked, "Can we do that?"

Figure 4: Example of a text-book problem re-worded to reflect values

Change:
Shao Hui bought 40kg of rice. He ate 5/8. How much was left?
to:
Shao Hui bought 40kg of rice. He kept 5/8 of it for his own family to eat, and gave the rest to a poor family who lived near his house. How much did he give away?

In this case they were not prepared to believe the subject experts that they could in fact make even such a minor kind of change. It was not until the curriculum reform expert said it was acceptable that they were prepared to even entertain the idea.

Stage 2 Teachers as adopters

In their first attempts to incorporate these new ideas into their teaching the major obstacles the teachers experienced were time and curriculum constraints. The subject experts had the major role here, giving them direct materials, direct demonstrations and direct feedback in class.

There were further perceived obstacles arising from a sense of mismatch between implementing the innovation and their existing responsibilities to cover the curriculum and have their students achieve good marks:

> *In the early stages there was inconsistency between the implementation of values education and my duties with the (curriculum) programme.*

They also started to express concerns that the project was compromising the amount of curriculum content they could cover:

> *We are finding that the characters of the children in the experimental class are improving but we are worried that their scores are going down because we are spending less time on the lesson*

Here it was only the Education Department officials who could give them the reassurance they were seeking, since they were not prepared at this stage to believe the subject experts that the overall results would improve in the long term (which they eventually began to do in many of the experimental classes towards the end of the project).

In this case the teachers needed support from a combination of partners: the subject experts to give them the ideas for incorporating the maximum of values education while making the minimum change to the content of the lesson, the curriculum reform expert to show them that this practice was in fact in keeping with the big picture of the national reform and the local education department officials who were able to reassure them that their credibility as teachers would not be compromised by trying the new ideas.

Several of the teachers also expressed concern about the lack of support from their other colleagues who were not involved in the project:

> *In addition to the examination pressure the leader is only concerned with the results of my class rather than the difficulties I have.*

Since this has fairly serious implications not only for the teachers' confidence to continue with the initiative but also for future sustainability, it is essential to provide the appropriate support for this problem. At this stage of the project the main support came from the Education Department officials, who gave reassurance that they were doing the right thing and placed it in the context of the future plans for education reform in the region. However, the teachers themselves pointed out the need for support from their own school leadership. As mentioned earlier, the school principals' support was solicited by the Education Department at the beginning of the project but prior to this stage had been mostly in terms of allowing the teachers to try out the ideas in experimental classes. In the last formal session of the project we invited more active participation by the principals by inviting them to attend a showcase of what the teachers in the project had been doing and then to participate in a forum to discuss how they can develop the ideas further across their schools. Here, again, is an important role for the sponsoring organisation, since it will be necessary to assist with financial support and resources to implement the actions suggested by the principals.

Another obstacle for the teachers as adopters, once they had accepted and understood the basic concept of the reform, was lack of ideas. As the following comment indicates, the subject and curriculum reform experts were the most able to give support in this regard:

> *In the early stages I did not have any ideas for implementing values education in my classes. After being advised by the [curriculum reform and subject experts] my process became smoother.*

It was at this stage that another important aspect of the partnership emerged. This was the role of the teachers themselves. Through observing their peers conducting demonstration lessons and through engaging in reflective discussions about these lessons and their attempts in general, the teachers were able to provide a great source of support and inspiration to each other:

> *In the early stages I did not have any ideas for implementing values education in my classes, for example deciding on the content. Now I still have difficulty but the guidelines give me great support. The [curriculum and subject experts] and my colleagues give me encouragement and support.*
>
> *In the early stages I found there were some conflicts between the experiment and the teaching in my school. The professors and my colleague helped me a lot.*

In this latter comment, 'colleague' refers to the teacher's partner in the programme from the same school.

In the early stages of 'teachers as adopters' the subject experts asked the teachers to experiment with the use of silent sitting (a technique fundamental to SSEHV, in which students sit silently for a few minutes and tap into their own inner strengths and resources to calm the extraneous chatter in their minds and often to solve problems), since this was something that could be added on as an 'extra' at the beginning of the class without taking up too much time and hence give them some confidence that they were moving forward with the initiative. This was one of the first breakthroughs for many of the teachers because they were able to have some successful results with their students (particularly better concentration and better behaviour):

> *Silent sitting is a way of thinking, gives people a sense of quiet, they are very free to think about anything and escape temporarily from reality – therefore it decreases the pressure of work. I use it personally to have a break mentally or physically.*
>
> *The silent sitting is very good to nurture their study habits. It encourages the students to think, try new things and change their attitudes towards their studies. They are now beginning to see that they are studying for themselves, not for their parents.*

Stage 3 Teachers as co-learners

As the teachers moved into the phase of co-learners, the subject and curriculum reform experts and the education department officials discovered that we were able to take a big step back. As the teachers themselves began to exercise their growing confidence and ability to verbalise about the new paradigm in order to deepen their understanding of the concept and how to apply it (Barr and Tagg, 1995) they turned more to their own peers for support.

The teachers who gave demonstration lessons at this stage showed evidence of a considerable increase in their incidental modeling of values that had not been there previously. For example in one Mathematics lesson the teacher went to a lot of trouble to find up-to-date statistics about social and environmental problems in China and to set problems that incorporated values education. Apart from this understanding of how to adjust the lesson content, there was an emerging sense of the integration of values education with both the content and the hidden curriculum of the lesson that can be characterised by the combination of a number of features such as:

- *encouraging children to think for themselves and discuss (Right Action)*
- *encouraging children to help and support each other (Right Action, Love)*
- *accepting their answers, not making them feel bad if they made a mistake (Love)*

- *creating a 'safe' environment – children feel safe to try ideas and learn from mistakes (Peace, Love)*
- *showing they valued what children were saying – teacher listening to children and children listening to each other (Love)*
- *using homework to ask children to research other areas related to both percentage and values.*

The teachers were still concerned that they were faced with the obstacle of having to fit in with all the time and curriculum constraints as previously and also expressed their concern about the lack of time to prepare the new values-related materials – but the teachers themselves became the dominant players in the partnership and learned a lot from observing each other and discussing

Stage 4 Teachers as Reaffirmers or Rejecters

As the teachers began to raise more complex questions and issues, it indicated that they were now moving to the phase of being concerned primarily about the impacts of the innovations on their students. For example, they were ready to explore deeper and enhance the quality of their teaching further.

> *What can we do now to deepen our personal understanding of the values and to deepen the experiment?*

> *How can we improve the quality of our classroom teaching [in relation to eliciting values while offering rich pedagogical experiences].*

Furthermore, they were showing signs that they were becoming concerned about a holistic integration of values education, including how it impacted upon discipline in and out of the classroom:

> *I try to use love to move my students – if every teacher treats them with love then sometimes there is no punishment at all, so sometimes I have a very good relationship with the students, sometimes they are disrespectful.*

> *I have one doubt – if we just teach students in a positive way, if we avoid them seeing bad things, how can they learn to discriminate? If they don't see the ugly, how can they appreciate the beauty? Is it good to just show the positive things? How about the negative things? For example, I have taught my children that when they go to another person's room they don't touch things and make a mess, but then others come to our room and do this, so the children wonder why others can do this and they can't.*

Another interesting question that reflected a deeper level of thinking was concerned with the effects of the values education strategy on children who are at different stages of their character development:

> *About the power of love: If there are two seeds and one is very strong but the other is not so good – if I give love to the not-so-good it still won't grow as strong as the good one, so is it better to concentrate the love on the strong one?*

They were also starting to think, at this stage, about the interactive effects between school and home:

A colleague told me "5 plus 2 = 0". I didn't understand. She told me that 5 means the 5 days in school, 2 means the 2 days outside school, maybe equals 0 because the effects of the two days at home can undo the effects of the five days at school – the effects may be negated by outside things. How can we connect family and community education with school education?

Sometimes I feel there is some difference in the students' behaviour – they are good in front of their teachers but different at home. I have been surprised to hear they do bad things at home, even to their own grandmothers they have been rude, therefore we must keep in close contact with their families so we can know the two sides of the children.

Another issue raised at this stage, for the first time, was that of evaluation:

How can we evaluate the moral education? We do the experiments but we don't know how to see the effects.

In all of the above, it can be seen that, although the questions they were asking were more complex than those they were asking in the earlier stages of the project, the teachers reverted to their former dependence on the facilitators to provide answers rather than attempting to suggest solutions themselves. Therefore, the facilitators structured problem-solving tasks for the fourth face-to-face session (see Figure 1) in such a way as to provide some useful information but to put the responsibility for thinking about the solutions onto the teachers themselves.

The teachers also began to ask questions about how to move beyond their own classrooms and integrate values education as a whole-school approach. They seemed to be no longer thinking of it as a fragmented thing applicable only to their experimental classes but as a total school programme, in and out of class.

It was interesting to note that at this stage they were turning more to the Education Department officers for support with policy-related matters than to the curriculum experts for support with pedagogical ideas. It was clearly important to them to have official support of the ideas that the curriculum experts were portraying and that they were beginning to come up with for themselves. However, with the pedagogical ideas they seemed to have developed a greater independence to think of their own strategies and to give feedback to each other. Examples of the feedback given by the Education Department officers at this stage include:

[In response to the teacher comment: 'I really love my students, am seldom angry with them. For example if they drop rubbish, the first time I tell them not to do it, the second time I take them to see how dirty it is. If they still do it a third time, those who throw rubbish have to clean the school for a week – then they stop. Sometimes this is not advocated now, so I could get into trouble.'] We must distinguish this kind of penalty from those that will hurt the students psychologically. This type won't hurt them psychologically.

The above reinforced the teacher's need for official endorsement that what she was doing was acceptable with regard to policy, irrespective of whether or not it was good pedagogical practice.

> *[In response to teachers' questions about discipline policy, competition and community expectations] Teacher practice is important – whatever you ask students, you should also do first. Teachers must love the students – this is the foundation of SSEHV. This doesn't mean love without any kind of punishment – if students form bad habits, if you don't use 'punishment' you can't get good effects – but first there must be clear understanding about the whole situation and make the right kind of punishment. Silent sitting is a main characteristic of SSEHV – what can we do to make silent sitting better? SSEHV must exist everywhere, so don't think that just the content is SSEHV, everything we do is the process of doing SSEHV. Competition: In relation to SSEHV, I don't think SSEHV must avoid competition. SSEHV is not evaluated by academic knowledge – the purpose of these experiments is not only to improve academic achievement, but to develop character, therefore you must send this message to your headmasters. One problem in Chinese education is that the family, community and school education are separated – this must be changed so the school and parents have a close relationship. The evaluation by academic achievement alone is a shortcoming of the education system so don't worry – this will change. Try to fill in the gap between school education and family education – keep in close contact with parents by phone calls and visiting family.*

Again what the teachers required here was official reassurance that they were on the right track from a policy, as opposed to a pedagogical, point of view.

Stage 5 Teachers as Leaders

At this stage of the project there is only a small number of teachers emerging as leaders. One, for example, has written an article for a professional journal in the district describing some practical applications of education in human values in the curriculum based on his experiences. Another has set up a whole-school integration programme in Mathematics and Chinese Language with future plans to expand to other subject areas. It appears that as the teachers move more into the role of leaders in their own schools they will become concerned mainly with policy-related support, hence the dominant partners will be the Education Department and the school principals. It is also envisaged that the sponsoring body and the Education Department will have active contributions to make at this stage in terms of financial and incentive support to sustain the initiatives and expand them to a school-wide level.

Discussion

In this chapter we have described the roles of various partners in contributing to teacher professional growth in developing a curriculum reform over a twenty-month period. Five main partners played key roles at different stages of the teachers' growth. The subject experts were critical in helping the teachers to understand the concepts and philosophies underlying the reform and to give specific examples, resources and feedback, especially in the early stages of the programme. The curriculum reform experts were important to reinforce what the subject experts were saying in the overall context of the reform. The Education Department officials'

participation was necessary to provide professional incentives for the teachers to sustain their participation and to provide support and reassurance about policy-related matters, and their role became stronger as the teachers' knowledge and understanding of the reform became stronger and they started to think of wider issues. Financial incentive to participate was given by the sponsoring body and was another critical component of the sustainability, particularly at the times when the participants could have been tempted to give up. The participating teachers themselves became critical partners, particularly once they had grasped the basic ideas, as they became a source of support and inspiration for each other. A sixth group, the school leaders, have been tacit supporters of the project to this stage, but are anticipated to have a more active role in the partnership as we move into the next phase of encouraging the teacher to take on leadership roles in extending the programme to become school based. It appears from the examples presented in this chapter that the combined effects of the various partners were effective in helping teachers to overcome the different kinds of obstacles that they encountered at different stages of their growth.

One particularly interesting outcome was the way in which the teachers themselves emerged as significant contributing partners within a fairly short time. In this study we invited two teachers from each school in order to ensure some peer support within schools as well as between schools. However, given the importance of teachers as partners that emerged from this study, it is recommended that in future programmes we will invite four teachers from each school in order to strengthen further the potential for peer support.

Another interesting question that has arisen from our experience is the best time at which to involve the school principals. At the beginning they were willing to allow their teachers to participate but were not really interested and, for example, did not accept the invitation to attend the opening ceremony or any of the face-to-face sessions. However, in the longer-term their active support is needed if the innovation is to be sustained or expanded school-wide. Therefore we decided to try training the teachers first, then inviting the principals to a showcasing of what the teachers have achieved, after which we consulted them about how to move to a school-wide basis.

One further implication that has emerged from our experiences is the need to make provisions for helping teachers to find suitable resources and adapt teaching materials, since the time required to do this task was one of the biggest obstacles they described throughout the programme. Hence, a recommendation for the future sustainability is to make provision for the sponsoring body to support the employment of an administrative person to assist with this kind of material development.

Overall, the experiences of this programme have indicated clearly that the partnership between various stakeholder groups was critical to the teachers' sustained participation and growth within the project. In fact, it is clear that no one partner could have assisted them effectively to overcome the full range of the problems that they encountered. It is suggested that the experiences and insights encountered during this project are not unique to the Mainland China context and that they have implications for teacher professional development universally.

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