

## Challenges and Strategies to Educational Change – Introducing School-based Curriculum

WONG YU Lai Wah  
Hong Kong Institute of Education

**Background:** During the era of education reform, the Hong Kong Special Administrative Region has launched a series of measures to enhance the learning of the students and the effectiveness of teaching. In the Curriculum Development Council document, Learning to Learn - the Way Forward in Curriculum, the policy of school-based curriculum is advocated. The aim is to allow “schools to have more autonomy in choosing some contents more relevant to their students so long as they are in line with the curriculum aims, strands, principles of learning/teaching, with justifiable modifications that suit their students most”. This paper reports a case study of a local primary school in implementing the school-based curriculum in General Studies (GS) from 2003 to 2006.

**Aims:** To study why the school initiated such educational change, the strategies teachers employed and difficulties they encountered. Recommendations are made for teachers and administrators who want to initiate educational change in schools.

**Sample:** The head teacher, the subject panel, level co-coordinators and subject teachers were interviewed. Parents and students were also invited to fill in questionnaires by the end of the school year.

**Method:** Qualitative research method such as in depth interview and quantitative research method such as filling in questionnaires were employed.

**Results:** Most of the teachers claimed that it is the school administration who initiated the adoption of the school-based curriculum policy. Though they tried their best to deal with various difficulties, worked hard, prepared lessons jointly, and claimed that students showed more interest in lessons, some did not have the ownership of the school-based curriculum development.

**Conclusion:** The implementation and institutionalization of any educational change requires more than willing individual teachers, e.g. the subject panel or level coordinators. Rather, there needs to be a deep re-conceptualisation of the nature of knowledge, teaching, learning, and changes in the practises of the subject department, supported by the head teacher, school administration, parents and students.

**Keywords:** Educational change, School-based curriculum, General Studies

教育改革的挑戰與策略 - 校本課程

**背景：**推行教育改革的目的是為增強學生的學習和提升教師的教學效能。「學會學習」文獻中強調校本課程發展的重要性，鼓勵讓學校和教師把中央課程加以調適，發展個別的校本課程，幫助學生更有效的學習目標。本文匯報本地一小學過去三年在常識科推行校本課程的情況。**目的：**探討該學校推行這改革的原因、採取的策略、和遇到的困難。同時亦提出一些建議以便學校推行教育改革。

**調查對象：**訪問校長、科主任、級聯絡老師及常識科科任老師。學期終，學生和家長填寫問卷調查。

**調查方法：**有關持分者接受訪問或填寫問卷調查。

**調查結果：**大部分老師宣稱這改革是由學校行政推動。雖然他們努力克服各種困難、用較多時間搜集資料、集體備課、和指出學生對課堂活動較感興趣，但他們並沒擁有這教育改革。**總結：**推行教改及使改革內容制度化不能單靠個別熱心的老師，例如科主任或級主任。所有的持分者除了必須認可改革的意義，亦應重新審視該科的學科知識、教與學的取向，學校的政策與資源的運用亦須與該改革內容配合。

**關鍵詞：**教育改革、校本課程、常識科

In *Learning to Learn - the Way Forward in Curriculum* (Curriculum Development Council, 2001), a major policy document of the education reform in Hong Kong, it argues that the education system should be reformed to provide the most favourable environment for teaching and learning in order to fully realize students' potential, and teachers should have more scope to help students learn more effectively. In the *General Studies for Primary Schools Curriculum Guide* (p1-p6) (Curriculum Development Council, 2002), schools have been encouraged to adapt the central curriculum in developing their school-based curriculum and to promote life-wide learning. This paper reports a study of the process of the implementation of the said policy in General Studies (GS) classrooms in a primary school from 2003 to 2006. Strategies and barriers to change were identified. It is hoped that the analysis will provide insight for the school administration and practising teachers who want to initiate and institutionalize any educational change.

#### *School-based Curriculum*

Skilbeck (1984) defined curriculum as "the learning experiences of students in so far as they are expressed or anticipated in educational goals and objectives, plans and designs for learning, and the implementation of these plans and designs in school environments" (p.21). Skilbeck (1998) further explained that 'school based' curriculum means that major decisions about the design, content, organization, and presentation of the curriculum, about pedagogy and about assessment of learning will be taken at the school level. He (1984) defined school base curriculum development (SBCD) as "the planning, design, implementation and evaluation of a programme of students' learning by the educational institution of which those students are members"

(p.21). Shared decision-making between teachers and students is emphasized. Thus, the SBCD involves a network of relationships with different groups in the school. They are teachers, students, school administration, parents and the local community. It is therefore characterized by agreed pattern of values, norms, procedures and roles. Marsh, Day, Hanney, & McCutcheon (1990) also stated, "School-based curriculum development is essentially a teacher-initiated grass roots phenomenon, and is likely to survive in this pure form regardless of political and economic contexts" (p.3).

Wiggins and McTighe (2005) suggested a planning sequence for curriculum, called backward design process. There are three stages, as depicted in Figure. 1. In the first stage, teachers consider their teaching goals, examine the established content standards, and review curriculum expectations. They are to decide what students should know, understand and be able to do. In the second stage, teachers think like an assessor. They decide how they will know whether students have achieved the desired results, and met the standards. In the third stage, teachers decide what activities students will do during the unit, what resources and materials they will need for those activities.

When designing the school-based curriculum in the subject of General Studies, the following should be taken into consideration (Chai, 2004):

1. At the school level:  
Whether the content of the curriculum agree with the educational goals of the school and the school culture?  
What are the school's expectations on General Studies?
2. At the students level  
Why the content should be taught?  
Does this content cater for the

- needs, the interests, and the abilities of the students?
3. At the societal level  
Does the content cater for societal educational goals, the needs of the society and help the future development of the society?
  4. At the subject level  
Does the content possess the major characteristics of General Studies?  
What learning approach(es) should be adopted to meet the aims of General Studies?

### **Educational Change**

In theory, the purpose of educational change is to help schools accomplish their goals more effectively by replacing some structures, programmes and/or practices with better ones. The participants in education want to investigate whether, how and under what conditions educational change can improve schools (Fullan, 2001). Fullan emphasized that the implementation of educational change involves change in practice. Change in practice occurs at many levels, such as the teacher, the school or the school district. Change is multidimensional. There are three dimensions in implementing any new policy or programme. They are: the possible use of new or revised materials, the possible use of new teaching approaches, and the possible alternation of beliefs. All these three aspects of change represent the ways of achieving some educational goal(s). Changes in actual practice along the three dimensions are essential if the intended outcome is to be achieved. Furthermore, it is at the individual level, individual practitioners, that change occurs. Therefore, it is necessary to provide supportive or stimulating conditions to foster change in practice.

Furthermore, Cheng (2002) stressed that any successful educational change consists of three different stages. They are:

1. Unfreezing  
The school should understand its own capabilities and the needs for change, the initiation and the hindrance to change, as well as the preparation of human resources and the resources for learning and teaching.
2. Changing  
This includes the implementation, the change of the management, the change of teaching and learning as well as the change of values and beliefs; the monitoring process in order to achieve; clarification of worries and uncertainty so as to reduce the damages caused by the change; and promotion of new ideas of learning and teaching as well as the new culture.
3. Refreezing  
This includes identification of the favourable outcomes of the change, removal of the unfavourable effects, evaluation of what is sacrificed during the change and the effectiveness of the change, putting the favourable outcomes into the system, and internalization of the success,

### **General Studies**

General Studies, an integration of Primary Science, Health Education and Social Studies, was first introduced in 1994 in Hong Kong and was implemented in all the six levels of all the primary schools in the school year, 1996-1997. The aims of the subject are:

- Through meaningful activities, children understand the inter-relationship and interdependence between people, things and their environment.
- Children are trained to develop values and attitudes in order to become rational and responsible citizens (Curriculum Development Council, 1994).

The new General Studies

curriculum (Curriculum Development Council, 2002) moves away from the content-focused approach to the learner-focused approach. It emphasizes the enhancement of students' inquiry and investigative skills for knowledge construction. The central General Studies curriculum is composed of six strands. They are: health and living, people and environment, science and technology in everyday life, community and citizenship, national identity and Chinese culture, as well as global understanding and the information era.

Schools are encouraged to “adapt the central curriculum to different degrees by varying the organization of contents, contexts, learning and teaching strategies, and criteria and modes of assessment to help their students achieve the learning targets” (Curriculum Development Council, 2002, p.68).

#### Objective of the Study

School-based Curriculum has been advocated in various education reform documents in Hong Kong, e.g. Learning to Learn - the Way Forward in Curriculum (Curriculum Development Council, 2001), and General Studies for Primary Schools Curriculum Guide (p1-p6) (Curriculum Development Council, 2002). However, teaching has been commented as textbook oriented and teacher talk has been the common teaching strategy. The objective of the present study is to investigate the process of the implementation of the school-based curriculum in General Studies in a local primary school. Suggestions might then be made to the school administration and practising teachers on how to initiate, implement and institutionalize this educational change in schools. The research questions are:

- Why did the school initiate such an educational change?
- What were the strategies to implement the educational change?
- What kind of support did the school

provide to facilitate the implementation?

- What were the difficulties encountered during the implementation?
- What kind of support was needed in order to help substantiate such an educational change?
- What were the perceptions of the students and the parents on the school-based curriculum and the assessment in General Studies?

In response to the education reform launched in Hong Kong and convinced by the concepts of the school-based curriculum, the subject panel (GS) of the present study initiated the implementation of the school-based curriculum at all levels of the school. She introduced the General Studies teachers to the intended curriculum: the General Studies for Primary Schools Curriculum Guide (CDC, 2002), the school-based curriculum and its role in the education reform in Hong Kong. However, the implemented curriculum may not be identical to the intended curriculum, the official curriculum guidelines. In the classroom teaching, teachers interpret and modify the intended curriculum according to their perceptions of the needs and abilities of the students and create their own implemented curriculum (the Third International Mathematics and Science Study, 1999). Thus, the attainment of the students, the attained curriculum, depends not only on students' learning, but also on what teachers choose to teach in the classroom. This is illustrated in Figure 2. The present study focuses on the process of the implementation of the school-based curriculum. Factors affecting the implementation were identified. Thus suggestions and recommendation might be made to school administration and practicing teachers who want to initiate an educational change.

## Method

The study employed qualitative and quantitative research methods for data collection in order to study the process of the implementation of the school-based curriculum in a local primary school from 2003-2006. Concerning the qualitative approach, the standardized open-ended interview approach was employed (Patton, 1984). The basic principle is that the response format is open-ended. The interviewees responded in their own words to express their own personal perspectives. During the interview, the researcher might pursue issues that were not anticipated as she was the only interviewer and was in charge of the whole study. On the other hand, concerning quantitative approach, when filling a questionnaire, the respondents were requested to fit their knowledge, experiences and feelings into the researcher's categories. Table 1 summarizes the methods and the purposes of data collection.

The school studied in the present research is located in a public housing estate in Hong Kong. It is a single session school. The school has implemented the school-based curriculum in General Studies since 2003-2004. Each year, they prepared a 'school-based' unit for each level. As classroom teachers are in the best position to effect educational change directly, after a unit was taught, all the 18 subject teachers held evaluation meetings to make suggestions for improvement. At the end of the year, they wrote reflection reports and shared their experiences during the evaluation meeting. Comments and suggestion were documented. Students and parents also aired their comments by filling in questionnaires.

By the end of the school year, 2005-2006, the third year of the implementation, the researcher interviewed the different stake-holders, i.e. the head teacher, and the subject

panel, so as to study why they initiated this educational change in their school/classrooms. Seven teachers/level coordinators were also interviewed so as to investigate their perception of the school-based curriculum development and challenges confronted during the process of this educational change. The major interview questions are:

- Who initiated the educational change, the implementation of the school-based curriculum in General Studies?
- Why the educational change was initiated?
- What was the role of the head teacher in this educational change?
- What were the strategies in introducing/implementing the school-based curriculum?
- What kinds of supports were provided by the school?
- Please comment on the collaboration of lesson preparation. Any suggestions for improvement?
- What were the effects of the implementation of the school-based curriculum?
- What were the difficulties encountered during the implementation?
- Please make suggestion for improvement if the school continues to implement the school-based curriculum in the coming school year. Any supports or resources requested?

Fullan (2001) argued that students not only are the potential beneficiaries of educational change, but also participants in the process of change. He also commented that parents may initiate, reject, support or block educational changes in schools. Consequently students and parents were also invited to fill in a questionnaire to reflect on their perception on the school-based curriculum and the assessment in General Studies at the end of the school year. The major questions on the

questionnaires are:

- Do you agree that the theme of this year's school-based curriculum help promote the interest of your study/the study of your child?
- Do you agree to the school policy that different modes of assessment should be employed to assess your learning/the learning of your child in the SBC units and the marks would be 10% of the total scores?
- Do you agree that the marks from the assessments of the SBC units can be raised to 20% of the total scores?

## Results

This section shows the results drawn from the data collected in the present study. They include perceptions of teachers towards the school-based curriculum, the implementation of the school-based curriculum, effects of the implementation, difficulties encountered during the implementation, supports received and requested, suggestions for improvement, as well as perceptions of the students and the parents towards the learning and assessment of the school-based curriculum units.

### *Perceptions of Teachers towards the School-based Curriculum*

During the interviews with the subject teachers/level coordinators, all of them saw that they had to implement the policy of the school-based curriculum in General Studies as the English panel in their school had already been implementing it with the assistance of the former Education and Manpower Bureau (EMB). They saw the policy of the school-based curriculum as the trend in the educational community. Furthermore, subjects such as Chinese, Mathematics and Music in their school also started to implement the said policy. Most of them claimed that in organizing the school-based curriculum, teachers should take the interests and the abilities

of students, as well as the school and the community environments into consideration so that the teaching and learning effectiveness could be enhanced. Only one teacher stated that the teachers' capabilities should also be considered in planning the school-based curriculum.

### *Implementation of School-based Curriculum*

The interview data from the head teacher, the subject panel and the teachers showed the details of the implementation of the school-based curriculum in General Studies in the school studied in the present study. The process of the implementation can be summarized in terms of the three stages of any educational change: unfreezing, changing, refreezing (Cheng, 2002).

#### 1. Unfreezing

During the interview, the subject panel admitted that she was the one who initiated this educational change. As the new General Studies curriculum should be implemented at all levels since the school year, 2004-2005 and the school-based curriculum was advocated in the General Studies for Primary Schools Curriculum Guide (Curriculum Development Council, 2002), she saw the need for the implementation. Consequently, she approached the head teacher and obtained her full support, including the allocation of teaching staff, and the provision of learning and teaching resources. On the other hand, during the interviews, teachers who had implemented the school-based curriculum in 2003-2004 reflected that they were told to adopt this new policy. It was something from the administration side.

However, the three dimensions in implementing a new policy (Fullan, 2001) were taken in consideration by the school administration. During the interview with the panel secretary, she

reported that she joined the workshops organized by the former Education and Manpower Bureau (EMB) in order to take a leading role in the implementation. Teachers were encouraged to join the courses/activities organized by the EMB so that they were better equipped with the new curriculum, the new teaching approaches, e.g. the inquiry approach, and eventually, they would have a change of their teaching beliefs. Most of the teachers, during the interviews, claimed that they acquired some basic knowledge of the new curriculum, the new teaching approaches either through the courses organized by the EMB or the talks conducted by the panel. They were also encouraged to request adequate teaching resources in order to facilitate students' learning and their teaching.

## 2. Changing

During the interview with the head teacher, she emphasized that in order to support this educational change, she worked together with the subject panel in assigning the teaching load of all the subject teachers so as to ensure at every level there was at least an experienced teacher to play an advisory role. The subject panel also reported that in order to help the teachers in the panel, at the start of the school year, 2003-2004, she and the panel secretary proposed themes for teachers' consideration to be taught as the school-based curriculum units. The themes either belonged to the strand, health and living, that teachers should be familiar with, or should be taught as school-/community-based, e.g. Going to School, the Gardens, Our Community and Good Shopping Places. Teachers also made different proposals during the panel meeting.

Teachers teaching the same level held fortnightly meetings to prepare lessons jointly so that they could support and learn from each other. In the process of designing the school-based curriculum, the teachers adopted the

backward design process (Wiggins & McTighe, 2005). They started with discussing what they wanted students to be able to do, what evidence what they wanted to collect from the students to show that they had learned, and then they designed how the students would learn by engaging in major learning activities. During these three stages, teachers always referred to the General Studies for Primary Schools Curriculum Guide to ensure the basic characteristics of the curriculum were catered for (Chai, 2004), e.g. whether students learned the basic concepts, generic skills, as well as values and attitudes in the SBC unit, Culture of China. In planning activities for the theme, Life: Change, Change, Change, interests and needs of their p.5 students were emphasized. Furthermore, teachers organized service learning activities in the district for the theme, Our Community. On the other hand, when planning the hands-on activities/scientist investigation for the theme, Technological World, they received support from the school by the provision of different teaching and learning resources, and the support from the former EMB by organizing workshops for them. They also collaborated with other subjects, e.g. Chinese, English, Mathematics, Art and Craft, because this theme was taught as an interdisciplinary unit.

Among the six units to be taught in a year, teachers only developed a school-based curriculum unit and produced a booklet for the students. During the second and the third year, when the teachers adopted the previous SBC theme(s) in their teaching, they had to provide justification for adopting or modifying elements in the previous themes for monitoring purposes. After each SBC unit was taught, teachers held evaluation meeting to assess the learning of the student and their teaching, and to make suggestions for improvement in order to reduce the damages caused by

the change if there were any Cheng (2002). Teachers also held evaluation meeting by the end of the school year.

By the end of the third year (2005-2006), there were three SBC themes and booklets for each level, as depicted in Table 2. Themes such as Going to School, the Gardens (p.1), My Friends, Our Community (p.2), Good Shopping Places/Good Sightseeing Spots (p.3), Hong Kong in the Past (p.4), Life in the City, and Our Economy (p.5) belong to the strand, community and citizenship of the General Studies central curriculum. Themes such as I am Getting Older (p.1), Growing Up (p.2), My Health (p.4), and Life: Change, Change, Change (p.5) belong to the strand, health and living whereas Animals and Plants in Hong Kong, the Weather of Hong Kong (p.3) and Natural Resources (p. 4) belong to the strand, people and environment. Teachers were more familiar and had more confidence in teaching themes of above three strands. On the other hand, themes such as Culture of China, Technological World, and a Global Perspective (p.6) belong to the strands, national identity and Chinese culture, science and technology in everyday life, and global understanding and the information era respectively. Teachers, during the interviews, reported that they chose these strands as they preferred to work together to prepare lessons so that the learning of the students could be facilitated more effectively.

### 3. Refreezing

During the process of implementation, the refreezing stage went along with the stage of change once teachers started to implement the school-based curriculum. After each SBC unit was taught and at the end of the school year, teachers held evaluation meeting to celebrate their good practices, identify the unfavourable effects and make suggestions for improvement in

order to minimize the unfavourable effects.

In the school year, 2006-2007, in order to institutionalize their good practices and to remove the unfavourable effects, teachers, at their penal meeting, decided that they did not develop a new unit for each level. On the contrary, they took time to do reflection and evaluation on implementing the SBC units during the past three years and plan for the development in the next school year.

#### *Effects of the Implementation*

The following summarizes the ideas reported by the teachers/level coordinators during the interviews about the effects of implementing the school-based curriculum in General Studies during the past three years, 2003-2006.

*Organizational change.* During the interview, the head teacher admitted that since the implementation of the school-based curriculum, she worked together with the GS panel to place teachers in teaching different levels. It is because they had to make sure that there was at least an experienced teacher to help the planning and coordination work in that particular level though he/she might not be the level coordinator (due to manpower allocation problem). The head teacher said that before the implementation of the SBC, she did the placement easily by herself as teachers just taught according to the textbooks.

*Continuous professional development.* During the interviews, teachers all admitted they worked very hard and spent more time in searching for more reference materials, and preparing the SBC booklets and worksheets. Though the official schedule for collaborative lesson preparation meeting was once in a fortnight, if teachers taught two levels, they had to attend meetings every week. During the meeting, they discussed

about the curriculum content, the design of learning and teaching strategies, as well as the modes of assessment. They also organized different community-based activities for the students, e.g. visiting the nearby shopping mall or amenities facilities.

During the interviews, some teachers admitted that through the collaborative lesson preparation, they learned more about the new GS curriculum, new teaching strategies, interests and needs of their students, and had more confidence in their teaching. Moreover, most teachers saw the value of the SBC in teaching the units such as My School (P.1), Our Community (p.2), and Good Shopping Places (P.3). Some teacher commented that when teaching the science topics, teachers should also adopt the approach of the SBC according the availability of teaching resources in school so that students can do experimental activities themselves.

*Students' engagement.* During the interviews, all the teachers reported that the implementation of the school-based curriculum was good for the students. They had more interest in lessons. Some teachers stated that their students had more confidence and better performance in the presentation after group discussion. Other teachers also reported that their students were enthusiastic in searching for references and in doing their projects.

#### *Difficulties Encountered during the Implementation*

During the interviews, though all teachers showed no objection to the implementation of the school-based curriculum and claimed their students showed more interests in the lesson, they reported the following difficulties:

*Lower status of General Studies.* The head teacher, the subject panel and the teachers/level coordinators who were interviewed all admitted that they had to make way for the major subjects,

Chinese, English and Mathematics. It is because students of primary 3 and primary 6 have to sit for the Territory-wide System Assessment for these subjects. Consequently, GS was considered as a minor subject and collaborative lesson preparation meetings were to be held once a fortnight, whereas the meetings for the major subjects were held weekly. Moreover, the head teacher frankly reported that in allocating teachers' teaching load and the duty of being the level coordinator, she had to consider the staffing of the major subjects first.

*Heavy workload.* Among all the 18 General Studies teachers, most of them taught one or two classes. Out of 30-32 periods in a week, they only taught 4-8 periods (4 periods for each class). Consequently, during the interview, a teacher complained that she had done much more in GS than in the major subject. A lot of time was spent in collaborative lesson preparation (formal and informal meetings), preparing and revising worksheets. Furthermore, though the official collaboration lesson preparation meetings were to be held once a fortnight, most of the teachers reflected that they could not afford to have it once a week as they had meeting(s) after school every day. They did not have enough time for lesson preparation.

*Different beliefs and agenda of some teachers.* During the interviews, though most teachers reported the value of the school-based curriculum in teaching the units concerning the school and the local community, some doubted the need of implementing the SBC when teaching the science topic such as Hot or Cold (P.3), and the unit about Mainland China, Our Homeland (P.5). She presumed that all students in Hong Kong should learn the same curriculum about China and the science topics. Some teachers also doubted the need of producing the booklets themselves. They

stated that the textbooks and the workbooks in the market were much better than their own booklets. For example, in the textbook, the photos and pictures about China were colourful and very beautiful. They saw the production of booklets as a symbol, a sign to show that something was done for the school-based curriculum development. Moreover, some claimed that they could not see reasons of revising the booklets and the worksheets produced in previous years as they were very good indeed. On the other hand, some teachers complained that the school should wait and learn from the experiences of other schools as so far not many schools implemented the SBC in General Studies.

*Short time span in a lesson.* During the interviews, some teachers reported that in order to cater for the needs and interests of the students, they provided students with more learning and assessment activities. However, all had to be done in a hurry in lessons of 30 to 35 minutes. Consequently, they requested to have more double lessons instead of having only one in a week.

*The problem of classroom management.* During the interviews, the subject panel and a teacher reported that some teachers might encounter the problem of classroom management, as some students were too excited in participating in various learning or assessment activities. Some of them were not used to group discussion/work.

*Support Received and Requested*

During the interviews, some teachers appreciated the time set for joint lesson preparation. Though it was only once in a fortnight, they admitted they could not spare more time for it as each of them also taught the major subject(s), such as Chinese, English or Mathematics. Consequently, they squeezed time for 'unofficial' discussion.

During the interviews, the subject

panel and the panel secretary reported that they received full support from the school administration in implementing the school-based curriculum, especially the provision of the learning and teaching resources as well as funding for outdoor learning activities. Teachers were also supported by the workshops/courses organized by the EMB or the panel. On the other hand, the head teacher admitted that when she heard about the complaints of the teachers, she tried to clarify the issue, comforted the teachers at different occasions and encouraged them to work for the benefits of the students.

During the interviews, some teachers requested more collaboration, and division of labour among themselves. Some requested more double lessons so that there would be more time for group work/discussion, presentation and other assessment activities. On the other hand, a few some teachers requested more autonomy in designing learning and assessment activities. Ownership of their product was emphasized as they wanted to put their ideas into practice.

#### *Suggestions for Improvement*

During the interviews, some teachers stressed that the school should not do anything just for the sake of change. Learner-centred should be emphasized. Another teacher urged to have more freedom in designing worksheets and learning activities as long as the basic criteria were fulfilled. On the other hand, a teacher suggested that teachers should have more confidence in the 'curriculum slimming', after referring to the needs and interests of the students. Students should not be spoon-fed. On the contrary, they should do more inquiry or participate in the hands-on activities.

#### *Perceptions of the Students and the Parents*

During the interview, the subject

panel reported that since the new General Studies curriculum was first introduced in 2003-04, the school introduced the ideas of the school-based curriculum briefly to the students and parents. Project learning was adopted by the school in dealing with the SBC units.

On the questionnaires, in the academic year 2005-2006, 91% of the students remarked project learning could promote their interest in the study of the SBC units, as some of them conducted their inquiry work outside the school campus. 80% agreed different modes of assessment could help their learning in the SBC units, and marks would be counted as 10% of the total scores. It is because by means of their project work, they were assessed in different aspects, i.e. knowledge, skills and attitude. On the other hand, 70% of the students did not agree to raise the percentage to 20% of the total scores in 2006-2007.

Concerning the feedback of the parents on the questionnaires, they had the similar points of view as those of the students. 87% of them agreed that different modes of assessment could help the learning of their children and marks would be counted as 10% of the total scores but 59% did not agree to the higher percentage, 20% of the total scores in the next year. Maybe they had more confidence in helping their children revise the textbooks and the worksheets, and saw it a 'better' way to score higher marks.

### Discussion

From the data analysis of the present study and based on the concepts of intended, implemented and attained curriculum, a model of implementing the school-based curriculum in a subject classroom, Figure 3, is presented. Since 1997, the Hong Kong Government has been implementing a series of education reform measures, so as to prepare students to pursue all-round development through life-long learning

(Education Commission, 2001; Curriculum Development Council, 2001). Curriculum guides of different key learning areas (Curriculum Development Council, 2002) were produced. Different professional development programmes were organized in order to help teachers familiar with the intended curriculum. Schools are encouraged to design the school-based curriculum conducive to effective the learning of students. This is illustrated as the top left box, S1, and the left circle, C1, of Figure 3.

Through professional development programmes, teachers were introduced the concept of the school-based curriculum, major characteristics of the new General Studies curriculum, the new teaching approaches and strategies so that they could also change their beliefs about teaching General Studies when necessary. It is because their understanding was affected by their own histories and beliefs of teaching. These are illustrated as top middle circle, C2, and the three circles, C3, C3A & C3B, at the top right side of Figure 3. All these affect what happens in the classroom, the implemented curriculum, the square in the middle, S2.

Teachers jointly prepared lessons, designed major learning and assessment activities which helped to promote the implementation of the SBC in General Studies classrooms, the implemented curriculum. The implementation was also facilitated by the support provided by head teacher who was ready to support the educational change by providing different resources and comforting the teachers. Furthermore, the school ethos of lesson observation and the formative assessment system facilitated the educational change. However, teachers also had to be very cautious in communicating with the parents who became very anxious when textbooks or workbooks were not adopted. Some saw no way to help their

children prepare for the lessons. All these are illustrated as the square in the middle, S2, and the two circles at its left, C4 & C5A, of Figure 3. On the other hand, the implementation was negatively influenced by the various difficulties encountered by the General Studies teachers, e.g. the lower status of General Studies, heavy workload, different beliefs and agenda of some teachers, short time span in a lesson and the problem of classroom management.

Students' behaviour such as their active participation in the learning and assessment activities, illustrated as the circle, C5, in the middle of Figure 3, was not only affected by the design and quality of the activities provided by the teachers, but also their expectation on the teachers and General Studies lessons. On the other hand, the assistance provided by some parents after school also affected students' attitudes in the lessons. These are illustrated as one small circle, C5B, and one small circle, C5A, of Figure 3.

At the start of their teaching, the teachers made new didactic contracts with their students (Brousseau, 1996) about the SBC, their behaviour, and activities in the class depicted as the circle, C6, of Figure 3. The attainment of the students, the attained curriculum, depicted as the square, S3, at the right side of Figure 3, was the outcome of the students' activities and performance in the class. However, it was also enhanced by the assistance provided by their parents after school, especially in doing workbooks/worksheets and preparing for tests/examinations.

## Conclusion

The data in the previous sections show most of the teachers reported they were told to implement the school-based curriculum. They worked hard, prepared the lessons jointly, and claimed that students showed more interest in lessons.

Though they received full support from the head teacher and benefited from collaborative lesson preparation, some of them encountered various difficulties, such as the lower status of General Studies, heavy workload, time constraints, different agendas of some teachers, a lot of time spent in preparing worksheets or searching for references, short time span in a lesson and the problem of classroom management.

The results of this study may be used to advise schools or policy makers that though most teachers proclaimed that they realized the trend and appreciated the effects of implementing the school-based curriculum, some of them might not see the meaning of this educational change. In fact, the school administration did provide teachers with professional development programmes to help them grasp the three dimensions in implementing the new policy. However, it may be easier for teachers to learn the concepts of the school-based curriculum, the new General Studies curriculum and the new teaching approaches, but teaching beliefs may not be changed in a short period of time. During the interviews, after three year's implementation, some teachers still claimed they did not see the need of implementing the school-based curriculum. Some saw the booklets produced as only a symbol of the SBC/some thing was done. In order to support the panel and the teachers, the head teacher tried hard to comfort the teachers and encouraged them to work hard for the benefits of the students when she heard the complaints. However, it is recommended that in order to sustain the implementation (institutionalize it), there should be systematic reflection and experience sharing (Esposito & Smith, 2006) so that teachers can learn from and support each other in the process of the educational change in a professional learning community. For example, collaborative

lesson preparation meetings may be held weekly so that teachers have more official time for sharing and reflection. Furthermore, some common criteria and guidelines may be developed in the panel meeting so that teachers may see clearly the meaning and the value of producing the school-based curriculum booklets, as well as preparing and revising worksheets.

On the other hand, during the era of education reform, there are needs and benefits in implementing different measures at the same time, but the teachers may be overloaded (Fullan, 2001), especially in the case of the minor subject, General Studies, compared with the three major subjects. Thus, the implementation of the school-based curriculum in General Studies requires more than willing individual teachers, e.g. the subject panel, the panel secretary or level coordinators. Though they were willing to work very hard, they could not be overloaded over years. Rather, there needs to be a deep re-conceptualisation of the nature of knowledge, teaching and learning, and changes in the practises of the subject department, supported by the principal, the school administration, parents and students. The meaning of the educational change must be accomplished at every level of the school system (Fullan, 2001). Consequently, the head teacher, the subject panel and level co-ordinators have to discuss thoroughly with all teachers in the panel the school policy in dealing with the teaching and learning of this subject and its place in the school curriculum. The school administration may hold discussion again with all the teachers in the school to see how a longer time span in a lesson, e.g. 50 minutes, can be arranged if the arrangement of more double lessons is not feasible but were requested by different subject panels. The school administration has to ensure all the

policies and systems work with each other and agree with each in order to promote the learning of students, and teachers find meaning in the process of such an educational change and possess ownership of the change.

Last but not least, as students and parents do not have a comprehensive concept of the school-based curriculum, nor have the experiences in their previous education, different official channels, such as the Parents and Teachers Association, morning assembly, may be employed to officially communicate with parents and students the characteristics of the school based curriculum and their role in implementing such an educational change. When parents and students can clearly tell the needs and the interests of students, teachers can plan the school-based curriculum more effectively and students' learning can be enhanced.

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**Author:**

**Dr Wong Yu Lai Wah**, Assistant professor, Dept. of Mathematics, Science, Social Sciences and Technology, Hong Kong Institute of Education.

e-mail: [lwwong@ied.edu.hk](mailto:lwwong@ied.edu.hk)

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**Table 1**

## Methods and purposes of data collection

Time	Data Collection	Purposes
1. After each unit was taught	1. GS teachers of each level met for evaluation.	1. To provide feedback about teaching and learning in the school-based curriculum (SBC) units.
2. At the end of an academic year	1. All the GS teachers held the evaluation meeting. 2. Students filled in questionnaires. 3. Parents filled in questionnaires.	1. To collect data about the teaching and learning in the SBC units. 2. To provide feedback about their learning and assessment in the SBC units. 3. To provide feedback about students' learning and assessment in the SBC units.
3. At the end of the third year of this study	1. The head teacher, the subject panel, level coordinators and subject teachers were interviewed by the researcher.	1. To collect their perception of the school-based curriculum development, the process of implementation, difficulties encountered, resources acquired and requested, and suggestion for continuation.

**Table 2**

Themes implemented in 2005-2006

Level	Theme	Theme	Theme
Primary 1	Going to School	I am Getting Older	The Gardens
Primary 2	Growing Up	My Friends	Our Community
Primary 3	Good Shopping Places / Good Sightseeing Spots	Animals and Plants in Hong Kong	The Weather of Hong Kong
Primary 4	Natural Resources	My Health	Hong Kong in the Past
Primary 5	Life in the City	Our Economy	Life: Change, Change, Change
Primary 6	Culture of China	Technological World	A Global Perspective

**Table 3**

## Difficulties Encountered during the Implementation

Difficulties encountered during the Implementation	Occurrence in the interviews (N=9)
Lower status of General Studies	9
Heavy workload	6
Time constraints - not enough preparation time	3
Different agendas of some teachers	3
A lot of time spent in preparing worksheets or searching for references	2
Short time span in a lesson	2
The problem of classroom management	2

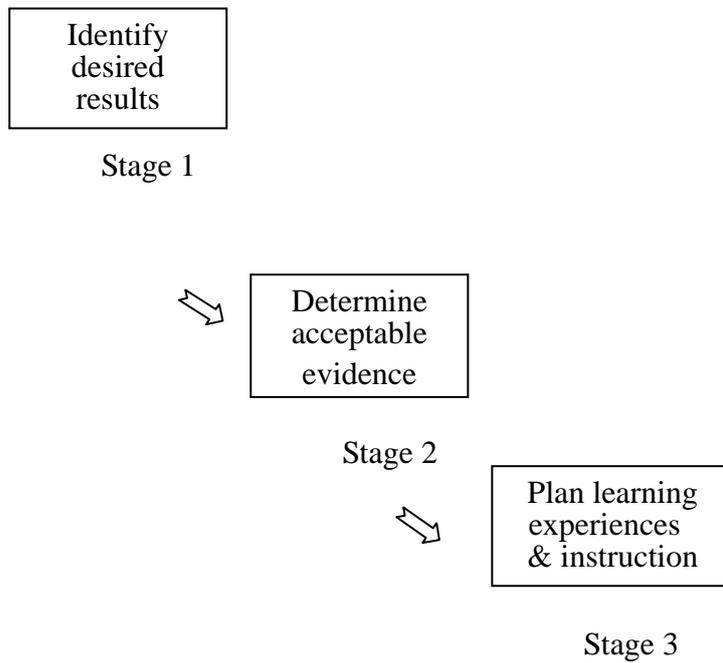
## Figure Caption

Fig. 1 Backward design process

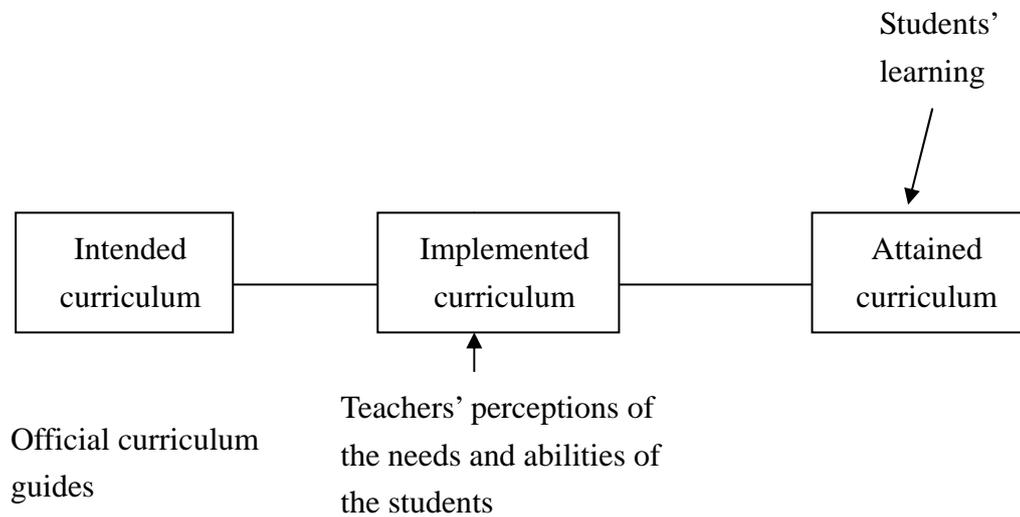
Fig. 2 Intended, implemented and attained curriculum

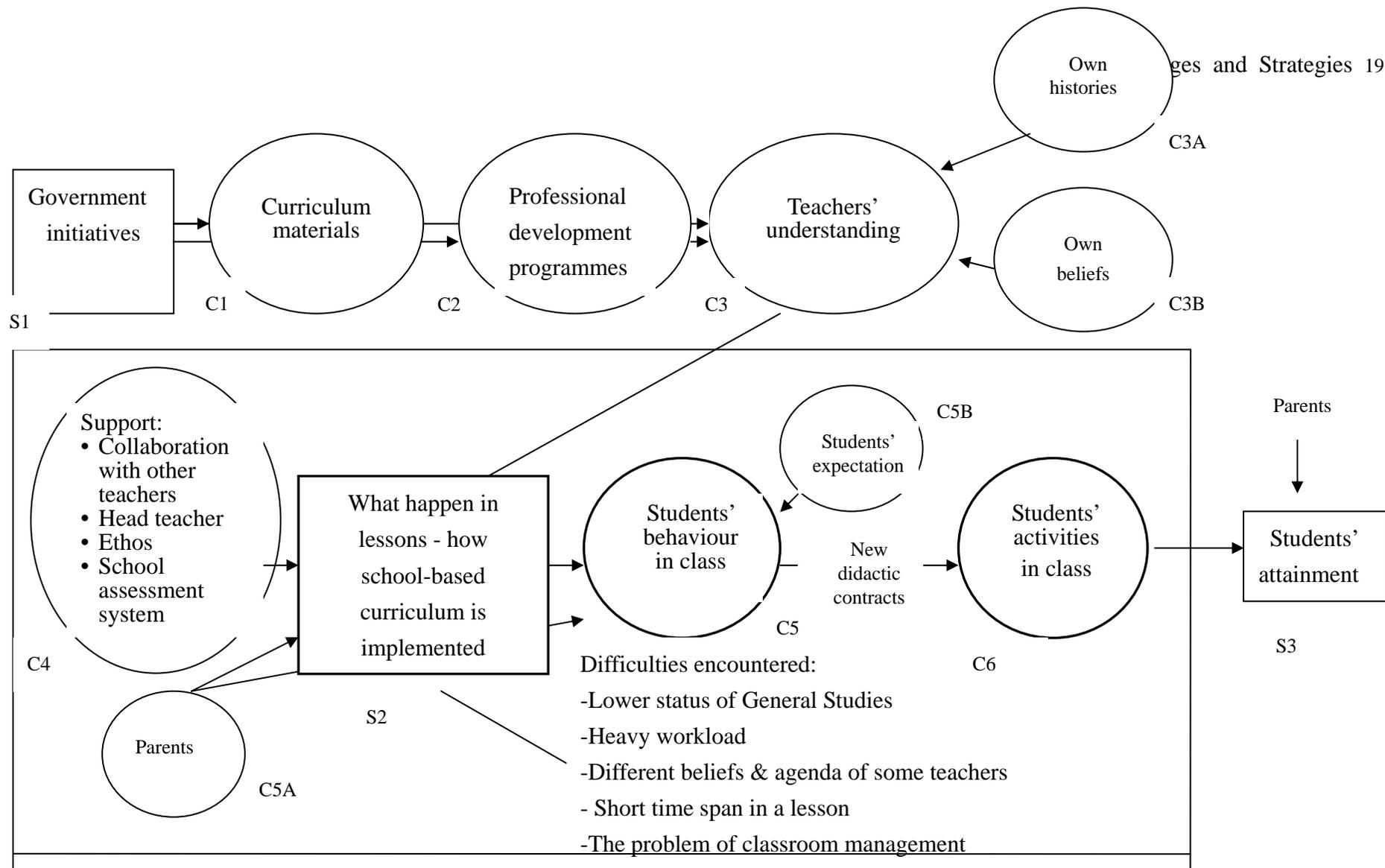
Fig 3: A model of implementing school-based curriculum in a subject classroom

**Fig. 1. Backward design process**



**Fig. 2 Intended, implemented and attained curriculum**





**Fig 3: A model of implementing school-based curriculum in a subject**

