

**A Study of School-based Curriculum Development in Mainland China – from a Cultural  
Perspective**

by

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## Abstract

In recent years, the strengthening of decentralization in education has been identified in Mainland China, based on the release of official documents and policies for schools with specific, relevant instructions for school-based curriculum development (SBCD). However, the researcher considers that understanding the curriculum as content instead of experience in Mainland China has confined the implementation of SBCD. Thus, because the Chinese characteristics of SBCD are more likely to be understood as a School-based Curriculum (SBC), few empirical studies on SBCD in Mainland China have been accordingly conducted. This study explored SBCD in the Chinese context from both the macro and micro perspectives by considering curriculum as experience.

In this study, four case schools were selected in recognition of the effect of collaborative school culture on school practices and improvements and on the basis of the school culture determined from the School Culture Survey (SCS) questionnaire. The SCS questionnaire was confirmed as a reliable and valid instrument in the local context with small-(backward and forward translation and modification of wording) and large-scale pilots (Exploratory Factor Analysis) by two factors –Collaborative Leadership (CL) and Collaborative Partnership (CP). The questionnaire was then distributed to 800 school teachers in 23 primary schools in a district. As a result, four case schools were identified by analyzing the qualitative data collected from 657 recipients using one-way ANOVA and an independent t-test.

To comprehensively explore the four case schools from both macro and micro perspectives with (1) directions of change of the entire school curriculum (i.e., curriculum content, assessment, and administration, as well as learning processes), (2) forms (i.e., developmental scale, theme, design, time, developers, and activity type), and (3) developmental processes (i.e.,

goal setting, design and mechanism, implementation, and evaluation and revision) of a school-based curriculum (SBC) within each case school, qualitative data were collected through government/school documents and by interviewing 24 school leaders/ class teachers (7, 6, 5, and 6 interviewees from Schools A, B, C, and D, respectively).

The study results indicate that SBCD varies in a similar collaborative school culture (high collaborative school culture of both high CL and CP) as a new, valid, and reliable SBC instrument is developed in the Chinese context. Additionally, the Westernized SBCD is identified in such a centralized and high collaborative culture, and the case schools tended to cut loose from the SBCD confinement (which focuses on an SBC) and to implement the Westernized SBCD for all school improvements. Curriculum change forces, such as evolving curriculum strategies and the factors affecting SBCD are identified and discussed in a Chinese context. This research also contributes to the set of empirical studies on SBCD in Mainland China.

The findings of this study indicate that various conceptions of the curriculum lead to different SBCD orientations; thus, it is suggested that an effective implementation of SBCD should be grounded on the framework of the curriculum as experience. Moreover, the conceptual framework of this study – to explore the school curriculum with both macro and micro perspectives – could be recommended as the conceptual framework for the thorough SBCD explorations of studies in other areas, especially in Asia where curriculum is generally regarded as content.

However, the similarities and differences of SBCD among the schools cannot be explained by the cultural factor; thus, it is considered that the limited sampling (sampling in the same cultural pattern) which less cultural impact (CL & CP) limits this study. Therefore, changing selection strategies for case schools in future studies is suggested to reveal increased SBCD

differentiations among schools.

*Keywords:* school-based curriculum development, culture, Mainland China, curriculum as experience



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## List of Abbreviations

ANOVA	One-Way Analysis of Variance
CL	Collaborative Leadership
CP	Collaborative Partnership
EFA	Exploratory Factor Analysis
KMO	Kaiser-Meyer-Olkin
M.O.E.	the Ministry of Education
NCR	National Curriculum Reform
NBEP	New Basic Education Project
Q1	(Main Research) Question 1
Q2	(Main Research) Questions 2
SBC	School-based Curriculum
SBCD	School-based Curriculum Development
SCS	School Culture Survey
SCEQ	School Cultural Elements Questionnaires
HSCP	History of the Shenzhen Communist Party

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## **Chapter 1: Introduction of the Research**

### **1.1 Introduction**

This chapter introduces the research by stating the background and significance of the whole study and constructing the main research questions. At the end of the chapter, the thesis outline will be illustrated to provide a clear and general guide for readers.

### **1.2 Background of the Study**

K is a small district in Shenzhen City, Mainland China. The researcher is quite attached to this place because it is where she was born and raised. K district is also where the researcher learned about SBCD during her conversation with the director of the district's Teaching and Research Office. As she obtained more information about SBCD, particularly the difference in understanding this topic in China and other areas (Marsh et al., 1990; Xu & Wong, 2011), her interest in investigating SBCD further increased.

Fifteen years have passed since Mainland China officially followed the international trend in 2001 by publishing a three-level curriculum management policy in "The Compendium of National Curriculum Reform in Basic Education (tentative)" ("The Compendium") by the Ministry of Education (M.O.E.) (M.O.E.(1), 2001), but the importance of SBCD is still on the rise. In 2014, the Ministry of Education of the People's Republic of China issued "The Proposal about Completely Deepening National Curriculum Reform as to Establish the Basic Mission of Strengthening Morality and Fostering Talent" (M.O.E.(2), 2014), wherein the

necessary attention on school-based curriculum management was emphasized. Accordingly, in early 2015, “the Instructional Proposal about Completely Deepening National Curriculum Reform in Middle and Primary Schools” was issued in Shenzhen City, and the concept of SBCD was further explained to generally instruct the schools (Shenzhen Education Bureau (5), 2015) within the city. Moreover, in September 13, 2016, the general framework of “Key Competencies for Student Development in Mainland China” was officially released, the result of a three-year study by a research panel involving around 100 educational experts from all over China (Lin & He, 2016). These “key competencies” of national standards are understood and interpreted as directions for future curriculum changes because they strongly support deepening SBCD in all schools in Mainland China (Cheng, 2016; Xie & Zeng, 2016). Therefore, a new round of school-based reform is expected to commence and pervade Mainland China, including the K district.

The researcher wants to investigate the district for a research on SBCD. Aside from the researcher’s attachment for this place, she aims to provide timely support to the district before it can successfully begin the new round of school-based reform with more targeted instructions. In fact, as a newly established district with a short nine-year history, the district government has been introducing talents into every area of the district, including excellent teachers and Principals in its schools (Education Department, 2014). The context and traditions of the schools within the district have yet to be established, and thus initiating SBCD in the school context is significant.

### 1.3 Significance of the Study

Kelly (2009) says, “The education system is a social institution which should be expected to change with other such institutions. It would be more surprising, not to say disturbing, if the education system were to stand still while all else changed” (p.1). Null (2007) further indicates, “...that curriculum must, can, and should change as the fields of political science, economics, and philosophy change” (p.480). A curriculum continuously changes along with the surrounding context, as corroborated with its own history of development, as illustrated by Schwab (1969).

To ensure that the curriculum responds appropriately to the correct direction, the incidences of planning and preparation in curriculum development are increased. These incidences are some of the features that characterized the curriculum change in recent years and are also “the central concern of educational studies and especially of Curriculum Studies” (Kelly, 2009, p.1).

As such, the concept of SBCD was proposed in the field of education when decentralization was repeatedly demanded within the social context (OECD, 1979). Specifically, SBCD prospered in most Western countries from the 1970s to the 1980s, when there were repeated demands to increase autonomy and participation in the management of every sector of public life (OECD, 1979). Schools, as one of these sectors, are actively involved in the decentralization of curriculum decision making to enhance school improvement, teacher development, and student learning (Law & Xu, 2013). This involvement is proved by the emergence of extensive literature on SBCD from the 1970s and its significant decline from the mid-1990s in the western world (Eggleston, 1980; Marsh et al., 1990; OECD, 1979; Skilbeck,

1984; Sabar, 1991; Kennedy, 2010; Bolstad, 2005).

In fact, the flourishing SBCD in the Western region was setting a new trend in the Asian world. Developing literature in the 1990s about SBCD in Asia was identified as the onset of SBCD introduction in the schools (Bolstad, 2005). Different from the decentralized countries in the Western world, the commonality of SBCD in Asian countries is about “the use of legal and bureaucratic processes to implement SBCD” (Kennedy, 2010, p.9). A top-down approach has made SBCD an important topic in Mainland China by the publication of “The Compendium” in 2001 when it was officially launched (Law & Xu, 2013; Li & Shuai, 2010). In reality, the concept of SBCD existed in Mainland China long before 2001 (Li & Shuai, 2010).

Nevertheless, from the “long” history of SBCD in Mainland China, a strong love–hate relationship clearly exists between the Chinese government and SBCD. From the “Decision on Educational System Reform by the Central Committee of Chinese Communist Party” in 1985 published by the M.O.E. and the “Full-time General High School Curriculum Plan (Experimental)” by the Education Committee of China in 1996, to the “Decision on Deepening Education Reform and Implementing Quality Education” issued in the Third National Education Conference held by the Central Committee of the Chinese Communist Party and the state council and the “Full-time General High School Curriculum Plan (Revised)” published by the M.O.E. in the year 2000, the government created the space and built the platform by which to approach SBCD and launch it officially in 2001 (Li & Shuai, 2010). From 1999 to 2006, SBCD prospered in Mainland China under the government’s approval and encouragement. When the government realized the sharp decline in the study and theoretical exploration of

SBCD, again, in “The Proposal about Completely Deepening National Curriculum Reform as to Establish the Basic Mission of Strengthening Morality and Fostering Talent” issued by the M.O.E. in the year 2014, the autonomy of the schools was reiterated to raise the attention of the schools. This action represents the love part of the relationship between the Chinese government and SBCD. The Chinese government aspires to utilize SBCD to provide some decision-making freedom on the school curriculum. However, as a centralized government, it is also worried that the excessive freedom yielded by SBCD will endanger its ruling. Thus, all documents, guidelines, or proposals issued by the government clearly regulate the proportion of school-based curriculum. The school-based curriculum as content will always be limited to approximately 10% of the entire curriculum within a school (Shenzhen Education Bureau (4), 2014; Li & Shuai, 2010). In any case, the schools are instructed first and foremost to implement the national and local curricula (Law & Xu, 2013; Li & Shuai, 2010; Xu & Wong, 2011).

As a result, SBCD in Mainland China is mostly understood as the total independence of schools in terms of developing a curriculum within a reserved space in the national curriculum plan (Li & Shuai, 2010). The curriculum is considered as content in Mainland China (for further explanations and arguments, refer to sub-sub-sub-subsection 2.3.2.2.2). Thus, many schools misunderstand the essence and significance of SBCD. Some give up on the process, whereas others implement it as an empty slogan (Li & Shuai, 2010; Zeng & Zhou, 2013).

Nevertheless, SBCD is undoubtedly significant and should be attached importance as deemed by the government. After issuing “The Proposal about Completely Deepening National Curriculum Reform as to Establish the Basic Mission of Strengthening Morality and Fostering

Talent” by the M.O.E. (2014), some local education authorities soon drafted instructions for their schools. Thus, in early 2015, the “Proposal of Deepening National Curriculum Reform in Middle and Primary Schools in Yangzhong City”, “Proposal about Deepening National Curriculum Reform in Middle and Primary Schools” by Qingdao City, and “Instructional Proposal about Completely Deepening National Curriculum Reform in Middle and Primary Schools” in Shenzhen City were issued by the Yangzhong Education Bureau (2015), Qingdao Education Bureau (2015), and Shenzhen Education Bureau (2015), respectively. These new proposals clearly emphasized and further explained the concept of SBCD.

Still, in the corresponding proposals, the first and foremost mission of the schools remains the implementation of the national and local curricula, while the school-based implementation of national (and local) curriculum was suggested for the first time in the official documents (Shenzhen Education Bureau (5), 2015; Qingdao Education Bureau, 2015), which was regarded as huge progress.

Since 2007, the related studies and theoretical exploration of SBCD were reduced as its theoretical exploration reached a plateau (Li & Shuai, 2010). However, at present, SBCD in Mainland China is in a new phase of exploration and still has great potential. Thus, determining the appropriate direction for current and future SBCD within the context of Mainland China is critical.

SBCD can be defined as a means, with legal and administrative autonomy and professional authority from the central government, to manage the school’s own curriculum development according to the needs of the pupils, the teachers, and the school as a whole, as well as the

school's internal resources (OECD, 1989; Skilbeck, 1984): SBCD involves all the activities a school is undertaking to improve the entire school according to the need and situations of the pupils, the teachers, and the school itself; the curriculum is considered as experience instead of content or a product; activities are jointly undertaken and developed by the teacher and the learner to improve the entire school—for school improvement, teacher development, and pupil learning.

Therefore, SBCD, which considers curriculum as experience involving all/any activities undertaken by the school, can be explored from a macro perspective to obtain a comprehensive understanding of the entire school development (Law & Xu, 2013). In addition, SBCD can be examined through an in-depth exploration of a change or of one aspect which contributes to the whole school development (Huang & Mao, 2013; Lv et al., 2013; Leung, 2002; Wong, 2003). However, only few studies have explored and revealed SBCD from both macro and micro perspectives to obtain a thorough understanding of the whole school development in schools. Therefore, from both macro and micro perspectives, this study investigates the comprehensive directions of change and a specific school-based curriculum change in schools for a thorough exploration of SBCD.

When looking for the most effective and scientific approach to determine the typical, worthwhile, and instructional case(s) to study SBCD, “school culture” caught the researcher’s attention. School culture, which is extensively recognized for improving a school, is a factor that affects the implementation of school practices and of SBCD (Marsh et al., 1990; Prosser, 1999). The differences of school cultures are expected to lead the differences in SBCD. As



such, the present research will initially investigate the culture in the schools to identify the case school(s) for the study on SBCD. Afterward, by carrying out a multiple case study on SBCD, which was conducted mainly through interviews with school Principals and teachers, this study is expected to contribute to the theoretical and empirical studies underpinning SBCD.

## 1.4 Main Research Questions and Overview of the study

**Table 1 Main Research Questions and an Overview of the whole study**

Main Research Questions	Sub-questions	Framework related to Literature Review	Research Methods	Answers
Q1: What are the cultures in the 23 schools like?	Q1a: Which is(are) the case school(s) identified through investigating the culture of the 23 schools?	The identification of the proposed instruments used for investigating culture by reviewing “2.2 Culture ”	Questionnaire Survey: SCS instrument	In Chapter 4
	Q1b: What are the main characteristics of the cultures of the 23 schools?	Related to “2.2.4 the School Culture Survey (SCS) for measuring school culture”		In subsection 6.2
Q2: How is SBCD implemented in the case school(s)?	Q2a: What are the directions of change(i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration) in the case school(s)?	From the macro perspective to explore the whole school from 4 directions of change – by considering both Fullan (1991)’s 3 dimensions and M.O.E. (2001)’s 5 directions of change (in 2.3.2.2.2 and 2.3.3.1.1)	a) Interviews: face-to-face interviews; telephone interviews b) Document Analysis	In Chapter 5
	Q2b: What forms (i.e., “developmental scale”, “theme”, “type of activities”, “design”, “time”, and “developers”) does the SBC take in the case school(s)?	From the micro perspective to explore a SBC within the school with the 6 dimensions of form of a SBC – by combining Marsh et al. (1990)’s matrix (in “2.3.3.1.2”), Wu (2000)’s matrix (in “2.3.3.2.1”), and Zeng and Zhou (2010)’s distinct dimension (in “2.3.3.2.1”)		In Chapter 5
	Q2c: What are the developmental processes (i.e., “goal setting”, “design and mechanism”, “implementation”, and “evaluation and revision”) of a SBC in the case school(s)?	From the micro perspective to explore the 4 aspects of the developmental processes of a SBC within the school – by synthesizing the developmental processes of the models by OECD (1979) (in “2.3.3.1.2”) and Skilbeck (1984) (in “2.3.3.1.2”)		In Chapter 5
	Q2d: What are the similarities and differences of SBCD among the case school(s)?			In sub-subsection 6.3.1
	Q2e: What emerges in terms of the similarities and differences of SBCD among the case school(s)?	In addition to the discussions on the findings, discussions for Q2e related to “factors affecting SBCD” (in 2.3.3.1.2), “forces of curriculum change” (in 2.3.3.1.1) and “change strategies of curriculum” (in 2.3.3.1.1)		In sub-subsection 6.3.2

This study has two main research questions (Table 1). The first main research question (Q1)

relates to identifying case schools by exploring the culture of all the 23 primary schools in the target area -- K district (for more details refer to subsection 3.4):

**Q1: What are the cultures in the 23 schools like?**

To answer Q1, for both identifying the case schools and exploring the culture of the 23 schools, two sub-questions are explored:

- Q1a: Which is(are) the case school(s) identified through investigating the culture of the 23 schools?
- Q1b: What are the main characteristics of the cultures of the 23 schools?

The second main research question (Q2) relates to exploring SBCD in the case schools:

**Q2: How is SBCD implemented in the case school(s)?**

To answer Q2, each case school is explored from both macro and micro perspective through sub-questions as follows:

A. From the macro perspective

From the macro perspective, SBCD is comprehensively explored by studying some main aspects of change of the whole case school(s):

- Q2a. What are the directions of change (i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration) in the case school(s)?

B. From the micro perspective

From the micro perspective, SBCD is revealed in depth by exploring a SBC of each case school:

- Q2b. What forms (i.e., developmental scale, theme, type of activities, design, time, and developers) does the SBC take in the case school(s)?
- Q2c. What are the developmental processes (i.e., goal setting, design and mechanism, implementation, and evaluation and revision) of a SBC in the case school(s)?

#### C. By comparing the results

By comparing the results of Q2a, Q2b, and Q2c, more details are gleaned by answering the following questions:

- Q2d. What are the differences and similarities of SBCD among the case school(s)?
- Q2e. What emerges in terms of the similarities and differences of SBCD among the case school(s)?

This study has three stages for answering the two main research questions. The first stage is the literature review, where a scientific and effective way to identify case schools from the school culture perspective is determined and the framework to explore SBCD in the case schools is conceptualized.

The second stage is the empirical study, which has two sub-stages. In the first sub-stage, a questionnaire is used as the data collection method to identify the case school(s) for answering Q1(Q1a and Q1b). In the second sub-stage, the case schools are studied for Q2 (Q2a–Q2e)

through interviews and document analysis.

The third stage is the analysis and discussions on data collected from both sub-stages of the second stage to find answers to Q1(Q1a and Q1b) and Q2(Q2a-Q2e) and obtain a thorough understanding of culture and SBCD in the schools.

### **1.5 Outline of the Thesis**

This subsection is about the outline and overview of the whole thesis.

Chapter 1 introduces the background and significance of the entire study and presents the research questions and an overview of the whole study. The outline of the thesis is then listed.

Chapter 2 presents a literature review that covers the two main elements of the study, “culture” and “SBCD”, and frames the research questions accordingly. Additionally, the findings and discussions of the study are presented according to the framework, especially the findings and discussions on SBCD. The discussion of culture first aims to understand culture in general and school culture at various levels of depth and then reveals various levels in studying culture. Consequently, school culture is further explored. The histories of school culture and improvement are intertwined; studies on school culture are mainly for school improvement, and collaborative school culture is a critical sub-culture for school improvement. Therefore, School Culture Survey (SCS) for investigating collaborative school culture and school improvement is introduced and chosen as the instrument for this study. The discussion of SBCD introduces the history of SBCD and the understanding of curriculum and SBCD in both the Western context and Mainland China. Studies on SBCD in both contexts are introduced. An

evaluation of the studies on SBCD in both the Western context and in Mainland China was conducted, which resulted in a framework for the empirical study on SBCD in this current study. This framework includes the directions of change (i.e., curriculum content, learning processes, assessment, and administration), the form of a SBC (i.e., developmental scale, theme, type of activities, design, time, and developers), and the developmental processes of a SBC (i.e., goal setting, design and mechanism, implementation, and evaluation and revision).

Chapter 3 discusses the research design and the data collection methodology of the study. First, the methodology of previous research on SBCD is reviewed, and the research methods, target area, and target schools for this study are justified. The preliminary studies of the research are presented. The two stages of research for the study (both quantitative and qualitative research of the research) with piloting details and data collections are introduced. The data of stage 1 (focuses on culture) of the research were collected by questionnaire survey for Q1 (Q1a and Q1b). The stage 2 data (focusing on SBCD) of the research were collected through case studies with document analysis and interviews mainly with school principals and teachers for Q2. At the end of this chapter, the validity, reliability, and ethical issues of the research are presented.

Chapter 4 includes two rounds of data analyses to discuss the questionnaire results for the answers to Q1a.

Chapter 5 presents the qualitative data collected from stage 2 of the study and the answers to:

- Q2a: What are the directions of change in the school?
- Q2b: What is forms (i.e., developmental scale, theme, type of activities, design, time, and

developers) does the SBC take in the case school(s)?

- Q2c: What are the developmental processes (i.e., goal setting, design and mechanism, implantation, and evaluation and revision) of a SBC in the case school?

Accordingly, the findings on each case school are introduced with the framework of “directions of change” of the whole school, the “form,” and “developmental processes” of a SBC.

Chapter 6 discusses the answers to both the culture part and SBCD part:

- Q1b: What are the main characteristics of the cultures of the 23 schools?
- Q2d: What are the similarities and differences of SBCD among the case schools?
- Q2e: What emerges in terms of similarities and differences among the case schools?

The discussions are based on the findings and discussions presented in the previous chapters.

The points reviewed in the literature reviews would also lead to the framework of discussion.

Chapter 7 presents the conclusions, implications and limitations of this study. The overall findings conclude in this chapter. The implications of the study are also revealed. At the end of the chapter, limitations of the study and relevant further studies are discussed.

## 1.6 Summary

This chapter had introduced the background and significance of the whole study. Two main research questions with seven sub-questions have also been presented. Additionally, an overview of this research and the outline of the whole thesis have been briefly revealed. The

next chapter discusses the literature reviews on both culture and SBCD.



## Chapter 2: Literature Review

### 2.1 Introduction

This chapter focuses on two main elements of the study: culture and SBCD. The purpose of the discussion of culture is to identify the most suitable cultural instrument to select case school(s). The literature review on SBCD is focused on constructs and the framework on exploring SBCD. Accordingly, the research questions, findings, and discussion of the thesis are constructed.

### 2.2 Culture

This subsection includes three sub-subsections and their related sub-sub-subsections. The first sub-subsection introduces various levels of culture or school culture by Schein (2004), Hofstede et al. (2010), and Hopkins et al. (1994) to reveal the core level of culture, which is the focus of this study for exploring the culture of schools. The second sub-subsection reveals various levels in studying culture, especially organizational/corporate culture (level), which leads to school culture (level). The third sub-subsection focuses on school culture to determine the most appropriate instrument for investigating school culture for this study.

#### 2.2.1 understanding various levels of culture and school culture.

##### 2.2.1.1 *Schein's three levels.*

Schein (2004) regards culture as consisting of three levels: level 1 is about artifacts and practices that are visible but often not decipherable, including symbols, rites, rituals, myths,

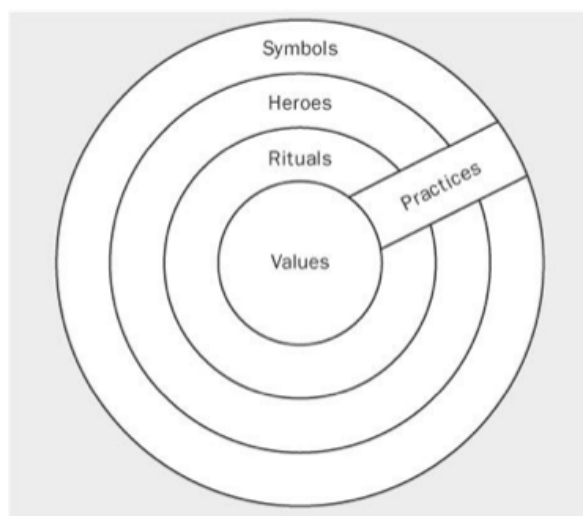


and visible and audible behavioral patterns. Compared to the other two levels, level 1 is the most tangible, visible, and observable level as an indicator of culture. Values, as a sense of what ought to be done, are at a greater level of awareness at level 2, which forms the basis of the artifacts and practices (Schein, 2004). Espoused values, or norms or rules, prove “the day-to-day operating principles by which the members of the group guide their behavior” (Schein, 2004, p.27). Invisible preconscious thoughts that are taken for granted are the basic assumptions at level 3, the deepest level of culture, which is about one’s relationship to the environment, as well as the natures of reality, human nature, human activity, and human relationships (Schein, 2004). This level is the underlying assumption that forms the basis of individuals’ espoused beliefs and values, thus guiding people on how to perceive, think, and feel.

#### ***2.2.1.2 Hofstede et al.’s “Onion”.***

In most Western languages, culture is defined as “civilization” or “refinement of the mind” (Hofstede et al., 2010), which is the result of refinement by education, art, and literature. However, Hofstede et al. (2010) consider such a definition in a narrow sense and argue that culture deserves a much broader definition. Therefore, Hofstede et al.(2010) describes culture as mental programming, that is, as “mental software” (p.2) and the “collective programming of the mind that distinguishes the members of one group or category of people from others” (p.3).

Thus, culture is represented at various levels of depth by “the Onion” (Figure 1)



**Figure 1 The “Onion”**

Based on the “Onion,” “Symbols” is the facial level and the most superficial manifestation of culture, including words, gestures, pictures, objects, clothing, hairstyles, flags, and so on, all of which can be easily developed and copied by others and can easily disappear when new ones arrive (Hofstede et al., 2010). “Heroes” with characters are highly admired in a culture, affecting people’s behaviors regardless if the heroes are alive or dead, real or imaginary (Hofstede et al., 2010). “Rituals” is regarded by Hofstede et al. (2010) as collective activities that are socially essential, including social and religious ceremonies and ways of greeting and paying respect to others. This layer also encompasses discourse, which is the way language is used in text and talk, in daily interaction, and in communicating beliefs). As shown in the “Onion,” “Symbols,” “Heroes,” and “Rituals” are also termed as “practices” because they are all visible and tangible. The core of the “Onion” represents the core of culture, which is “Values.” Hofstede et al. (2010) suggest that values are obtained unconsciously from the surrounding environment, which includes symbols, heroes, rituals, and basic values.

In fact, “Values” by Hofstede et al. (2010) and “basic assumptions” by Schein (2004) are both invisible preconscious thoughts that decide the appearance of the culture and play critical roles in the whole culture. Thus, when talking about culture, such a core level of culture is equated with the whole culture, which in fact comprises several levels. Schein (2004) defines culture as follows:

[a] pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p.17)

### ***2.2.1.3 meanings related to schools by Hopkins et al..***

The following meanings of culture related to schools are offered by Hopkins et al. (1994). The “observed patterns of behavior,” “norms,” “dominant values espoused by the school,” and “philosophy guiding the whole school” are the various levels of culture that were implicitly and explicitly defined by Schein (2004) and Hofstede et al. (2010). However, Hopkins et al. further explain the concepts within the school environment, and the meanings are as follows (Gruenert, 2005):

- The observed patterns of behavior, such as how teachers interact in the staff room, the language they use, and the rituals they establish;
- The norms that evolve in working groups of teachers in terms of lesson planning or monitoring the progress of students;
- The dominant values espoused by the school, typically through a mission statement;
- The philosophy that guides the approach teaching and learning of particular subjects in a school; and
- The unwritten policies and procedures that new teachers have to learn in order to get along in the school or their department. (p. 44)

### 2.2.1.4 culture levels focused on by this study

Based on various cultural levels by Schein (2004), Hofstede et al. (2010), and Hopkins et al. (1994), Table 2 outlines a continuum showing that the top and bottom levels represent the visible and invisible levels of culture, respectively. The top levels of culture are comparatively facial and superficial levels that can be more easily developed and observed, whereas the bottom levels of culture are obtained more unconsciously and are critical to the entire culture. This study focuses on the invisible levels of culture, which are preconscious and regarded as the core of the entire culture.

**Table 2 Collection of Various Levels of Culture or School Culture**

	Schein (2004)	Hofstede et al. (2010)	Hopkins et al. (1994)
Visible Levels of Culture	Artifacts & practices	Symbols Heroes Rituals	Observed patterns Norms
Invisible Levels of Culture	Espoused values	Values	Dominant Values Philosophy
	Basic underlying assumptions		Unwritten policies & procedures

### 2.2.2 various levels to study culture.

Culture can usually be studied at various levels. This sub-subsection aims to determine the appropriate level for exploring culture in this study. Hofstede et al. (2010) divide culture into six levels that could result in the different layers of mental programming of individuals:

- A national level according to one's country (or countries, for people who migrated during their lifetimes);
- A regional and/or ethnic and/or religious and/or linguistic affiliation level;
- A gender level, according to whether one was born as a girl or as a boy;
- A generation level, separating grandparents from parents from children;
- A social class level, associated with educational opportunities and a person's occupation or profession; and
- For those who are employed, organizational, departmental, and/or corporate levels according to the way employees have been socialized by their work organization. (p.15)

Fan (2000) introduces five levels of culture according to the units to be studied, such as international culture (e.g., East vs. West), national culture (e.g., Chinese culture), regional culture/subculture, business culture (e.g., industry or professional culture), and organizational or corporate culture.

Usually, the theories of organization culture are used to study school culture because schools are recognized as organizations. However, Ngan and Lee (2002) point out that schools contain the characteristics of organizations, though organizations and institutes or schools are not the same given their differences in operation rules, regulations, requirements, and environments. Schools are for educating pupils, and thus the innate characters of schools would be different from those organizations seeking for profits or for social welfare. Therefore, this study focuses on school culture.

### **2.2.3 school culture.**

#### ***2.2.3.1 the terms of school culture.***

To date, no consensus exists regarding the terms “school culture,” “school climate,” “school ethos,” “school tone,” or “school atmosphere” to define the vague phenomenon among schools.

However, Prosser (1999) indicates that, generally, school effectiveness researchers use “climate,” school improvement researchers and qualitative sociologists use “culture,” and the “ethereal qualities of schools” are described with “ethos,” “atmosphere,” and “tone” (p.5). From the methodological perspective, generally, “school climate” is the preferred term of quantitative researchers, whereas qualitative workers prefer “culture,” “ethos,” “atmosphere,” or “tone” (Prosser, 1999, p.6). From the late 1980s, “culture” became the predominant term to describe the overall “character” of a school, though its definite meaning is still unresolved (Prosser, 1999).

Gruenert and Whitaker (2015) believe that differences exist between the concepts of school culture and school climate (Table 3), the distinctions between the two concepts are shown as follows:

**Table 3 The Difference between “Culture” and “Climate”**

<b>Culture...</b>	<b>Climate...</b>
... is the group's personality.	.. is the group's attitude.
.. gives Mondays permission to be miserable.	... differs from Monday to Friday, February to May.
... provides for a limited way of thinking.	... creates a state of mind.
... takes years to evolve.	... is easy to change.
... is based on values and beliefs.	... is based on perceptions.
... can't be felt, even by group members	... can be felt when you enter a room.
... is part of us.	... surrounds us.
... is “the way we do things around here.”	... is “the way we fell around here.”
... determines whether or not improvement is possible	... is the first thing that improves when positive change is made.
... is your head	

According to Table 3, compared to “climate,” “culture” is “part of us” and “cannot be felt, even by group members”. As it is explained in sub-subsection 2.2.2, this study focuses on the invisible levels of culture, which are preconscious and regarded as the core of the entire culture. Thus, the term – “school culture” is more suitable for use in this study according to the

abovementioned definitions.

### ***2.2.3.2 the issue of meanings for school culture.***

There is no agreement on the meanings of school culture, and its meanings merely depend on the author's discipline (Prosser, 1999). Prosser (1999) suggests that instead of relying on the definitions to implicitly convey meanings, writers should explicitly address the issue of meanings. Therefore, Prosser (1999) interprets four categories for authors to address the issue of meanings for school culture:

- *Wider culture.* Schools are regarded as part of the society; thus, other levels of culture, such as national culture and local culture, would affect and be part of the schools. When school culture is considered as “wider culture,” the relationship between the cultures of a nation and schools would be emphasized. Considering schools as being in a vacuum and separated from the outside world is also inappropriate.
- *Generic culture.* The generic culture of schools reflects their similarities in terms of the norms, structures, rituals and traditions, and common values and actions. This shared vision underpins the school culture. In literature, generic culture is usually investigated partially as a sub-culture of schooling. For instance, a study about the culture of care in teaching in primary schools is a study on a dimension of generic culture in schools.
- *Unique culture.* Halpin and Crofts' (1963) “Organizational Climate Description Questionnaire” is an example of studies on the dimensions of the unique culture of schools.

It identifies six organizational climates, such as closed, paternal, familiar, controlled,

autonomous, and open. The schools have their own particular and unique culture that is underpinned by their distinctive in-house rules.

- *Perceived culture*. There are two sub-categories in a perceived culture: on-site and off-site perceived cultures. “On-site perceived culture” describes the staff and casual visitors’ views of a school that reflect the elements of its unique culture, whereas “off-site perceived culture” describes the outsiders’ view of a school.

This study should address the issue on generic culture, which is usually investigated partially as a sub-culture of schooling (Prosser, 1999), by considering all the above four categories. The sub-culture of “collaborative school culture,” is the core of school culture critical for school improvement, and more will be explained in following subsubsubsections.

#### ***2.2.3.3 the history of school culture and school improvement.***

By summarizing the understanding of trends in educational theory and practice in the United Kingdom by Prosser (1999), this sub-sub-subsection outlines how and why school culture and organization culture are linked, and why and how school culture and school improvement are connected.

The relation began from the educational theories by Bernstein (1970) which indicate that schools collapse on the basis of inequities in society. In addition, a fundamental change to schooling transpired in the mid-1960s. With the combination of those causing effects, instead of focusing narrowly on issues central to comprehensiveness (e.g., “curriculum evaluation” and “mixed ability teaching”), a minority of researchers in the 1970s began exerting effort to



understand comprehensive schools in holistic rather than partial terms.

The school effectiveness movement started in North America at around the same time. Brookover et al. (1978) suggest that although schools cannot compensate for change and improvement, they can be easily influenced to change and improve. Subsequently, researchers in the United Kingdom started to support this movement, and Rutter et al. (1979) significantly link the understanding of school culture with the effectiveness of schools (Hargreaves, 1995). Thereby, the holistic features of schooling and school culture in particular were refocused.

In the 1980s, a second major movement focusing on school improvement started. This movement further revealed the functions of school culture on school improvement. Specifically, they were aware that school culture was instrumental in bringing about improvement; of the need to assess a school's potential to accept change; of the complexity of changing a school's culture; of the worthwhileness of identifying and agreeing the direction of change; and of the significance of leadership in change and therefore managing culture. (Prosser, 1999, p.4).

During the 1980s, with the resurgence of interest in management and organizational theory in American studies, the writings of school culture were focused on organizational culture and leadership and the relationship between them. "School culture is a nascent concept in educational administration" (Gruenert, 2005, p.44). "During the last twenty-five years, management theory in the form of 'organizational culture' has provided a useful resource for reflecting on the management of schools"(Prosser, 1999, p.10), with change, leadership,

management, and staff professional culture as the foci.

Therefore, school culture and organizational culture are linked in the management of schools. School culture is likewise identified as a value system for schools to instrumentally attain improvement and effectiveness (Cheng, 2000; Dimmock & Walker, 1998; Hargreaves, 1995; Tsang, 2009). Furthermore, school culture plays a decisive role in determining the possibility of improvement (Deal & Peterson, 1999).

#### ***2.2.3.4 the history of collaborative school culture and school improvement***

The above sub-sub-subsection explains the connection between school culture and improvement, and the following section indicates that “collaborative school culture” as a “sub-culture” is critical for school improvement.

Prosser (1999) identifies a retreat from studies on the holistic notions of school culture to studies on sub-cultures and their dynamic relationship. The move places more stress on the specific aspects of education as important dimensions of school culture (Prosser, 1999). “Collaborative school culture” is one of the important dimensions and one of the critical sub-cultures within schools. As Gumuseli and Eryilmaz (2011) point out, “the previous researchers were mostly focused on ‘school culture’, however, the researchers in the twenty first century are much more interested in building the ways of ‘collaborative school culture’ at schools” (p.15). In other words, there has been a move away from studies on the holistic notions of school culture to studies on collaborative school culture and their dynamic relationship.

Collaborative culture is about “working relationships which are spontaneous, voluntary, evolutionary, and development-oriented” (Flore, 2004, p.300). Collaborative culture means that “staff members often talk, observe, critique, and plan together” (Demir, 2008, p.97).

According to Fullan and Hargreaves (1991), schools with professional collaborative cultures also have the following characteristics:

1. Complex problem-solving ability and extensive sharing of craft knowledge.
2. Strong professional networks to share information.
3. Great risk-taking and experimentation (i.e., colleagues offer support and feedback).
4. A rich technical language shared by educators in the school that can transmit professional knowledge quickly.
5. A high job satisfaction level and identification with the school.
6. Continuous and comprehensive attempts to improve the school, when combined with the improvement efforts of the staff. (p.49)

Teacher development can be facilitated for teachers in a school with a collaborative culture through mutual support, joint work, and broad agreement on educational values (Fullan & Hargreaves, 1996; Little, 1990). The capacity beliefs of teachers would also be enhanced because they believe that they have shared the responsibility for accomplishing organizational goals (Demir, 2008; Yu, Leithwood & Jantzi, 2002). Furthermore, a collaborative school culture has a positive influence on student achievement (Bland, 2012). Collaborative school culture is identified as an effective context and the best setting for both student and teacher learning (Gruenert, 2000, 2005). It likewise brings “higher levels of trust and respect among colleagues, improved professional satisfaction, improved instructional practices, better

outcomes for all students, and school change that is maintained over time” (Waldron & Mcleskey, 2010, p.59). Thus this culture makes “an important contribution to both the success of school improvement processes and the effectiveness of schools” (Campo, 1993, p.119).

#### **2.2.4 the School Culture Survey (SCS) for measuring school culture**

The School Culture Survey (SCS) was developed by Steve Gruenert and Jerry Valentine at the Middle Level Leadership Center in 1998 (Gruenert, 2005; Gruenert, 2000) to get “a sense of how much their school culture is collaborative” (Gruenert & Whitaker, 2015, p.60). In other words, this instrument mainly focuses on the collaborative culture within school – the most critical sub-culture for school culture and improvement.

After reviewing the literature related to “school improvement, effectiveness, culture, and climate as well as educational administration” (Gruenert, 2005, p.45), the developers conducted a 79-item pilot survey on 634 teachers in Indiana, and then produced an instrument with 35 Likert-type items containing six factors that contribute to the collaborative nature of a school (Gruenert, 2005). The six factors and their meanings are as follows (Gruenert & Whitaker, 2015):

##### **Factors of SCS**

1. Collaborative leadership measures the degree to which school leaders establish and maintain collaborative relationships with school staff.
2. Teacher collaboration measures the degree to which teachers engage in constructive dialogue that expands the educational vision of the school.

3. Professional development measures the degree to which teachers value the continuous personal development and school-wide improvement.
4. Unity of purpose measures the degree to which teachers work toward a common mission for the school.
5. Collegial support measures the degree to which teachers work together effectively.
6. Learning partnership measures the degree to which teachers, parents, and students work together for the common good of the student.

Given that revealing the “whole” culture of any organization (Schein, 2004) is impractical, the scores assessed by SCS cannot represent the school culture of the whole school (Gruenert, 2000). However, it attempts to inform that the aforementioned school culture’s degree of collaboration is “an important contribution to both the success of school improvement processes and the effectiveness of schools” (Campo, 1993, p.119).

As a valid and reliable instrument, the SCS has been widely used in other studies. In these studies, SCS served as the main instrument and has been discussed in examining collaborative school culture and its related themes (Bland, 2012; Gumuseli & Eryilmaz, 2011; Valentine, 2006; Gruenert, 2005).

### **2.2.5 summary.**

This study focused on the invisible levels of culture that are critical to the entire culture. The exploration of the various levels to study culture contribute to the understanding of school culture as the organizational culture. However, the nature of schools differs from that of other

organizations. Therefore, the review focus shifts to school culture.

A further review of the literature on school culture indicates that the main purpose of school culture is school improvement, which is also the aim in studying SBCD. With the focus on “school improvement,” “collaborative school culture” is subsequently identified as a sub-culture that critically contributes to school improvement. Accordingly, the review focus shifts to collaborative school culture. Furthermore, the SCS has been found to be a reliable and valid instrument, and has been used in many other studies on collaborative school culture and its related themes. As a result, the SCS instrument is identified as effective measure of collaborative school culture from the “school improvement” perspective for this study.

## **2.3 School-Based Curriculum Development**

This subsection has three sub-subsections and related sub-sub-subsections, which introduce the history, definitions, and studies on SBCD in both Western and Chinese contexts.

### **2.3.1 the history of SBCD.**

#### ***2.3.1.1 the history of SBCD in the Western context.***

In 1979, the OECD stated, “School-Based Curriculum Development is a new name for an old idea” (OECD, 1979, p.11). Such an old idea can even be traced back to the days when Socrates created his curriculum as the joint dialectical experiences with his peers and his people in the public places of Athens, which served as the school (OECD, 1979). However, what makes such an old idea appear again in public and become a subject of key international debates?

Huang (2005) includes two reasons: one is the failure of curriculum reform movement or curriculum innovation in the Western world, specifically in the United States, and the other is the result of the upsurging trend of democracy. In the researcher's understanding, the latter reason is the root cause when the former reason is the direct cause. These reasons are explained in detail below.

**The upsurging trend of democracy as the root cause.** Dewey (1990) says that the discussion of a new movement in education should be taken from the broader or social view. Null (2007) also indicates that a curriculum must, can, and should change along with the changes of other fields in the society, such as political science, economics, and philosophy, because the school, as “a human social institution,” communicates with the outside world by engaging “in complex transactions with the environment, exchanging ideas, resources and people” (OECD, 1979, p.14). However, the school/education system would not respond “uncritically to the demand of this environment” (OECD, 1979, p.14), but only with planning and preparation in advance before developing the curriculum, one of the features of curriculum change in recent years and the concern of educational studies (Kelly, 2009).

Logically, the educational system responded when decentralization/democracy was repeatedly demanded within the social context (OECD, 1979). Kelly (2009) says democracy is more than a political system but a moral system that above all with moral principles of “equality, freedom and...the rights of the individual” (p.215). The educational system then acts according to those “moral principles”— the learner's need and characteristics are as concerns that stemming “from a close and sympathetic understanding” (OECD, 1979, p.14). Curriculum, as

experiences of values developed by both teachers and pupils, is guided by “moral principles”—“equality, freedom, and ...the rights of the individual” (Kelly, 2009, p.215; OECD, 1979).

Thus, curriculum is regarded as any activities the learner has experienced within the school. It is developed according to the needs of learners and the school resources in order to improve the curriculum (OECD, 1979), specifically, to “enhance school improvement, teacher development, and pupil learning” (Law & Xu, 2013). Therefore, the means with functions for obtaining those purposes will be considered, and SBCD is one of the means that can be used. Thus, this trend is the root cause of why SBCD has become a hot topic in the international context.

**The failure of curriculum reform movement in the United States.** As aforementioned, the trend of democracy is the root cause of the appearance of SBCD. SBCD can help schools to act with and for the “moral principles.” Why is it chosen? The following sections will introduce the direct cause of the appearance of SBCD.

The failure of the curriculum reform movement/curriculum innovations in the United States during the 1960s is the reason SBCD was selected. During the late 1950s and throughout the 1960s, the Cold War controlled the political discourse, and the politicians presumed that Russian had been surpassed in the space race (Null, 2007). As a result, the public school curriculum was accused of not having enough scientific rigor, and the heavy dependence of the power of curriculum decision making on the schools and the teachers was blamed for the



decreasing the educational quality (Null, 2007). The US federal government encouraged and invited scientists to assist the country in winning the Cold War (Rudolph, 2002), and presumed that the high quality of curriculum required the collaboration of experts with federal organizations. Consequently, university specialists from various scientific fields, specifically from the fields of biology, physics, and chemistry, were recruited by the federal government to remake the science curriculum (Null, 2007). The federal government organized and asked the scientists to create a new science curriculum but neglected the curriculum development specialists during the process. Moreover, the federal government was trying to promote for the whole country a “centralized production of curriculum” (Bolstad, 2005, p.14), a top-down way of curriculum development.

However, democracy had already been commonly recognized by the people, who were strongly against this centralized way of curriculum development, which obviously violates the “moral principles” of “equality, freedom and...the right of individual” (Kelly, 2009, p.215) and inevitably ended in failure. The number of people who realized the deficiency of a centralized education increased. In fact, SBCD is viewed as a slogan for decentralization and a representation of the polar opposite of centralized education (Marsh et al., 1990). Additionally, it is defined by a few as “a complete opposite to centralized production of curriculum” (Bolstad, 2005, p.14). SBCD as an opposite idea to centralized education was approved and promoted when the centralized way of curriculum development was strongly contested. Therefore, the failure of the curriculum reform movement is the direct cause of the trend of international studies for SBCD since the 1970s.

### ***2.3.1.2 the history of SBCD in Mainland China.***

Mainland China is one of the areas in the Asian trajectories of SBCD, with the commonality of implementing SBCD in a bureaucratic and administrative manner (Kennedy, 2010). Compared to the areas in the Western trajectories with relative freedom in implementing SBCD, a “limited nature of SBCD” in the areas in the Asian trajectories exists. For instance, Li (2002) has reported that schools in Taiwan have only 20% of the whole curriculum free of charge, and at the same time, cross-disciplinary and thematic units of study are the main foci. In Hong Kong, the schools implement SBCD projects with a caveat on the essential projects, that is, “serving the purpose of complementing the required knowledge, concepts, and skills offered to pupils in the centrally devised curriculum” (Kennedy, 1992, p.184).

Nevertheless, areas such as Hong Kong and Taiwan, though with a “limited nature of SBCD,” have more freedom to develop different forms of SBCD compared to Mainland China (Kennedy, 2010). The following sections will introduce additional information about SBCD in Mainland China by revealing its history.

A new round of national curriculum reforms (NCRs) was started in Mainland China with the publication of “The Compendium” in June 2001. Concurrently, SBCD became an important topic, as it is the “core move” (Xu & Wong, 2011, p.47) and “highlight” (Zeng & Zhou, 2013, p.271) within the NCR. SBCD in Mainland China is introduced and safeguarded by a three-level curriculum management policy officially announced in Clause 16 in “The Compendium”:

In order to secure and promote curriculum requirements for various areas, schools and students, three-levels—national/central, provincial/local, school—of curriculum management, will be implemented.

The M.O.E. is responsible for making overall curriculum plans for basic education, formulating curriculum management policy, establishing what curricula are to be included and how many teaching and learning hours are to be dedicated to them collectively and individually in the national curriculum, specifying national curriculum standards, and actively carrying out the new curriculum evaluation system.

The provincial education administration departments are responsible for planning the implementation of the national curriculum within the province (or within the autonomous region or municipality directly under the central government), planning and implementing the local/provincial curriculum in accordance with national curriculum management policy and actual local conditions, and reporting to the M.O.E. for the records, under the approval of the M.O.E., provincial education administration departments are entitled to specify local curriculum plans and standards exclusively for the province (or for autonomous regions or municipalities directly under the central government).

The schools are responsible for executing the national and local curriculum. Additionally, the schools are entitled to develop or choose the suitable curriculum by considering local social and economical situations, traditions, and advantages of the schools themselves, and interests and need of their students. Education administration departments at national and provincial/local levels are required to provide directions to and supervise the curriculum implementation and development in schools. Meanwhile, the schools are entitled and obliged to report to the higher level the problems they have in implementing the national and local curriculum. (Zeng & Zhou, 2013, p271-272)

SBCD did not suddenly emerge in Mainland China. A few documents were published to build the basis for SBCD before it was officially taken to the threshing ground in 2001 (Li & Shuai, 2010). The local government had some powers in educational management because of the 1985 “Decision on Educational System Reform by the Central Committee of Chinese Communist Party” published by the M.O.E.. In “Full-time General High School Curriculum Plan (Experimental)” by the Education Committee of China in 1996, it was announced for the first time that the schools, to some extent, could design their own optional curricula and their activity courses could occupy 20% to 25% of the total weekly schedule (Education Committee of China, 1997). The “Decision on Deepening Education Reform and Implementing Quality

Education” issued in the Third National Education Conference held by the Central Committee of the Chinese Communist Party and the State Council triggered the establishment of the three-level curriculum management system (Li & Shuai, 2010). In item 14 in the second part of the *Decision*, the following were announced: adjust and reform the curriculum system, structure, and content; establish a new basic education system; and implement national curriculum, local curriculum, and school-based curriculum; in the whole national curriculum plan, 80%, 15%, and 5% are the proportions prescribed for the national curriculum, local curriculum, and school-based curriculum, respectively (Li & Shuai, 2010). The “Full-time General High School Curriculum Plan (Revised)” published by the M.O.E. in 2000 stated that the optional courses that local governments and schools develop for themselves should account for 10.8% to 18.6% of the total weekly schedule; at the same time, schools be responsible for setting comprehensive practical activities for themselves, which should account for 8.8% of the total weekly schedule (Li & Shuai, 2010).

Even after 2001, when SBCD had become an important topic in Mainland China, some documents were announced to guarantee the proper implementation of SBCD, such as the “Program of General High School Curriculum (Experimental)” in 2003 to guarantee the reasonable and sufficient autonomy for the schools (Li & Shuai, 2010). In 2014, in “The Proposal about Completely Deepening National Curriculum Reform as to Establish the Basic Mission of Strengthening Morality and Fostering Talent” issued by the M.O.E., school-based management was again emphasized to ensure the autonomy of the schools in various aspects.

### **2.3.2 definition of SBCD.**

### ***2.3.2.1 definition of curriculum.***

Blenkin et al. (1992) clarify three contrasting concepts of curriculum, namely, curriculum as content, as products, and as process.

Originating from the Latin word “race course” (Bobbitt, 1918), curriculum is defined in the Oxford English Dictionary as “the subjects comprising a course of study in a school or college.” In the Longman Dictionary of Contemporary English, curriculum is “the subjects that are taught by a school, college etc., or the things that are studied in a particular subject”. Put together, those definitions imply the meaning of a course of study as, say, the contents. In other words, curriculum is akin to a body of knowledge content (Ai, 1995).

Ralph W. Tyler (1949), in his *Basic Principles of Curriculum and Instruction* book, understands curriculum by highlighting four processes: identification of the school’s purposes, selection of experiences used to fulfill the school’s purposes, organization of the experiences, and development of evaluative tools used to determine whether the experiences fulfilled the school’s expressed purposes. Tyler is telling us that we should begin our plan with a clear view of aims and purposes (Kelly, 2009). With such an objectives approach, quantity rather than quality of curriculum is emphasized. In other words, curriculum is viewed as a product designed to achieve certain aims or objectives, that is, it is perceived in terms of curriculum products designed to achieve certain ends (Ai, 1995).

The experienced-based definition of curriculum or considering curriculum as a process is actually more prevalent among the other concepts of curriculum. Only the concept of

curriculum as a process can support the evolution of knowledge in a society (Ai, 1995). Dewey (1997) emphasizes the need for a sound philosophy of experience in education and curriculum to avoid the shortcomings of not supporting the dynamic of knowledge. When curriculum is regarded as content or products, “neither allows for change, modification or adaptation; and thus neither creates an educational context for assisting pupils to become adaptable or for promoting in them a flexible stance towards human knowledge and value” (Blenkin et al., 1992, p.28).

From permanent school subjects as one end to all learning experiences throughout life at the other, the above curriculum definitions have reflected what Bobbitt (1918) regards as the range of curriculum. However, as Kridel (2010) suggests, the multiplication of curriculum definitions is not a problem in an emergency that must be solved, but inevitably be acknowledged as a state of affairs, for “the real purpose or value of a definition is its ability to clarify and explain one’s understanding or position regarding curriculum” (p.179).

The following sections will further explain the three concepts of curriculum to explore what is analyzed by Kelly(2009) in *The Curriculum Theory and Practice* about the effect of curriculum change when considering curriculum as content or product and the effects of curriculum change by considering curriculum as experience/process:

#### **A. Curriculum as content or product**

There are three levels of meaning when curriculum is considered as content or product, such as curriculum as content, curriculum as product, and curriculum as the combination of content

and product. The curriculum-planning model is common as the combination of content and product, wherein curriculum as product is the relatively less used model among the three.

### *1) Curriculum as content*

Curriculum as content is based on absolutist epistemology that sees knowledge as “in some sense God-given, out-there and independent of the knower”(Kelly, 2009, p.26) and “in no sense related to the particular circumstances of individual eras, societies, cultures or human beings” (Kelly, 2009, p.26). As such, this view of knowledge attracts politicians because it elevates the universal above the particular and the collective above the individual, which makes their lives easier.

Basically, both advantages and disadvantages are present in applying such an approach to curriculum. The advantage is that it can ensure that students reach the “intrinsically worthwhile” (Kelly, 2009, p.48), whereas the disadvantage is it would lead to stratification, elitism, disaffection, and alienation, and thus a democratic society would never be reached.

When curriculum is regarded as content, education will be a cultural transmission, and the common cultural heritage will be what is taught in schools (Lawton, 1973, 1975). However, “culture” itself is difficult to define, and when its content is stressed, it would result in a selection from the culture. Consequently, the selection of culture would be the politicians’ own favored versions of culture regarding the society. Behind the policies, the influential pressure groups select what they think serves the economy best.

Such controversial advantages and explicit disadvantages are the effects when curriculum is

considered as content.

## *2) Curriculum as product*

Curriculum is viewed as products to be designed in order to achieve certain aims or objectives, of what is termed the objectives approach. With aims as the base, learning is viewed as a linear process, and the objectives that lead the learning process are derived from the aims set at the beginning.

In this learning process, scientific precision, accuracy, and technological efficiency are emphasized. The process, influenced by instrumentalism, is similar to “training” or “instruction” rather than to education. This objectives model has a passive view of humanity, emphasizing instrumentality and subsequently leading to an instrumental view of schooling. If the bread can make life possible, then the flower can make life worthwhile. This model focuses on the bread because “it is fundamentally behavioral, linear, instrumental” (Kelly, 2009, p.59).

## *3) Curriculum as the combination of content and product*

In the combined model, achieving the delivery of the selected content is the basis. In other words, a fundamental commitment to the content model is observed. The objectives model is the methodology with an aims-and-objectives scheme to effectively achieve the delivery and assimilation of selected content.

## **B. Curriculum as experience/process**

The philosophical case of planning the curriculum in terms of its content or products is based



on a kind of absolutist epistemology, in which knowledge is considered as “timeless, objective, in no sense related to the particular circumstances of individual eras, societies, cultures or human beings” (Kelly, 2009, p.26–27), and thus elevates the universal above the particular and the collective above the individual. That is the effect throughout the second half of the last century—the inextricable interlink between knowledge and politics that causes serious political dangers and threats to individual freedom and to social democracy. In other words, the philosophy is about the acceptance of totalitarian forms of government that leaves no scope for individual freedom.

Nevertheless, it is postmodernism that makes us realize such explicit link between theories of knowledge and political movements and the political danger threats to individual freedom and to social democracy. Postmodernism rejects all “totalizing theories” (Kelly, 2009, p.39), and thus is strongly opposed and rejected by politicians and philosophers who are with the traditional and absolutist view of human knowledge. In addition, it is a salutary antidote to those besetting curriculum with traditional and absolutist view of human knowledge, underpinning the approach to curriculum as process.

By considering the society as democratic and humans as individuals living actively and productively within a democratic social context, this view of education and this process model of curriculum consider development as the essence of education, and thus as “the only logical starting point for educational planning”(Kelly, 2009, p.84), with education as the individual experience.

This approach allows us to have our content, but the content refers to the principles inherent in our aims or purposes, and thus leads to the focus on developing the understanding of pupil. The focus will never be on “the delivery of predetermined content or the achievement of pre-stated behavioral changes” (Kelly, 2009, p.82). This approach also allows us to have our aims or purposes, but not the same as the objectives model that uses aims as the bases and with a linear process for objectives derived from the aims or bases. The goals or purposes of this process approach are derived from the detailed principles that are inherent in those aims for informing and guiding the subsequent practice. This concept means when planning and executing an educational curriculum, the underlying principles and the processes of development should be the emphasis. When talking about the products or outcomes of this model, the intellectual development and cognitive functioning should be mentioned but not “the quantities of knowledge absorbed” (i.e., the focus of the content model) or “changes of behavioral performance” (i.e., the focus of the product model) (Kelly, 2009, p.83).

In fact, key words such as “democratic,” “development,” “process,” and “experience,” which appeared above within the part of “curriculum as process,” are also emphasized in the discourse on SBCD (OECD, 1979). Curriculum considered as process or experience is proposed as the operational and planning models of SBCD (Skilbeck, 1984). However, as Mainland China is a country with a centralized educational system, it favors what absolutist epistemology proposes, such as “collective above the individual” and “the universal above the particular,” both of which are strongly objected to by postmodernism. In addition, curriculum as a process is underpinned by postmodernism. Then, how is SBCD affected by the proposed

planning model of process when it is introduced in centralized Mainland China? The above question will be analyzed in later sections about SBCD in the context of Mainland China.

### ***2.3.2.2 understanding SBCD.***

#### *2.3.2.2.1 understanding SBCD in the Western context.*

Bolstad (2005) understands that the definition of SBCD may depend on the respective authors' own predispositions. For instance, by emphasizing the redistribution of power of SBCD within schools, Marsh et al. (1990) note that "school-based curriculum development is essentially a teacher-initiated grass roots phenomenon, and it is likely to survive in this pure form regardless of political and economic contexts" (p.3); while by emphasizing the developmental process of SBCD, Skilbeck (1984) defines SBCD as "the planning, design, implementation, and evaluation of a program of students' learning by the educational institution of which those students are members" (p.2). Bezzina (1991) identify SBCD as "a process in which some or all of the members of a school community plan, implement, and evaluate an aspect or aspects of the curriculum offering of the school" (p.40). Bolstad (2005) also agrees that because of the influence of political, social, and cultural factors, different countries may have different understanding of SBCD.

Nevertheless, the following are the four definitions of SBCD created by OECD (1979), including the most important key aspects of SBCD:

- A. SBCD is "a new name for an old idea" that "the best place for designing the curriculum is where the learner and the teacher meet" (OECD, 1979, p.11). In other words, the school is

the best place for curriculum design, because curriculum as experience should be developed by the teacher and learners together according to “the learners’ needs and characteristics” (OECD, 1979, p.14). Thus, “the curriculum in school-based curriculum development is internal and organic to the institution (school), not an extrinsic imposition” (Skilbeck, 1984, p.2).

B. The second key aspect of SBCD is reveal as follows:

Taking the term ‘curriculum’ broadly, as ‘the program used by the school as a means of accomplishing its purpose, (including) all the experiences of children for which the school should accept responsibility’, they say: ‘SBCD indicates all the activities undertaken in order to improve the quality of the curriculum, when these activities are initiated, planned and performed by the parties involved in daily school work: teachers, parents, pupils, and school administrators’, while ‘SBCD is taken to mean (curriculum) development that is based on the school and is largely dependent on school staff and resources’.(OECD, 1979, p.11)

In other words, “curriculum” is used by the school as a means to reach its purpose of improving the quality of the curriculum. “Curriculum” is about all/any experiences of children within the school, and SBCD is about all/any activities undertaken to improve the quality of the curriculum. Activities such as as daily school work are initiated, planned, and performed by the teachers, parents, pupils, and school administrators. As curriculum is developed according to the school’s own situation, curriculum development is largely dependent on the school staff and resources as well. SBCD is used as a means to develop the curriculum, such as initiate, plan, and perform all the activities within the school according to its needs to accomplish the purpose of improving the quality of the curriculum.

- C. The third definition of SBCD pays no attention to the outside world and focuses only on the schools and happenings within the school. In addition, SBCD is defined as a curriculum developmental process within the school and mainly by the school staff. For instance, Skilbeck (1984) defines it as “the planning, design, implementation and evaluation of a programme of students’ learnings by the educational institution of which those students are members” (p.2).
- D. The school does not exist alone but connects with a number of other institutions within the whole society. This definition of SBCD emphasizes a redistribution of power, responsibilities, and control by acquiring of legal and administrative autonomy and the professional authority from central and local educational authorities. Based on the above, it requires the school to participate in educational innovation more actively and directly, focusing on the change of organization rather than on “the production of new curriculum material” (OECD, 1979, p.13).

Combining the above four definitions of SBCD result in the following definition: as a means, with legal and administrative autonomy and the professional authority from the central government to manage the school’s own process of development of curriculum according to the needs of the pupils, the teachers, and the school as a whole, as well as the resources within the school for the improvement of the whole school (i.e., for school improvement, teacher development, and student learning). In a word, the curriculum is regarded as experience, encompassing all/any activities undertaken and developed by the teacher and the learner together in order to improve the whole school (OECD, 1989; Skilbeck, 1984).

### *2.3.2.2.2 understanding SBCD in Mainland China.*

Before the NCRs, all are uniformed in the whole nation, for example, the teaching plan, the teaching syllabus, and the textbook (Xu & Wong, 2011), which is what Cui (2000) calls a “national curriculum developmental mode”(p.2) and what Bolstad (2005) labels as “centralized production of curriculum”(p.14), when SBCD is viewed as a complete opposite. Therefore, as mentioned above, several documents were published to pave the way before the official launching of “The Compendium” for the NCR in 2001 and for SBCD, which is the “core move” and “highlight” in the NCR. This reform is a significant change for the educational system in Mainland China, leading to the emergence of flourishing studies about SBCD in Mainland China since 2001 (Zeng & Zhou, 2013).

Theoretical discussions generally identify two kinds of viewpoints on SBCD in the context of Mainland China. The first kind is in a narrow sense, in which SBCD is understood as “school-based curriculum” development and as a reserved space that supplies to and unites with the “national curriculum” and “local curriculum” in the national curriculum plan. Moreover, the schools can have total independence in developing their curriculum in that reserved space, which refers to schools’ active implementation of activity courses, optional courses, and extraordinary activities (Chen, 2001; Li, 2005; Li & Shuai, 2010; Xu, 2001; Xu, 2005; Xu & Wong, 2011). The second kind of viewpoint is in a broader sense, in which SBCD is a “school-based” curriculum development and disagrees that a SBC with a limited space can embody the core of SBCD. Aside from the total independence in a SBC (the reserved space), schools should also adapt and redevelop the “national curriculum” and “local curriculum”

according to the needs of the students, the teachers, and the schools (Cui, 2000; Cui & Du, 1999; Cui, et al, 2002; Xu & Wong, 2011).

Similar with what Sabar et al. (1987) state the meaning of SBCD is significantly affected by the factors of policies, society, and culture. Normally, two kinds of SBCD are implemented in the schools in Mainland China: one is a SBC, and the other is a SBC and adaptation and redevelopment of national and local curricula. Most schools implement SBCD as the former one (Zeng & Zhou, 2013), yet it is recorded that some schools with stronger leadership have started to implement the latter (Li & Shuai, 2010). No matter which kind of SBCD the school is implementing, “a SBC” is like standardly equipped in the Chinese context.

For why SBCD is commonly understood in such a manner, Xu and Wong (2011) justify that it is the cause of linguistic differences. Because “school-based curriculum development” can be interpreted in Chinese as either “school-based” curriculum development (xiao ben de ke cheng kai fa) or “school-based curriculum” development (xiao ben ke cheng de kai fa). Given that the former interpretation leads to a broader sense of understanding SBCD, the latter interpretation leads to a narrower sense of understanding SBCD. They also explain that the scholars in favor of interpreting “school-based curriculum” development (a SBC) are mostly known as “curriculum reform experts” who participate in three-level management policy documenting work, and thus they were entrusted to interpret the policy document and instruct the teacher to act accordingly. As a result, SBCD is popularly understood as a SBC in Mainland China (the first viewpoint), although some schools, besides having a SBC, also implement the national and local curricula (the second viewpoint).

In the researcher's understanding, the linguistic differences explained by Xu and Wong (2011) might cause the difference between the two Chinese viewpoints on SBCD. However, such explanations still could not explain for why “a SBC” would become the feature of SBCD in the context of Mainland China. The researcher considers the root cause might be as follows: the curriculum in the whole educational system in Mainland China is regarded as content rather than as experience (referring to sub-sub-subsection 2.3.2.1), which could significantly affect the understanding and function of SBCD when implemented.

The curriculum in the educational system in Mainland China, which is considered as content, is reflected as follows. In 1999, in the *Decision on Deepening Education Reform and Implementing Quality Education* issued in the Third National Education Conference held by the Central Committee of the Chinese Communist Party and the State Council, the national curriculum, local curriculum, and school-based curriculum accounts were prescribed at approximately 80%, 15%, and 5%, respectively (Li & Shuai, 2010). In early 2015, in the *Instructional Proposal about Completely Deepening National Curriculum Reform in Middle and Primary Schools* issued by the Shenzhen Education Bureau, the national curriculum (i.e., basic curriculum), extended curriculum, and characteristic curriculum (i.e., school-based curriculum) were regulated to occupy 60%–70%, 20%–30%, and 10%, respectively. In other words, the curriculum as content was allocated as pieces with different proportions. The “curriculum as content” dominates the understanding of SBCD. The researcher believes that with such understanding of SBCD, the original meaning and function of SBCD would be abandoned because the premise of SBCD is that the curriculum should be considered as



experience (for more details, refer to sub-sub-sub-subsection 2.3.2.2.1).

Considering the curriculum as content enables a focus only on Clause 16—the three-level curriculum management policy (refer to paragraph 3 in sub-sub-subsection 2.3.1.2) as the only safeguard of the implementation of SBCD in the Chinese context, bounded by its unspecific political interpretation and instruction. However, in the researcher’s understanding, when implementing SBCD, the curriculum should be considered as experience instead of content. Thus, the safeguard policies for the implementation of SBCD in Mainland China include not only Clause 16 but also Clause 2 of “The Compendium,” which present the directions of change and set the specific targets of SBCD for the schools:

2. The specific targets of NCR: to change the over academic-oriented tendency, to emphasize the learning attitude of active participation, to make the processes of obtaining basic knowledge and basic skills as also the process of learning to learn and forming proper values.

Changing the curriculum structure: to change from over emphasizing subject-oriented, subject-excessive but lack of curriculum integration, to comprehensively setting the sorts of curriculum and proportions of class hours for the nine-year compulsory education; to set the comprehensive subject according to the needs of students’ development from different areas, as to present capability of balancing, comprehensiveness and selectivity.

Changing the curriculum content: to change the current situation from having complicated, extremely difficult, trick, academic-oriented and outdated materials, to emphasizing on students’ life experiences, scientific experiences, and individual interests and needs, as to choose the best collections of basic knowledge and skills for essential lifelong learning.

Changing the learning processes: to change the current situation from over emphasizing receptive learning, rote learning and mechanistic training, to active participation, enquiry-based learning, data collection, process information, hands-on experience, ability to construct knowledge, analytical skills, problem-solving and communication and collaboration.

Changing the curriculum assessment: to change from over emphasizing selection with elitist philosophy, to enhancing student learning, developing teachers, and improving teaching.

Changing the curriculum administration: to change from centralized system to the tripartite-level management among central government, provincial agencies, and schools,

for enhancing the flexibility of curriculum for students in different schools and in different areas. (M.O.E.(1), 2001, para.4-9)

In summary, five directions of change are listed as guidance for the schools in Clause 2, namely: “curriculum structure,” “curriculum content,” “learning processes,” “curriculum assessment,” and “curriculum administration.” These five directions of change function as the dimensions for the overall reform in a school and for SBCD with domestic characteristics.

### **2.3.3 studies of SBCD.**

Kennedy (2010) indicates a Western and an Asian trajectories for SBCD, and notes that a time lag between these trajectories. The 1970s and 1980s are the peak periods of SBCD studies in Western countries; this trend was driven to the Asian areas and emerged in the 1990s (Bolstad, 2005; Kennedy, 2010).

The different policy trajectories vary in their implementation of SBCD. The similarity among the Asian trajectories is “the use of legal and bureaucratic processes to implement SBCD” (Kennedy, 2010, p.9), whereas SBCD is considered an advocated idea found in curriculum discourse in the Western trajectories (Kennedy, 2010). In the United States, there are several terms, such as “child-centered approaches,” “progressive education,” “school improvement,” and “school effectiveness,” that are related to SBCD (Marsh et al., 1990). In addition, not with further instructions, the state system of Australia adopted the principles of SBCD by encouraging the decentralization of decision-making powers to schools (Marsh et al., 1990).

Compared to the Asian trajectories, the schools in the Western world enjoyed more freedom

when implementing SBCD, and thus various forms of SBCD began appearing in the studies in the West. The foci, forms, models, and factors of and affecting SBCD are introduced in the following sections with regard to the Western context due to the flourishing studies about SBCD found there.

### ***2.3.3.1 studies on SBCD in the Western world.***

#### *2.3.3.1.1 curriculum change.*

This sub-sub-sub-subsection introduces four main aspects when trying to understand curriculum change. The four main aspects of curriculum change are the forces of curriculum change, the change strategies, the process of curriculum change, and the dimensions of curriculum change.

#### *-forces of curriculum change*

Kelly (2009) states that, “the education system is a social institution which should be expected to change with other such institutions. It would be more surprising, not to say disturbing, if the education system were to stand still while all else changed” (p.1). Null (2007) further indicates, “...that curriculum must, can, and should change as the fields of political science, economics, and philosophy change” (p.480). Kelly and Null speak of the external forces that create pressures as the cause for the curriculum change, with external forces understood as imported technology and values and immigration (Fullan, 1991).

Besides external forces, the internal force is another kind of source that causes curriculum

change. As the effects of internal conflicts, internal forces cause curriculum change when an inconsistency of educational values occurs among the inner groups (Fullan, 1991).

However, external forces are more powerful in schools than internal forces, for the former can provide an incentive with stronger effects (Fullan, 1991; Skilbeck, 1984). From the history of curriculum development, it can be seen the changes that were caused by the effects of external forces (Schwab, 1969). History even pointed out that “changes in society at large have their own impetus and can have a stronger impact on the school curriculum than the deliberate efforts of teachers and other within the school” (Skilbeck, 1984, p.72). Stenhouse (1986) further explains that when external forces are absent, two major restrictions are present on the school’s capacity to change and even internal forces appear. The two main restrictions are the restriction of resources and the restriction of parental and social opinion.

“The Compendium” where SBCD becomes an important topic in the context of Mainland China, clearly stated that it was issued because the old basic educational curriculum could no longer adapt to the developmental needs of the times. At this point, though SBCD in Mainland China is emphasized when the decentralization of curriculum decision making is internationally regarded as an effective change strategy to instigate school improvement, teacher development, and pupil learning (Law & Xu, 2013), similar with other practices in Mainland China, it is also a top-down implementation within a centralized system. In other words, the external forces again provided a strong impetus for the emergence of SBCD in Mainland China.

While the above forces are the broader point of view from Fullan (1991) to analyze curriculum change, Doll (1970), from a more detailed perspective, examines four multiple forces that affect curriculum change. The four forces are power, the dollar, growth and knowledge, and human needs and concerns. Each force lies deep in human motivation, as curriculum is present where the people are and is thus for the people. Thus, those four prominent forces sometimes merge and blur because human motivation is almost never single or pure.

Some of the four forces have been examined in the context of the United States. For instance, Doll (1970) lists “campaigns for a black curriculum...and so on” as one of the eight kinds of drives for power that serve as major attempts to change the curriculum. Moreover, those four forces are not broad enough to analyze the forces of curriculum change, as the present study requires a broader point of view to examine general curriculum change.

#### *-change strategies of curriculum*

Bennis et al. (1969) proposes three strategies for a person, organization, or professional to deal with change, namely, empirical-rational strategies, normative-re-educative strategies, and power-coercive strategies. Several decades after, these three strategies were identified as useful frameworks to analyze curriculum change (Blenkin et al., 1992).

Empirical-rational strategies optimistically perceive humans as rational, and the rational self-interest instinctively appeals to the human who will automatically act accordingly. Still, the change agent has the duty to demonstrate the potential benefits to the users, so that users can be informed and then turn on their user system to analyze with rationality. In

normative-re-educative strategies, humans are regarded as innately active. Their usual patterns of action will be changed when they are informed and educated about the meaning and value in engaging in new commitments. Power-coercive strategies are top-down strategies that use power to bring about changes. The power is basically political and economic and can sometimes be moral. People with less power comply with instructions from higher authorities.

A combination of the three strategies is needed for a successful change, as it can have more flexibility in dealing with corresponding situations. Power-coercive strategies are not as effective as the other two strategies because they bring the users limited intrinsic motivation with no sense of ownership of change, whereas the other two strategies can involve teachers in the process of change (Blenkin et al., 1992; Morris, 1998).

#### *-phases and dimensions of curriculum change*

Fullan (1991; 1992) describes a three-phase process of change/innovation: initiation (i.e., mobilization and adoption), implementation, and institutionalization (i.e., continuation and incorporation). This process is considered a change process of overlapping interactive phases and a complex multidimensional proceeding process at the same time (Fullan, 1991). The initiation phase is a decision-making phase for considering whether to initiate or proceed with a change. The implementation phase, as a developmental process of change, is when an idea or a belief is applied into practice, during which teachers innovate with alteration in materials, instructional practices, and beliefs. When the changes are regarded as normal parts of the system, or when the changes are fully integrated into the system, the institutionalization phase

is reached. However, full completion of a three-phase process takes a long time. According to Fullan (1991), it would generally take three to five years from the generation of an idea to a full integration in the system.

Fullan (1991) also identifies three dimensions of change during the three phases of curriculum change: the use of new or revised materials (or technologies), the use of teaching approaches (i.e., teaching strategies or learning activities), and the alteration of beliefs (i.e., pedagogical assumptions or perceived relevance). The three dimensions are interrelated, and the alteration of beliefs is the most difficult to achieve among the three dimensions. Minor change is considered when the curriculum is changed with only one dimension, whereas a complex change occurs when all those three dimensions are covered.

#### *2.3.3.1.2 studies of SBCD in the Western context.*

This sub-sub-sub-subsection includes four parts of the studies of SBCD in the Western world, and the four parts are foci of SBCD, forms of SBCD, models of SBCD, and factors affecting SBCD.

##### *- foci of SBCD*

No definition that is accepted by all exists because SBCD is different in various cultural and social contexts, and at the same time limited by different cultural and social factors. Nevertheless, six foci of SBCD are identified: the process, an opposite to top-down imposed curriculum, collaborative efforts, situation analysis, the Principal, and the teachers (Bezzina,

1991; Brady, 1992; Brady, 1995; Day, 1990; Elliot, 1997; Hannay, 1990; Howells, 2003; Keys, 2000; Marsh et al., 1990; Marsh, 1990; May, 1992; Ramsay et al., 1993; Reid, 1987; Sabar et al., 1987).

### ① The process

Bezzina (1991) defines SBCD as a three-step process by some or all of the members of a school community, including planning, implementation, and evaluation of an aspect or all aspects of the curriculum. Brady (1992) describes it as a cycle with three more steps by extending the step of planning, which are (a) goal setting and needs identification; (b) policy making, with policies consisting of statements of purpose and broad guidelines; (c) planning of programs; (d) preparation and approval of program budgets; (e) implementing; and (f) evaluating.

### ② An opposite to top-down imposed curriculum

After discussing different meanings attached to SBCD, Brady (1992) views SBCD as opposite to a top-down imposed curriculum. Nevertheless, with SBCD as a bottom-up method, the school does not necessarily have to make all the decisions, though greater responsibility for curriculum decision making is emphasized more than ever (Reid, 1987; Marsh et al., 1990).

### ③ Collaborative efforts

Bezzina (1991) states that SBCD is “a collaborative effort that should not be confused with individual efforts of teachers or administrators operating outside the boundaries of a collaboratively accepted framework” (p.40). Brady (1992) suggests SBCD as a cycle with six phases, and concurrently defines it as a “collaborative” school management cycle. SBCD is



described with action research in the United Kingdom involving collaborative efforts between teachers and academics (Elliot, 1997). Although SBCD is “school-based,” it does not mean that all decision making rests with the school, and therefore, collaborative internal and external efforts are emphasized (Marsh et al., 1990). Collaborative decision making among teachers, parents, and schools and communities is included during the development of a school-based curriculum (Ramsay et al., 1993). “An external agency” is needed for collaboration when developing curricula because there will be some teachers who would not have enough knowledge and training to develop worthwhile curricula on their own (Sabar et al., 1987). Overall, the collaborative efforts of SBCD emphasize both the collaborations within the schools and external help and assistance whenever needed.

#### ④ Situational analysis

“Situational analysis” is the most “school-based” focus with the characteristics of case by case or, say, concrete analysis of specific issues. Brady (1992) states that schools are different from each other, and so curriculum objectives have to be set accordingly by meeting the local variations. In addition, curriculum development “begins with a critical examination of the situation at the school level,” as it “cannot be transferred from one school to another.”

However, Marsh et al. (1990) prefer the term “school-focused” rather than “school-based” as they consider the latter does not mean all decision making should depend on the school itself. In other words, the development of a school-based curriculum will be affected by other factors. For instance, May (1992) talks about the “national educational climate” that will affect the

autonomy that a school enjoys at the local level. Such climate may involve the political, social, and cultural factors that differ within a country or among countries and will significantly affect the meaning of SBCD (Sabar et al., 1987).

SBCD is likewise interpreted differently from “national profiles,” as Brady (1995) suggests that the future of SBCD will depend on the degree of prescription in national profiles. Therefore, school-based is the basis for curriculum development, which is not only about the school, but also inevitably considers the context surrounding it.

#### ⑤ The Principal

The importance of the Principal on SBCD initiatives within the school is shown (Bezzina, 1991). Day (1990) discusses that the Principal is a strong driver of SBCD. In the study by Marsh (1990), the importance of the personal and professional characteristics of the Principal and deputy Principal on the development and sustainability of SBCD is emphasized. Specifically, the importance of the Principal on SBCD is beyond all doubt.

#### ⑥ The teachers

During SBCD, teachers are considered simultaneously as both aids and barriers (Bezzina, 1991), implying that they play a significant role during SBCD. Thus, how can teachers be prevented from becoming barriers? The restraints on the curriculum decision making of teachers should be observed.

First, whether or not the options of curriculum decision making available to teachers are affected by five overlapping frames: “system frame” - the decisions teachers perceive have

already been made by policy statements, curriculum document, or other system directives; “school/institution frame” - the restrictions placed on the teachers within the school, including timetabling, access to resources, and class organization; “faculty frame” - the decisions made by faculty heads when teachers perceive; “learners’ frame” - teachers’ expectations regarding students; and “teacher self-frame” - teachers’ professional self-concept and the ideals that teachers possess (Brady, 1992).

Regarding the “system frame,” the policy statements, curriculum documents, or other system directives will accordingly restrict teachers’ decisions about content selection, sequencing of content, or methods to impart content. Political forces will also affect the professional responsibility of teachers for curriculum development when their professional identity and the value of curriculum innovation are devalued (Howells, 2003). In the “teacher self-frame,” philosophy, psychology, and sociology can help provide insight knowledge to teachers to help them make decisions regarding SBCD (Brady, 1992).

Other than the five frames, time is regarded as a significant issue for teachers in SBCD. Given that SBCD is also a professional growth experience for teachers, during the process of professional growth, the teachers need to reflect critically, consider alternatives, deal with the cognitive dissonance, and assimilate new ideas into their personal knowledge, all of which are time-consuming. Thus, curriculum development might be rushed if time is limited (Hannay, 1990).

Moreover, Marsh et al. (1990) discuss two main motives that will drive the individuals,

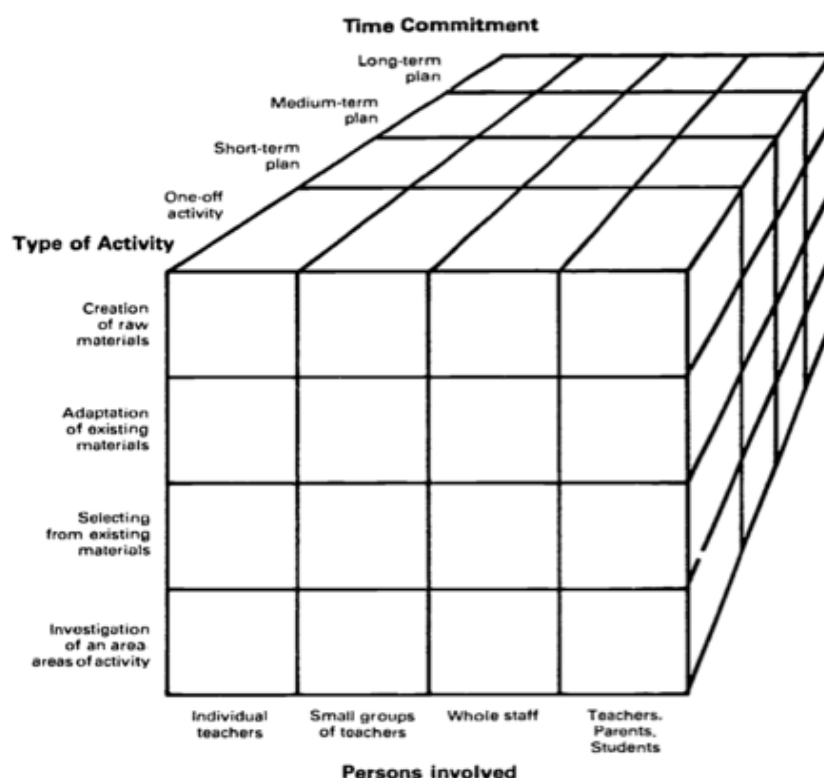
including teachers, involve in SBCD, namely, “current level of job satisfaction” and “educational innovations.” Specifically, “educators are susceptible to educational innovations,” and the more the participants feel unsatisfied with their job (e.g., wanting promotion, poor student attainments, boredom, etc.), the more they will want to engage in SBCD.

### *-forms of SBCD*

Eggleston (1980) identifies two main forms of SBCD and specifies five variations:

- 1) Where the main imperatives have sprung predominantly from outside the school but where the initiative has been taken up in a distinctive manner within the individual schools:
  - 1a) SBCD emerging as a direct by-product of a national project;
  - 1b) SBCD where school initiatives build upon existing national curriculum projects;
  - 1c) SBCD taking over a national project;
- 2) Where the initiative has sprung almost wholly from within the school and remains largely distinctive, if not unique, to that school:
  - 2a) School-based curriculum that arises from the specific decision of a school to operate courses and teaching in a distinctive way;
  - 2b) SBCD that arises from the specific teaching needs of the school. (p.88)

Generally, Eggleston (1980) suggests five variations that can be divided into two main forms according to whether it is within or over the national curriculum. The three variations within the national curriculum involve using, adapting, and extending the national curriculum. The two variations over the national curriculum are the short-term and long-term creations by the school.



**Figure 2 A Matrix of SBCD Variations**

Brady (1992) understands SBCD as having 12 different variations from two dimensions: the type of activity and the people involved. In the dimension of “type of activity,” three categories, such as “creation,” “adaptation,” and “selection of curriculum materials,” are the three ways from which the activities in SBCD originate. In the dimensions “people involved,” “individual teachers,” “pairs of teachers,” “groups,” and “whole staff” are categorized as the four kinds of people involved in the process of SBCD. For Brady, the highest level is about the whole staff within a school creating a new curriculum, and the lowest level is when an individual teacher uses curriculum materials by selection.

After Brady, Marsh et al. (1990) advance the two dimensions into three dimensions. A matrix

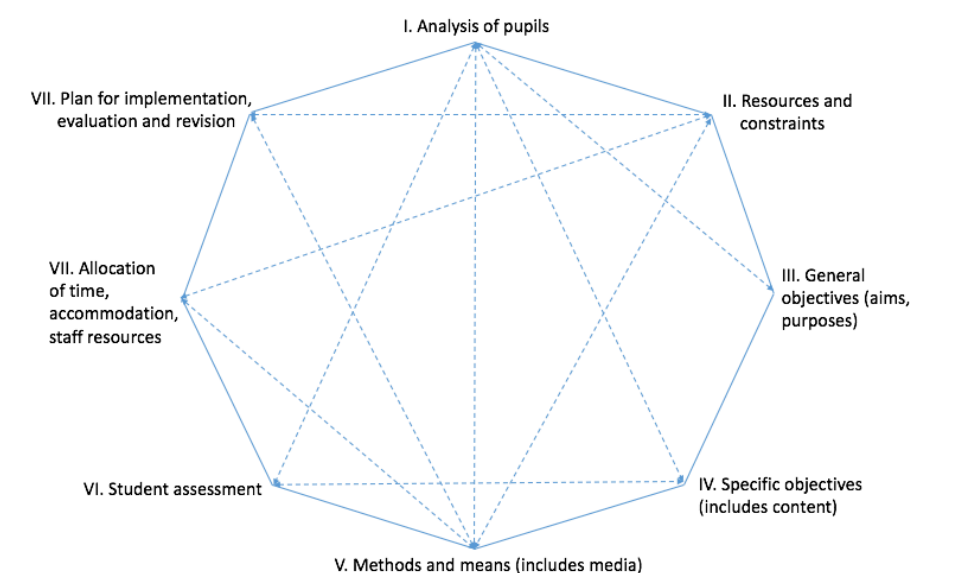
of SBCD variations is depicted in Figure 2. The third dimension is called “time commitment,” in which the duration of SBCD is shown with four categories, such as “one-off activity,” “short-term plan,” “medium-term plan,” and “long-term plan.” The other two dimensions are similar to what Brady described, but some categories are added and some are modified. The dimension of “type of activity” contains “creation of raw materials,” “adaptation of existing materials,” “selection from existing materials,” and “investigation of an area/areas of activity.” The dimension of “persons involved” is made up by the four categories of “individual teachers,” “small groups of teachers,” “whole staff,” and “teachers, parents, and students.” Marsh et al. (1990) emphasize that the time commitment dimension is crucial, for no matter how successful one-off activities are, the one-off activities will give insignificant enduring effects unless they are part of a well-developed and on-going plan. Similarly, the long-term plan may have further problems if competing priorities and changes in staff occur.

Sabar (1991) also described a revised matrix of three dimensions to identify the curriculum development strategies of Short (1983). The three dimensions are participants, levels of adaptation, and seat of curriculum development. The lowest level is fidelity adoptions, whereas the highest level is complementary developing. The case marked in the figure shows a development taking place within the school (as it appears at the site-specific location), and the participants include experts and teachers who are about to adapt existing materials (as it locates at complementary developing).

### *-models of SBCD*

Two models are commonly used and referred to in SBCD. One model, proposed by OECD, focuses on the pupils, and the other is Skilbeck's model, which focuses on the distinction of functions. The models are introduced as follows:

#### 1) OECD's model that focuses on pupils



**Figure 3 OECD's Model that Focuses on Pupils**

Figure 3 shows the diagram representing SBCD that focuses on the pupils. OECD (1979) regards it natural to start with the analysis of pupils, as they are the potential users of the curriculum. Thus, the knowledge, presumed ability, age, and social background of the pupils, among other variables, are necessary to start with the analysis. Afterward, the analysis moves to the likely resources and constraints on the number of teachers, their experience, knowledge and ability, funds for buying materials and equipment, external restrictions and controls. The

next step is to determine the general objectives. These objectives should be closely linked to the philosophy or value system underlying the whole educational system.

OECD (1979) states that schools in centralized countries can easily set the specific objectives compared to those that have autonomy. Both general and specific objectives for schools in centralized countries are decided by a “political” body. However, specific objectives for schools in decentralized countries are absent or merely suggested. Normally, deciding specific objectives is the most difficult and time-consuming among steps. OECD (1979) criticizes those who set too much weight on “behavioral” objectives, supposing that the changes in a student can be observable. A clear idea of objectives is indispensable as well, and a fairly straightforward check-list of objectives will be helpful as a guide. When considering the objectives regarding a specific subject area, the overall objectives of the school must be considered. Moreover, rough priority must be accorded to the various objectives. Finally, the check-list is not used to encourage a straightforward linear approach, but is used during the whole process to identify the main priorities and check if attaining the objectives is reasonable.

Methods are the key stage where choices can be made. Constant reference back to the previous stages is essential. The mode of student assessment should be paid more attention to, specifically when it is not controlled by external agencies. The last two stages are practical stages that should involve the development team for practical problems of the organization.

Overall, for the whole process the following are needed: a team; a working place; accessible resources, such as libraries and museums; available and sufficient funds for the purchase of

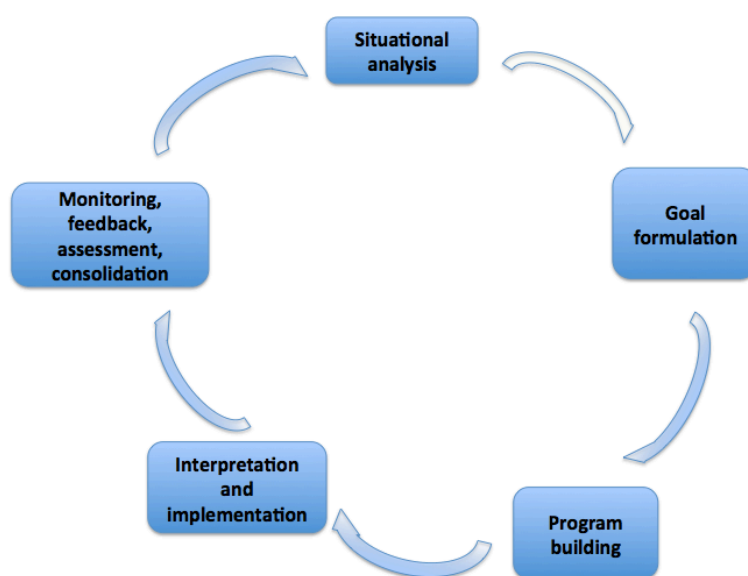


materials and travel; and close collaboration of the school administration should with the team to ensure that the general aims of the schools and external authorities are followed during all the processes and available resources are not overstrained.

## 2) Skilbeck's model that focuses on the distinction of function

Different from OECD's model, which starts with the potential users of curriculum, Skilbeck (1984) thinks that teachers must begin their analysis in a learning situation where the curriculum is to be established and the situation is meant to transform.

In actual practice, all the five stages might be better carried along at the same time, and thus there is no need to stoically follow the arrows in Figure 4. Developers should change along with the changing situation, but not to emphasize the strategies set in advance.



**Figure 4 Skilbeck's Model that Focuses on the Distinction of Function**

The above is a favorable model because SBCD itself implies a model of curriculum

development, which begins with an analysis of the factors that comprise the situation (Brady, 1992).

*-factors affecting SBCD*

The factors affecting SBCD are identified by focusing on the processes of SBCD or on some practical limits within the procedures of implementation. Nine major factors relating to SBCD are summarized by Marsh et al. (1990), including motivations of stakeholders; interest in innovative approaches; control, responsibility, and ownership; type/scale of activity; school climate; leadership; time; resources; and external initiatives and support. Motivations of stakeholders, awareness of innovative approaches, and ownership are the three factors given a central focus. The nine factors are mainly derived from the studied cases in Australia, Canada, the United States, and the United Kingdom. Similar to Marsh et al. (1990), Skilbeck (1984) underlines the capabilities, skills, attitudes, values, and motivation of teachers as the main challenges for SBCD. He also described the challenges brought by localism, parochialism, and conservatism. Those mindsets constrain the feeling that schools can be expected to organize large-scale and comprehensive development of the curriculum, thus tinkering with parts of the curriculum but quite inadequate in relation to policy planning being regarded as adequate. Compared to Marsh et al. (1990) and Skilbeck (1984), OECD (1979) mainly focuses on the constraints that impede SBCD, but neglect those positive factors that may support the practices. Thus, three categories are classified by combining both negative and positive factors affecting SBCD: legislative, administrative, and financial factors, factors within the school, and factors exterior to the school.

## A. Legislative, administrative, and financial factors

### 1) Political factors

Political constraints to SBCD will be more outstanding in countries where political parties take much more interest in education, given that the power relationship of SBCD and central authorities is about one where one wanes when the other waxes (OECD, 1979). The education system is under tight administrative control from the central government and will employ a supervisory system to safeguard its autonomy from overstepping central guidelines. Each country actually has a particular way of organization within the school. In other words, hierarchy is already existing when SBCD comes into being. Therefore, the attempt to change such a hierarchy during SBCD will become the constraints on SBCD (OECD, 1979).

Thus, Skilbeck (1984) considers curriculum innovations in a school difficult to accomplish when its organizational structure is hierarchical and conservative. In other words, under a centralized authority, SBCD will be constrained.

### 2) Time

Marsh et al. (1990) clearly state that having sufficient time is a major factor for SBCD. Skilbeck (1984) agrees that time has a capital advantage among those resources for SBCD. From the legislative perspective, time can be regarded as the legal constraints on SBCD, because time is the legal provision affecting education in every country. Such legal provisions will apparently become obstacles when extreme details are stated, such as laying down the hours to be spent on each subject or forbidding children to leave the premises during school

hours (OECD, 1979).

### 3) Financial factors

Financial support is one of the essential resources for the normal operation of SBCD, yet the amount of money needed is often underestimated (OECD, 1979). Financial factors are also administrative factors because money, as a resource, is mainly distributed and controlled by the state, provincial, or local education authority.

### 4) Administrative factors: attitudes, expectations, and motivations

The attitudes and expectations of administrative and supervisory personnel can affect SBCD, because the individual administrator or supervisor's interpretation of SBCD is significant. When administrators or supervisors have sufficient understanding to see the need for change, they will provide support (OECD, 1979) and will become the motivation of the stakeholders. When stakeholders are under the influence of localism, parochialism, and conservatism, or are satisfied with what is happening around them, until an externally generated initiative emerges, serious SBCD activities would not be initiated (Marsh et al., 1990; Skilbeck, 1984) because the fluent promotion and operation of SBCD will be constrained by the climate of opinion from the stakeholders about what is important in education (OECD, 1979).

## B. Factors within the school

### 1) Participants

#### a. Readiness and teachers' in-service training

Teachers' readiness to participate in SBCD is indeed critical to the success of SBCD. Although it will be inappropriate to regard teachers' readiness with over optimism, their capacity should not be underestimated (OECD, 1979). In analyzing the readiness of participants, Marsh et al. introduce six developmental stages of participation in SBCD (Table 4) by Hall et al. (1975, 1977):

**Table 4 Developmental stages of participation in SBCD**

<b>Stage</b>		<b>Major Priorities</b>
I	Individual experimentation	(a) Not confident in working with others (b) Not willing to share ideas
II	Exchanges ideas	(a) Willing to 'swap recipes' informally (b) Willing to try out other teacher ideas
III	Seeks our information	(a) Finds out informally about tasks and expectations (b) Does some independent searching out (e.g. Resource Centres)
IV	Participates with minimal responsibilities	(a) Takes on roles which require limited leadership skills (b) Prefers to adopt a 'low profile' in terms of participation
V	Active participant	(a) Is a major participant in the activity (b) Is willing to organize and lead various activities
VI	Undertakes major leadership roles	(a) Is prepared to initiate and plan activities (b) Monitors achievements and takes steps where need to maintain group productivity and direction

Curriculum development is the daily task of teachers, and SBCD is a good approach for them because teachers will not automatically realize the importance of SBCD. Moreover, teachers' mindsets will change along with the changing climate, and thus teachers' training with SBCD components is significant (OECD, 1979).

b. Interests in innovative approaches and motivation

Participants' interests in innovative approaches and their motivation are closely interrelated. In actual situations, participants' interests in innovative approaches can be raised inseparably by both "dissatisfaction with pupils' effectiveness of learning" and "prospects of promotion," both of which will also become the motivation for the participants to have innovative approaches to

reach the expected situations (Marsh et al., 1990).

At this point, there is no superiority of specific methods of teaching. Therefore, the interests of participants in innovative approaches can be easily raised when external pressures appear, specifically from the government and the media. Usually, Principals would become the initiators to have innovative approaches, because they would like to perform as a leader as well as have more opportunities than others regarding the latest information about innovatory products and processes (Marsh et al., 1990).

c. Control, responsibility, and ownership

Participants' interests in innovative approaches and motivation may decline when there is little support, time, energy, and resources. Thus, the motivation and interests in innovations are quite the early steps to achieve actual curriculum change. Participants should also be made to feel their control and ownership during the processes and feel that they are responsible for the outcomes of their participations.

d. Professionalism and leadership

Principals are identified as the key agent in SBCD, and various Principal styles are suggested (Marsh et al., 1990). Hall and Rutherford (1983) advance three typical styles, namely, "responder," "manager," and "initiator." Leithwood and Montgomery (1986) suggest four levels of Principals in their process, such as "administrator," "humanitarian," "program manager," and "problem solver." Marsh et al. (1990) consider "initiator" and "problem-solver" Principals would be particularly successful to facilitate SBCD activities.

However, placing all the burdens about leadership on school Principals in SBCD is unreasonable, as others can also function with leadership roles within the school (Marsh et al., 1990). The significant skills necessary to key agents in SBCD are as follows (Campbell, 1985):

### 1. Curriculum skills

#### (a) Subject knowledge

- (i) updating subject knowledge
- (ii) identifying conceptual structure of subject(s)
- (iii) identifying skills in subject(s)

#### (b) Professional skills

- (i) reviewing existing practice
- (ii) constructing scheme/program
- (iii) implementing scheme/program
- (iv) assessing scheme/program

#### (c) Professional judgment

- (i) deciding between available resources
- (ii) deciding about methods
- (iii) identifying links between subjects
- (iv) ordering, maintaining resources
- (v) relating subject to its form in other schools

### 2. Interpersonal skills

#### (a) Working with colleagues

- (i)leading workshops/discussions
- (ii)translating material into comprehensible form
- (iii)liaising with head and/or senior staff
- (iv)advising colleagues informally
- (v)teaching alongside colleagues
- (vi)visiting colleagues' classes to see work in progress
- (vii)maintaining colleagues' morale, reducing anxiety, and so on
- (viii)dealing with professional disagreement
- (b)External representation
  - (i)consulting advisers, university staff, and so on
  - (ii)consulting teachers in other schools. (p.75)

## 2) School climate/culture

School climate is recognized as a major factor in school change (Marsh et al., 1990). When examining the relationship between organizational climate and SBCD, Brady (1987) concludes that “Principal supportiveness” is the most critical to the success of SBCD activities. Goodlad (1987) describes the school as an ecosystem, with constant self-examination needed to perform functionally. In addition, Lieberman and Miller (1984) refer to the school culture with “routinization and regularities of school life and the strong informal norms that grow up among teachers and which govern their working life” (p.98). The school is suggested as a structure that is neither loose nor tight (Hoyle, 1986). A school with a positive culture is where administrative decisiveness are bordering on coercion but are exercised intelligently and



supportively (Huberman & Miles, 1984). The importance of group cohesiveness and collaboration to school climate should not be underestimated, as SBCD activities advance the total school staff, or at least departments or sections, rather than merely individuals (Marsh et al., 1990).

### C. Factors exterior to the school

#### 1) Assessment

Two obstacles for SBCD are created by both external and internal needs assessment. First, pupils undergo a selection process by external examination before they enter higher education and the industry; to attain the best performance in examination, they naturally resist unknown quantities that may affect their performance. Second, there is a demand for specific curriculum subjects at specified levels in both higher education institutions and some industries. Thus, the students are unwilling to accept new subjects or new combinations of subjects brought by SBCD (OECD, 1979).

#### 2) Superiors

The superiors (i.e., state/province/local education authorities) have the capability to distribute resources (i.e., human resources, money, etc.) and to intervene with their subordinates (Marsh et al., 1990). Therefore, the intervention and arrangement by the superiors may also affect the implementation of SBCD within the school.

#### 3) Parents and pupils

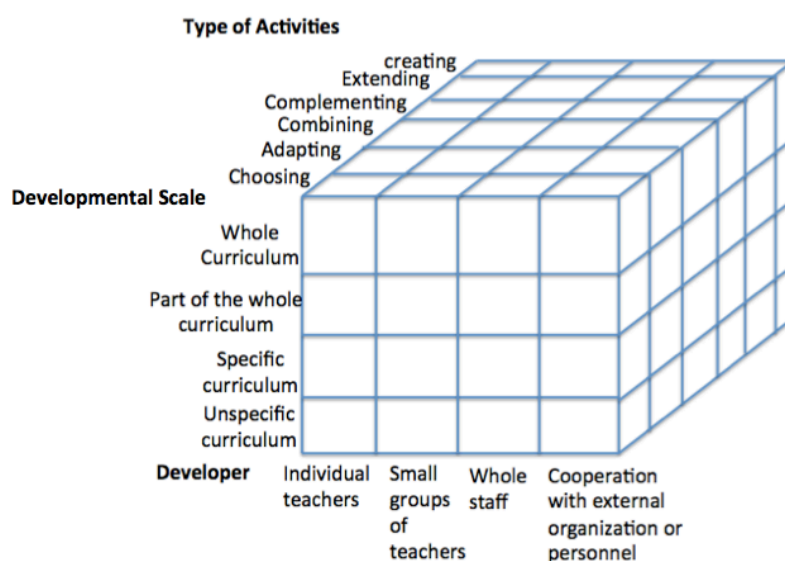
The interests of both students and parents in the curriculum are somehow utilitarian. Thus, their attitudes toward SBCD should be paid more attention to if SBCD is to succeed (OECD, 1979). Parents and pupils as factors should not be neglected.

### ***2.3.3.2 studies on SBCD in Mainland China***

As mentioned above, two viewpoints on SBCD dominated the understanding and then the implementation of SBCD in Mainland China (in paragraph 2 of sub-sub-sub-subsection 2.3.2.2.2). Thus, most schools implement SBCD as a SBC, whereas few schools with strong leadership may implement SBCD as a SBC with adaptation to and redevelopment of the national and local curricula. As a result, majority of studies on SBCD in Mainland China are about SBCs. The following reviews on SBCD studies in Mainland China were in the forms and models of the SBCs that were studied in a former research in the Chinese context.

#### ***2.3.3.2.1 forms for SBCD.***

Introduced by Jin (2006), Wu (2000) proposed a matrix (Figure 5) regarding the distinctive implementation in Mainland China and classified SBCD with three dimensions about who develops the curriculum, what the scale of development is, and what the method of development is. Compared to other forms introduced above (i.e., SBCD in the international context), this is the best form to understand the type of SBCD in Mainland China. For Wu (2000), who considers SBCD in Mainland China with a broader point of view (discussed above in 2.4.2.1), this form of SBCD with three dimensions can help understand a SBC as well as the adaptation and redevelopment of the national and local curricula in a school.



**Figure 5 A Matrix of SBCD Variations in Mainland China**

Zeng and Zhou (2013) analyze a great deal of literature about SBCD published from the 2011 to 2010 in Mainland China and identify three distinctive dimensions for understanding SBCD in Mainland China. The three distinctive dimensions are “designer”, “theme” and “design”. The dimension “designer” is with similarities with “persons involved” or “developer” introduced above; the dimension “theme” includes 8 themes: “expanding national curriculum (NC)”, “social life”, “culture cultivation”, “art accomplishments”, sports activities, science and technology (ST) education, moral education, and “others”; the dimension “design” has two categories – “grading curriculum” and “whole school curriculum”, by considering SBCD is implemented by different grades or as a whole-school curriculum (Zeng & Zhou, 2013, p.275-276).

#### *2.3.3.2.2 operational models of SBCD.*

Gao (2010) introduced a condition-led model for SBCD derived from an activity class for developing the communication skills of pupils. A problem-oriented model is designed by Liu (1999), who considered the process of SBCD as a process of resolving teaching and educating problems that emerge from daily school activities. Hu (2015) attempted to introduce a curriculum model promoted by a European educational organization, PARSEL, and originally designed for scientific literacy. Hu (2015) tried to use the curriculum model when developing a school-based curriculum related to chemistry classes. Aside from the above models for a SBC or the adaptation and redevelopment of national and local curricula, Jin (2006) introduces a goal-oriented model. Other authors showed their distinct models for their specific schools (Dong, 2007; Zheng, 2008).

Nevertheless, all the models are as the variations of those proposed by OECD (1979) or Skilbeck (1984).

#### **2.3.4 the framework for the empirical study on SBCD.**

This study explores SBCD in Mainland China, yet it is not limited and confined by the understanding of SBCD in this area. Instead of understanding SBCD as a SBC, SBCD is defined as a means with legal and administrative autonomy. It is also the professional authority from the central authorities to manage the school's own process of development of curriculum according to the needs of the pupils, the teachers, and the school as a whole, as well as the resources within the school for the improvement of the whole school. One of the premises for

the discussion of SBCD is that the curriculum should be made up of and regarded as experience, that is, experiences defined as any activities undertaken and developed by the teacher and the learner together to improve the whole of the curriculum and the school (OECD, 1989; Skilbeck, 1989; Law & Xu, 2013). Therefore, SBCD to be explored in the current study is the curriculum changes or activities for school improvement.

By regarding curriculum as experience which as the premise for studying SBCD, and by considering both the literatures in the western context and in the context of Mainland China, the framework for the exploration of SBCD in the case school(s) in this research is framed accordingly as follows:

In a macro perspective, all the curriculum changes of all the activities undertaken within the school are expected to be revealed and will follow the directions of change outlined in Clause 2 in “The Compendium” for the NCR (more details refer to para. 7 in sub-sub-sub-subsection 2.3.2.2.2). The researcher frames it with four directions of change instead of the original five directions. “Curriculum structure” is considered as part of “curriculum content” in this research. Therefore, four directions are set as the frame to comprehensively explore the whole school: 1) Curriculum content; 2) Learning processes; 3) Curriculum Assessment; and 4) Curriculum Administration. Compared to the “dimensions of curriculum change” (refer to sub-sub-sub-subsection 2.3.3.1.1) reviewed from the Western studies on SBCD, which also consider curriculum as experience and discuss the similar dimensions of school curriculum changes, these four directions of change may better suit the Chinese context. These parameters are presented for guiding all the schools in Mainland China and with more Chinese

characteristics for a better exploration of SBCD in Mainland China.

In a micro perspective, a SBC (the most recommended SBC in the school), as one of the activities within the school and as a common feature of all the schools in Mainland China, is also studied for an in-depth exploration of SBCD in the school by exploring its form and developmental processes. With regard to the framework of form, by considering all the forms of SBCD introduced locally and internationally (in sub-sub-sub-subsections 2.3.3.1.2. and 2.3.3.2.1), the framework of the form to be studied in this research includes six dimensions: a)developmental scale, b)type of activities, c)theme, d)design, e)time, and f)developer. By considering the developmental processes of the models of SBCD (in sub-sub-sub-subsections 2.3.3.1.2. and 2.3.3.2.2), those processes used to explore the SBC in the study are synthesized with four aspects, namely, a)goal setting, b)design and mechanism, c)implementation, and d)evaluation and revision.

Accordingly, Q2a, Q2b, and Q2c are set:

- Q2a: What are the directions of change (i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration) in the case school(s)?
- Q2b: What forms (i.e., developmental scale, theme, type of activities, design, time, and developers) does the SBC take in the case school(s)?
- Q2c: What are the developmental processes (i.e., goal setting, design and mechanism, implantation, and evaluation and revision) of a SBC in the case school(s)?

With such a framework, the case studies on SBCD in each case school are explored

correspondingly.

## 2.4 Summary

This chapter has reviewed the considerable literature on the two main elements of the study: “**culture**” and “**SBCD**”.

The “culture” part aims to identify a suitable instrument for investigating the culture of schools in order to select case schools according to this study. As a result, the SCS instrument for investigating collaborative school culture has been identified as the instrument for this study; this is because SCS mainly focuses on collaborative culture within the school, which is a sub-culture that critically contributes to school improvement – the main purpose of studying school culture.

The main purpose of the “SBCD” part is for constructing the research framework for the SBCD empirical studies for this study. By considering literature from both Chinese and international contexts, most SBCD studies in Mainland China have examined and focused on school-based subject/s. To address this gap, the current study explores the case schools from macro and micro perspectives, with four directions of change (from the macro perspective) and with the most recommended SBC forms and developmental processes (from the micro perspective). In the discussion part of the thesis, other points (i.e., factors affecting SBCD, forces of curriculum change, change strategies of curriculum) introduced in this chapter will be also identified with further in-depth discussions. The following chapter discusses the research design and data collection of the whole study.

## **Chapter 3: Research Design and Data Collection**

### **3.1 Introduction**

This chapter will discuss the research design based on the research questions. The framework of research is in accordance with the chapter on literature review. First, the target population will be introduced. According to the research questions, two stages of research are designed for the whole study. The methodologies used in the respective stages are introduced. Afterward, the validity, reliability, and ethical issues are explained.

### **3.2 Review of Methodology**

Case study is a popular method used by researchers (Bezzina, 1991; Brooker & Macdonal, 1999; Brady, 1987; Keys, 2000; Shoham, 1995; Lam, 2011; Law & Xu, 2013) studying SBCD. Qualitative methodology is usually the main methodology in the research. However, when the questionnaire survey is needed, a study then have both qualitative and quantitative methodologies (Lo, 1999; Brady, 1987; Lam, 2011; Chen et al., 2015).

Researchers usually gather information through observation, interviews, and questionnaires. Bezzina (1991) had a 30-week observation period, and he collected data through interviews, observations, and questionnaires with all of the teachers in the school. Keys studied the teachers' role in SBCD, interviewed nine teachers, and observed four teachers in the school. In Shoham's (1995) study, 85 teachers who were implementing special programs responded to a questionnaire, and 53 teachers were interviewed. A four-year trial of a new PE curriculum was evaluated by Brooker and Macdonal (1999) with interviews. Content analysis is also a feasible



way of analyzing SBCD, as conducted by Shoham (1995) in his study on teachers' role in SBCD. He analyzed the content of all 35 school-based curricula in existence in Kibbutz secondary schools in 1990. Grounded theory was also used by Ramsay et al. (1993) when they had a two-year project involving 28 schools. As a result, over 700 propositions about the processes involved in a school–community collaboration in curriculum development were developed and tested.

However, the above literature reviews are just references. Detailed information about the methods used in this research will be further justified and introduced in the following subsections.

### **3.3 Justification of the Research Methods**

Two paradigms of research are commonly recognized. One is quantitative research, and the other is qualitative research. Usually, these two paradigms will be easier and clearer to understand through comparison. Quantitative work seeks to explain outcomes by examining the frequency with which they are empirically associated with possible causes, whereas qualitative analysis employs a type of reasoning that is analogous to riddle-solving (Alasuutari, 1995).

When the above is trying to explain and compare with reasoning logic, Bryman (2008) clarifies the process in a simpler way – the presence of quantification is symbolized by the term quantitative research, while the absence of quantification is symbolized by the term qualitative research.

However, those two extreme research doctrines somehow confine the researcher when conducting the research, and so more and more voices arise for using both approaches (Cohen et al., 2007; Innacoon, 1975; Parlett & Hamilton, 1972; Creswell & Plano Clark, 2006). The “mixed methods” then comes up as the “third research paradigm” (Johnson & Onwuegbuzie, 2004, p.15). Mixed methods are not simply viewed as methods but “more as a methodology that spanned viewpoints to inferences and that included the combination of qualitative and quantitative research” (Creswell & Plano Clark, 2006, p.31). In fact, the voice of a third paradigm, the mixed method, is developed for the common recognition that the use of flexible methods for reaching research purpose is important. The research purpose defines the methods used, and so methods should be flexibly chosen and used to serve the research purpose (Innacoon, 1975; Parlett & Hamilton, 1972; Corbin & Strauss, 2008).

Therefore, to justify the research method, the focus again lies on the research questions to be answered in this study. The research questions of this study are as follows:

**Q1: What are the cultures like in the 23 schools?**

- Q1a: Which is(are) the case school(s) identified through investigating the culture of the 23 schools?
- Q1b: What are the main characteristics of the cultures of the 23 schools?

**Q2: How is SBCD implemented in the case schools?**

- Q2a. What are the directions of change (i.e., philosophy of schooling, curriculum content, learning processes, curriculum assessment, and school administration) in the case

school(s)?

- Q2b. What forms (i.e., developmental scale, theme, type of activities, design, time, and developers) of the SBC take in the case school(s)?
- Q2c. What are the developmental processes (i.e., goal setting, design and mechanism, implantation, and evaluation and revision) of a SBC in the case school(s)?
- Q2d. What are the differences and similarities of SBCD among the case school(s)?
- Q2e. What emerges in terms of similarities and differences of SBCD among the case school(s)?

The mixed method will be flexibly used to answer the research questions. Questionnaires, as the quantitative method, will be used for Q1, whereas case studies, as the qualitative method, will be used for Q2. Additional details about the methods will be presented in the following subsections.

### **3.4 K District, the Population, and the Target Population**

About sampling, Creswell (2015) thought that three terms must be initially defined: population, target population or sampling frame, and sample. Population refers to a group of individuals who possesses one characteristic that distinguishes them from other groups. Target population is the list or record of individuals in a population that can be obtained by a researcher. Sample is selected by the researchers from the target population and studied. Before selecting and deciding specific research methods for the research questions, both population and the target

population in the study should be clarified.

As mentioned in subsection 1.2 of Chapter 1, K district in Shenzhen City is selected by the researcher to study SBCD. Schools in Mainland China are directly administered by the Education Bureau of the district, and most policies and resolves from the central government perceived by schools are directly from the interpretation of the bureau. Therefore, having a district as a research base will enhance understanding on how SBCD is perceived and implemented. Similarly, to some extent, it ensures that SBCD in each school with the same external effects can be more easily identified when the internal factors cause the differences or similarities among schools. As schools from the same district receive the same interpretation of policies and resolves, a school's own interpretation will become an obvious cause of what makes the top-down stipulated practice different from one school to another. Thus, the school culture directly affects the school's own interpretation and implementation of the practice. Thus it is selected as the assurance for identifying the case schools to further SBCD exploration in this research.

K district has 14 primary schools, 10 schools with nine-year education (combining six primary grades and three junior middle grades), 3 junior middle schools, and 2 vocational schools (Shenzhen Government, 2016). Accordingly, all the personnel in the 29 schools comprise the population of the whole study. However, personnel in primary schools have comparatively low constraints by assessment; thus, it is expected that primary schools will implement SBCD more actively. Therefore, personnel in 24 schools are selected as the target population for the study. However, for some reasons, one of the 10 nine-year schools did not participate in the research.

Therefore, in total, 23 (14 primary schools and 9 nine-year education schools) have joined the study.

### 3.5 Preliminary Studies

To obtain a general understanding of SBCD in K district, the researcher performed the following preliminary studies:

- On November 2, 2015, the researcher interviewed the deputy director of the Educational and Scientific Research Center of K district to obtain a general understanding and situation of SBCD in the district.
- On November 4 and 6, 2015, the researcher visited three primary schools (schools 4, 5, and 6)<sup>1</sup> and talked to a total of nine teachers and Principals to ask about their understanding of SBCD and the specific situations of SBC in the schools.
- On November 18, 2015, the researcher joined the district-level SBCD meeting, which had gathered almost all the representatives of all schools in K district for SBCD reporting and communication.

### 3.6 Stage 1 – Quantitative Research

This subsection is for collecting the data for answering the following questions:

Q1: What are the cultures in the 23 schools like?

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<sup>1</sup> The numbers of school refer to Table 6.

- Q1a: Which is(are) the case school(s) identified through investigating the culture of the 23 schools?
- Q1b: What are the main characteristics of the cultures of the 23 schools?

Therefore, this subsection shows the findings of the quantitative research. An analysis of the quantitative data and presentation of the findings of the Stage 1 research was performed. The answer to:

- Q1a: Which is (are) the case school(s) identified through investigating the culture of the 23 schools?

is obtained and introduced in Chapter 4. The answer to:

- Q1b: What are the main characteristics of the cultures of the 23 schools?

is featured in the discussion part in Chapter 6 (subsection 6.2).

### **3.6.1 questionnaire survey as the method used in stage 1.**

Data from a larger number of subjects as well as subjects in more diverse locations can be collected by questionnaires in a relatively shorter amount of time compared with other methods (Ary et al., 2014; Creswell, 2015; Gay et al., 2009). The 23 primary schools with more than 2,000 school teachers and 35,000 pupils are indeed a large amount of subjects. Moreover, these primary schools are scattered over quite a large area. Hence, questionnaires as a data collection method is a solid choice.

### **3.6.2 piloting and results of the questionnaire survey.**

Two processes should be considered for piloting. One is small-scale piloting, which refers to “a relatively informal exercise of trying out the questionnaire to see how it works and to get the ‘bugs’ out of the questions,” and the other is large-scale piloting, which is about a large-scale “detailed analysis of the responses” (Munn & Drever, 1990, p.30). As introduced in Chapter 2, SCS instrument is available and deemed suitable for this study. Some translation wording issues were tackled for the Chinese version of SCS. In the large-scale piloting, the Chinese version of SCS was determined with EFA and item analysis as valid and reliable methods to measure the school culture of the 23 primary schools in K district, with 23 items of the two-factor structure remaining. Data collected in the large-scale piloting determined as valid and reliable were also used directly for the following data analysis to identify the cultural patterns of the 23 schools in K district.

#### ***3.6.2.1 small-scale piloting.***

As introduced in Chapter 2 Literature Review, the SCS instrument was selected on the grounds of its having been proven to be a reliable instrument for measuring culture within schools.

Chinese is the written language of the schoolteachers in K district, but the original language of the questionnaire SCS is English. Thus, forward and backward translation was used to test and modify the wording of the Chinese version of SBC with the help of two English teachers in K district and two graduates who majored in English Interpretation and Translation.

### ***3.6.2.2 large-scale piloting – Exploratory Factor Analysis (EFA) and results.***

Factor analysis is “normally used to regroup variables into a limited set of clusters based on shared variance” (Yong & Pearce, 2013, p.79) and is a commonly used statistical approach in the fields of psychology and education (Hogarty et al., 2005; Williams et al., 2010). William et al. (2010) highlight three of its uses:

Firstly, factor analysis reduces a large number of variables into a smaller set of variables (also referred to as factors). Secondly, it establishes underlying dimensions between measured variables and latent constructs, thereby allowing the formation and refinement of theory. Thirdly, it provides construct validity evidence of self-reporting scales. (p.2)

Two main factor analysis techniques are identified, EFA and CFA. Broadly speaking, the biggest difference between EFA and CFA is that EFA, being exploratory in nature, has no expectations on the number or nature of the variables except to generate a theory or model; whereas CFA tries to confirm or examine the hypotheses or proposed theories (Yong & Pearce, 2013; Child, 2006; Williams et al., 2010; Pett et al., 2003; Henson & Roberts, 2006; Thompson, 2004; Swisher et al., 2004).

EFA is a widely utilized and broadly applied statistical technique to develop scales and subscales (Costello & Osborne, 2005; Gorsuch, 1997). For instance, about 75% of a psychological abstract search for 1990–1995 using the terms “factor analysis” and “item” are studies that used EFA (Gorsuch, 1997). According to Pett et al. (2003), Thompson (2004), and William et al. (2010), the objectives of EFA are various, such as the following:

- Reduce the number of variables;



- Examine the structure or relationship between variables;
- Detect and assess the unidimensionality of a theoretical construct;
- Evaluate the construct validity of a scale, test, or instrument;
- Develop parsimonious (simple) analysis and interpretation;
- Address multicollinearity (two or more variables that are correlated);
- Develop theoretical constructs; and
- Prove/disprove proposed theories.

Therefore, EFA was used in this research to validate the instrument of SCS. Generally, two parts are included in this sub-sub-subsection: the preparation stage for deciding the number of questionnaires to be distributed, the insurance against unreliability, and the response rate; and the process of processing EFA for the appropriate number of factors.

#### *3.6.2.2.1 preparation stage – distribution of SCS questionnaires.*

For reliability, only schoolteachers were selected as the respondents. Moreover, according to Gruenert and Whitaker (2015), SCS is an instrument designed for schoolteachers to get a sense of how much their school culture is collaborative. The questionnaire was likewise anonymous to ensure reliability and encourage greater honesty (Cohen et al., 2007).

A large population size generally has a small proportion of the probability sample (Gay et al., 2009; Cohen et al., 2007). Gay et al. (2009) pointed out that if the population size is around 1,500, 20% should be sampled. Cohen et al. (2007) showed a full table of sample sizes for a probability sample (Table 5), and noted that the smaller the degree of variation (the small

confidence interval), the higher the sample size. However, a compromise is reached when the researchers opt for a 95% confidence level with an optional confidence interval.

**Table 5 A Full Table of Sample Sizes for a Probability Sample**

Popula tion	Confidence level 90%			Confidence level 95%			Confidence level 99%		
	Confidence interval:			Confidence interval:			Confidence interval:		
	5%	4%	3%	5%	4%	3%	5%	4%	3%
1500	230	331	503	306	429	624	460	613	827
2000	240	351	549	322	462	696	498	683	959
2500	246	364	581	333	484	749	524	733	1061

The 23 primary schools in K district have around 2,000 schoolteachers. Consequently, 800 SCS questionnaires were distributed in proportion to the different numbers of schoolteachers in each school (Table 6). A total of 657 questionnaires were also collected in proportion, resulting in a response rate of 82%. According to the sample size table by Cohen et al. (2007), the sample size of 657 reached a compromise for an approximate target population of 2,000.

**Table 6 The Number of Questionnaires Distributed and Collected for the 23 Schools**

School NO.	Questionnaires Distributed	Questionnaires Collected	School NO.	Questionnaires Distributed	Questionnaires Collected
1	20	20	13	30	27
2	30	25	14	40	25
3	50	40	15	40	30
4	30	29	16	40	33
5	40	36	17	40	28
6	50	45	18	40	33
7	20	17	19	40	28
8	50	43	20	20	21
9	40	33	21	30	25
10	30	27	22	30	19
11	30	23	23	30	24
12	30	26	Total	800	657

### 3.6.2.2.2 EFA results.

Sample size is also important to factor analysis because it is one of the pre-conditions to have factor analysis. EFA works better with a larger sample size, as a larger sample size can diminish error in the data (Yong & Pearce, 2013). At least 300 are recommended. The sample size is guided by the following: 100 as poor, 200 as fair, 300 as good, 500 as very good, and 1,000 or more as excellent (Comrey & Lee, 1992). Therefore, the number of 660 in this research is considered very good. Furthermore, the ratio of respondents to variables is another reference for deciding the appropriate sample size. 3:1, 6:1, 10:1, 15:1, and 20:1 are regarded as the rules of thumb (Pett et al., 2003; Gorsuch, 1983; Tabachnick & Fidell, 2007; Everitt, 1975; Williams & Brown, 2010). Normally, the ratio should be at least 10:1; it is considered stable when the ratio reaches 30:1 (Yong & Pearce, 2013). The original SCS has six variables. Thus, according to Comrey and Lee (1992), the sample size of 660 for EFA in this research is considered very good. The six factors and their related items are (Gruernet & Whitaker, 2015) as follows:

SCS items in the **Collaborative Leadership** factor: 2, 7, 11, 14, 18, 20, 22, 26, 28, 32, 34

SCS items in the **Teacher Collaboration** factor: 3, 8, 15, 23, 29, 33

SCS items in the **Professional Development** factor: 1, 9, 16, 24, 30

SCS items in the **Unity of Purpose** factor: 5, 12, 19, 27, 31

SCS items in the **Collegial Support** factor: 4, 10, 17, 25

SCS items in the **Learning Partnership** factor: 6, 13, 21, 35

An EFA was conducted on the 35 items with a promax rotation using SPSS 21.

The final two-factor structure in this study is composed of 23 items after deleting 12 items that were cross-loaded on two factors or with no loadings on it (for details of EFA processing, refer to Appendix D). Table 7 shows 13 items (Items 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, and 34) for Factor 1 and 10 items (Items 13, 15, 19, 21, 23, 24, 25, 30, 31, and 35) for Factor 2.

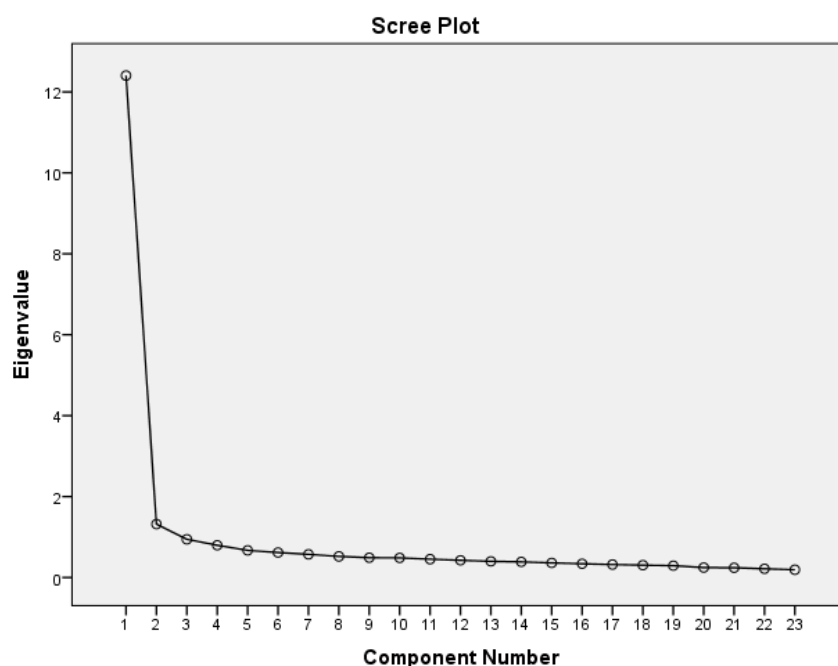
**Table 7 Pattern Matrix (SPSS Output – Final Results of EFA)**

Pattern Matrix <sup>a</sup>					
	Component			Component	
	1	2		1	2
22 Teacher involvement in policy or decision-making is taken seriously.	1.006		21 Teachers and parents communicate frequently about student performance.		.911
14 Teachers are involved in the decision-making process.	.914		25 Teachers work cooperatively in groups.		.851
32 Administrators protect instruction and planning time.	.898		35 Students generally accept responsibility for their schooling, for example by being mentally engaged in class and completing homework assignments.		.809
27 The school mission statement reflects the values of the community.	.819		15 Teachers take time to observe each other teaching.		.767
26 Teachers are rewarded for experimenting with new ideas and techniques.	.749		30 The faculty values school improvement.		.691
28 Leaders support risk taking and innovation in teaching.	.702		13 Parents trust teachers' professional judgments.		.687
33 Disagreements over instructional practice are voiced openly and discussed.	.699		23 Teachers are generally aware of what other teachers are teaching.		.636
20 Teachers are kept informed on current issues in the school.	.676		24 Teachers maintain a current knowledge base about the learning process.		.509
34 Teachers are encouraged to share ideas.	.563		31 Teaching performance reflects the mission of the school.		.486
3 Teachers have opportunities for dialogue and planning across grades and subjects.	.502		19 Teachers understand the mission of the school.		.468
8 Teachers spend considerable time planning together.	.492				
18 Leaders in the school facilitate teachers working together.	.451				
9 Teachers regularly seek ideas from seminars, colleagues, and conferences.	.409				
Extraction Method: Principal Component Analysis.					
Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 3 iterations.					

The KMO measure verified the sampling adequacy for the analysis (Table 8),  $KMO = .968$ , which is above .60. Bartlett's test of sphericity,  $\chi^2(253) = 10,371.186$ ,  $p < .000$ , indicated that correlations among items were sufficiently large for EFA. Two factors had eigenvalues greater than 1, as the scree plot clearly illustrates in Figure 6.

**Table 8 KMO and Bartlett's Test (SPSS Output – Final Results of EFA)**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett's Test of Sphericity	Approx. Chi-Square	10371.186
	df	253
	Sig.	.000



**Figure 6 Scree Test Criterion (SPSS Output – Final Results of EFA)**

The 23-item structure explained 59.672% of the variance in the pattern of relationships among the items shown in Table 9. The percentages explained by each factor were 53.932% (Factor 1)

and 5.741% (Factor 2).

**Table 9 Total Variance Explained (SPSS Output – Final Results of EFA)**

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.404	53.932	53.932	12.404	53.932	53.932	11.276
2	1.320	5.741	59.672	1.320	5.741	59.672	10.582
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

The two factors in this study were highly correlated to each other as well, as shown in Table 10.

The correlation between Factor 1 and Factor 2 was .737.

**Table 10 Component Correlation Matrix**

Component Correlation Matrix		
Component	1	2
1	1.000	.737
2	.737	1.000
Extraction Method: Principal Component Analysis.		
Rotation Method: Promax with Kaiser Normalization.		

To test the reliability of each of the two factors, an item analysis was conducted. Normally, Cronbach's alpha reliability coefficient ranges from 0 to 1 (Gliem & Gliem, 2003). George and Mallery (2003) provide the following conditions as the rules of thumb, “ $\alpha > .9$  – Excellent,  $\alpha > .8$  – Good,  $\alpha > .7$  – Acceptable,  $\alpha > .6$  – Questionable,  $\alpha > .5$  – Poor, and  $\alpha < .5$  – Unacceptable” (p.231). The Cronbach's  $\alpha$  for Factor 1 was .940 and for Factor 2 was 0.918 (Table 11). Therefore, both factors on this scale had excellent internal reliability.

**Table 11 Cronbach's  $\alpha$  for Factor 1 and Factor 2**

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of items
Factor 1	.940	.942	13
Factor 2	.918	.919	10

Both the validity and reliability of the instrument were examined in this study through EFA and

item analysis. The initial SCS survey instrument contained 35 items. However, based on the result of EFA, 23 items remained. A two-factor structure was confirmed for the SCS instrument, and it explained 59.672% of the variance in the pattern of relationships among the items. The reliability of both factors was excellently high with Cronbach's alphas greater than .918. Therefore, the translated version of the SCS questionnaire is determined as valid and reliable to measure the school culture of 23 primary schools in K district by the remaining 23 items of the two-factor structure — Collaborative Leadership (CL) including item 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, 34 and Collaborative Partnership (CP) including item 13, 15, 19, 21, 23, 24, 25, 30, 31, 35 (more details of how to named and defined the two factors refer to sub-subsection 3.6.3).

### 3.6.3 the new SCS instrument in a Chinese context.

The original SCS is an instrument with 35 Likert-type items of six factors. The instrument uses the English language and was developed by conducting a 79-item pilot survey on 634 teachers in Indiana (for details, refer to sub-subsection 2.2.4). The six factors and their related items are from the original SCS, which are as follows (Gruernet & Whitaker, 2015):

SCS items in the **Collaborative Leadership** factor: 2, 7, 11, 14, 18, 20, 22, 26, 28, 32, 34

SCS items in the **Teacher Collaboration** factor: 3, 8, 15, 23, 29, 33

SCS items in the **Professional Development** factor: 1, 9, 16, 24, 30

SCS items in the **Unity of Purpose** factor: 5, 12, 19, 27, 31

SCS items in the **Collegial Support** factor: 4, 10, 17, 25

SCS items in the **Learning Partnership** factor: 6, 13, 21, 35

A small-scale piloting (in sub-sub-subsection 3.6.2.1) and a large-scale piloting (in sub-sub-subsection 3.6.2.2) on the original SCS, from 35 Likert-type items containing six factors, were conducted to form a reliable and valid Chinese version of SCS suitable to a Chinese context, containing 23 Liker-type items containing two factors. The two new factors and their related items of the new SCS are as follows:

Items in the new factor 1: 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, 34

Items in the new factor 2: 13, 15, 19, 21, 23, 24, 25, 30, 31, 35

***Table 12 Comparison of the Items of the Original SCS Instrument with the Items of the New SCS Instrument***

Items in individual factor of the original SCS instrument	Items individual factor of the new SCS instrument
Collaborative Leadership factor: 2, 7, 11, 14, 18, 20, 22, 26, 28, 32, 34	Factor 1: 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, 34
Teacher Collaboration factor: 3, 8, 15, 23, 29, 33	Factor 2: 13, 15, 19, 21, 23, 24, 25, 30, 31, 35
Professional Development factor: 1, 9, 16, 24, 30	
Unity of Purpose factor: 5, 12, 19, 27, 31	
Collegial Support factor: 4, 10, 17, 25	
Learning Partnership factor: 6, 13, 21, 35	

Comparing the items of the original SCS instrument with the items of the new SCS instrument (Table 12), it could be found that among the 13 items in factor 1 (items 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, and 34), a total of eight items (items 14, 18, 20, 22, 26, 28, 32, and 34) are from the original “Collaborative Leadership” factor. Based on the interpretation of the two factors (Williams & Brown, 2010), “the meaningfulness of latent factors is ultimately dependent on researcher definition” (Henson & Roberts, 2006, p.396), and the labeling of factors is a



subjective, theoretical, and inductive process (Pett et al., 2003). Therefore, Factor 1 is named **Collaborative Leadership** again.

The ten items in Factor 2, except for the “Collaborative Leadership” factor, are almost evenly allocated to the other five original factors: two items (items 15 and 23) to “Teacher Collaboration,” two items (items 24 and 30) to “Professional Development” factor, two items (items 19 and 31) to the “Unity of Purpose” factor, one item (item 25) to “Collegial Support” factor, and three items (items 13, 21, and 35) to “Learning Partnership” factor. The ten items in Factor 2 are consistent with the theme of collaborative partnership, in particular, the teachers’ partnership with other teachers and the teachers’ partnership with students and parents. Thus, accordingly, Factor 2 is named **Collaborative Partnership**.

Therefore, the reliable and valid Chinese version of the SCS questionnaire is determined as a new SCS instrument that fits the Chinese context with the remaining 23 items containing two new factors: Collaborative Leadership (CL), including items 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, and 34 and Collaborative Partnership (CP), including items 13, 15, 19, 21, 23, 24, 25, 30, 31, and 35.

### **3.7 Stage 2 –Qualitative Research**

This research stage is about determining the answers to the other main research questions:

#### **Q2: How is SBCD implemented in the case school(s)?**

- Q2a. What are the directions of change (i.e., philosophy of schooling, curriculum content, learning processes, curriculum assessment, and school administration) in the case

school(s)?

- Q2b. What forms (i.e., developmental scale, theme, type of activities, design, time, and developers) does the SBC take in the case school(s)?
- Q2c. What are the developmental processes (i.e., goal setting, design and mechanism, implantation, and evaluation and revision) of a SBC in the case school(s)?
- Q2d. What are the similarities and differences of SBCD among the case school(s)?
- Q2e. What emerges in terms of the similarities and differences of SBCD among the case school(s)?

The research method used to investigate the above questions was case studies. The following sub-subsections introduce and present why and how the case studies were conducted.

### **3.7.1 reasons for conducting case studies and selecting the case schools.**

Case studies are used to investigate the second main research question because an in-depth understanding of SBCD within schools is needed. Specifically, a case study method is selected for the following two reasons:

First, case studies are uniformly recognized as favoring intensity and depth and capable of having a contextualized, deep understanding and an in-depth description that is rich and holistic to explain (Ary et al., 2014; Marsh & Rossman, 2015; Yin, 2009). Moreover, the development of “how” and “why” questions is likely to be the rationale for a case study, for these questions are more explanatory (Yin, 2009). The second main question is a “how” question, which needs in-depth explanatory surveys in order to be solved.

Second, the attribute of SBCD itself has already decided that it should be a school-based study. The case study is designed to study a “particular program or classroom” (Lichtman, 2013, p.154), because it is a method that allows preserving the “holistic and meaningful characteristics of real-life events...such as...organizational and managerial processes...” (Yin, 2009, p.30).

The selection of the case schools is according to the results of the research in stage 1 (see subsection 3.6 for further details). Accordingly, four schools are selected, School 10, School 12, School 14, and School 23, and are renamed as School A(10), School B(12), School C(23), and School D(14), respectively.

### **3.7.2 research instruments – interview and document analysis.**

The three kinds of data collection sources and techniques in the case study are interview (i.e., structured interview, unstructured interview, focus groups, e-mail interviews), observation (i.e., participant observation, nonparticipant observation, and recording observation), and examining records (i.e., archival documents, journals, maps, videotape and audiotape, and artifacts) (Gay et al., 2009; Yin, 2009; Ary et al., 2014).

However, the main data collection sources and techniques were obtained through interview, because the research could purposefully interact with the target personnel and obtain pertinent information. Nevertheless, document analysis was needed to further understand the context and mechanism of SBCD in the school, as those documents could help gain valuable historical insights, identify potential trends, and explain how things turned out the way they are (Gay et

al., 2009).

### ***3.7.2.1 interview.***

#### *3.7.2.1.1. general introduction of interview.*

Interviews are a flexible tool for collecting data from people about their opinions, beliefs, and feelings about certain situations in their own terms (Ary et al., 2014; Cohen et al., 2007). Interviews are different from the ordinary daily conversation (Dyer, 1995). Cohen et al. (2007) define that interview is purposely constructed, usually question-based, and set up by the researcher with “rules of the game”(p.349), not as a natural occurring situation. Walliman (2011) thinks interviews are particularly useful to qualitative data collection, and they could be used even for sensitive topics if the correct preparation is used. Therefore, Yin (2009) regards interviews as one of the most important sources of case study information. Moreover, interviews as one of the most widely used and basic methods for obtaining qualitative data (Ary et al., 2014), may be the overall strategy or the only method employed in any qualitative study (Marshall & Rossman, 2015).

#### *3.7.2.1.2 types of interview.*

Cohen et al. (2007) indicate that the types and number of types of interview are mainly dependent on how one reads. Thus, there is no consensus on the types and number of types of interview. For instance, LeCompte and Preissle (1993) identify six types of interview, namely, standardized interviews, in-depth interviews, ethnographic interviews, elite interviews, life

history interviews, and focus groups interview. Yin (2009) provides three types, such as in-depth interview, a focused interview, and a formal survey. Creswell (2015) presents four types, which are the one-on-one interviews, focus group interviews, telephone interviews, and e-mail interviews. Lichtman (2013) illustrates three types, such as individual interview, focus group interview, and online interview. Moreover, three types of interviews are given by both Walliman (2011) and Corbin and Strauss (2008), and such classifications are more regular and easier to understand:

**1.Structured interview** – standardized questions read out by the interviewer according to an interview schedule. Answers may be in closed format.

**2.Unstructured interview** – a flexible format, usually based on a question guide. However, the format remains the choice of the interviewer, who can allow the interview to “ramble” in order to get insights into the attitudes of the interviewee. No closed format questions.

**3.Semi-structured interview** – contains structured and unstructured sections with standardized and open-type questions. (Williman, 2011, p.99)

The interviews were semi-structured, as can be seen in the guideline of interview schedule (Appendix A). Generally, the interviews were in-depth interviews that lasted from 30 minutes to 120 minutes. Originally, all interviews were to be conducted one-on-one and face-to-face. However, the plan had to be changed to one-on-one telephone interviews because some of the teachers were unavailable to hold interviews during school time.

*3.7.2.1.3 types of questions, questioning strategies to adopt, and questioning strategies to avoid for the interview.*

During the design of the questions for the interviews and the process of the interviews, some suggestions from Lichtman (2013) for interview questions were used, such as the types of

questions, questions strategies to use, and questions strategies to avoid.

**Types of questions.** Lichtman (2013) provides five types of question: grand tour; concrete example, comparison or contrast, new elements, and closing.

-- Grand tour questions. This type was utilized for it is general. It is also a good way to begin with questions such as “Tell me about what you think is a good school.”

-- Specific or concrete example questions. This type of question avoids involving abstract concepts and tries to give the interviewee a chance to provide relevant, concrete, and specific information. Examples of this type of question are, “What new teaching methods have you adopted during your mathematics class?” and “What did you see in your school that indicates there is a collaboration between the teachers?”

-- Comparison or contrast questions. This type of question tries to make the interviewee draw a comparison between times, situations, places, events, or people, with questions such as “How are things at this school now compared to when the national guideline had not been published?”

-- New elements or topics questions. When the interviewee was “stuck” on a particular thing and keeps repeating information, the interviewer introduced a new topic by using transition statements to move from one area to another. Questions include “You’ve talked about your pupils like your way of teaching during the class. What about your communication with your pupils’ parents?”

-- Closing questions. The interviewee answered this type of question by providing anything

else that has not been mentioned, such as “Is there anything else you would like to add to what you have already said?”

**Questioning strategies to use.** Lichtman (2013) provides some questioning strategies to use during the interview.

- **Elaboration.** As the combination of “specific or concrete example question” and “closing question,” this strategy encourages the interviewee to say more, to clarify and elucidate his or her responses and input additional things. For instance, “You said you enjoy your work though you have 20 classes a week. What else can you say about why you feel your work is so enjoyable?”
- **Probing.** This strategy helps the interviewer get the underlying meaning of what is said. For instance, “I see. What do you mean by ‘using the structure’?” and “Could you tell me more about that?”
- **Neutral.** This is a very tricky strategy because it puts the interviewer in a neutral position, neither for nor against something, such as “We have talked about the collaboration. What is the experience like for you in this school?”
- **Single question.** This question is about limiting the questions to one idea or else the interviewee would be lost in a pack of questions. “About those five directions of changes, how about talking about the learning processes in your class first?”
- **Wait time.** By using this strategy, the interviewer provides the interviewee enough time to think and formulate his or her thoughts before talking.

- **Special areas.** This approach encourages the interviewee to tell his or her story in his or her own words. For instance, “How many years have you been a Principal in this school? Any changes during these years?”

**Questioning strategies to avoid.** Leading questions, complex questions, double-barreled questions, questions with jargon or technical language, and excessive chatter must be avoided during the interview.

**Other issues.** This small section aims to introduce other issues that should be given attention during the interview.

- Do not just depend on memory (Creswell, 2015; Lichtman, 2013). The interviewer had a voice recorder and took down notes during all the interviews.
- Mind the language used. Use the language that the interviewee can understand and feel comfortable with (Cohen et al., 2007). To ensure the best communication between the interviewer and the interviewees, interviews were conducted in Putonghua, the mother tongue of both the interviewer and the interviewees.
- Mind the sequence and framing of the interview questions (Cohen et al., 2007). To make interviewees feel comfortable, the easier and less threatening, non-controversial questions were addressed earlier in the interview.
- Locate a quiet, suitable place to conduct the interview (Creswell, 2015). Except for telephone interviews, all the interviews in the schools were taken in the meeting room arranged by the schools to avoid interruptions and minimize distractions from outside.
- Mind the attitude. The interviewer tried to be courteous and professional, as well as to



develop rapport with the interviewees (Creswell, 2015; Lichtman, 2013).

#### *3.7.2.1.4 piloting, interview schedules, and subjects.*

Two rounds of interview were held in stage 2 of the research. The first round of interview focused on SBCD from a macro perspective to understand School 10(A) and School 14(D) comprehensively from several directions of change. However, from the results of the interviews on these two schools, their attribution of being a “private school” or a “public school”<sup>2</sup> (because school A is a public school, and school D is a private school) seems to contribute significantly to the differences between the two schools. To avoid this attribution of school from becoming the main cause of SBCD differences among the schools, and to identifying more factors affecting SBCD, two more schools (Schools 12 and 23) were added to the research (details are found in subsection 4.3).

According to the research design, each of the case schools should be explored with both “the directions of change” (from a macro perspective) and “a SBC” (from a micro perspective). Nevertheless, the first round of interviews has already finished the part of “the directions of change” in School 10 and School 14. Therefore, the second round of interview finishes the rest of the parameters. The second round of interviews focused on SBCD from a micro perspective to comprehensively explore the SBC in School 10 and School 14. The interviews also focused

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<sup>2</sup> a “private school” or a “public school”: there are two kinds of school in Mainland China: one is public schools, the other is private schools. The biggest difference between public schools and private schools is the financial sources: public schools are government-funded, whereas private schools are mainly funded with self-raised money.

on SBCD from both macro and micro perspectives to explore the directions of change of the school and the SBC in School 12 and School 23.

*- piloting*

For piloting the first round of interview for the macro understanding of SBCD, one Principal, one middle-level leader, and one school teacher from “School 1” were interviewed. Afterward, the interview schedules were re-worded and re-framed, and the general framework for data analysis was identified by coding the data collected from “School 1.”

For piloting the second round of interview for the micro understanding of SBCD about the specific situation of SBC, the Principal and the Class teacher of the subject Calligraphy from School 12 were interviewed twice in total.

*-interview questions, interview schedules and subjects in the main research*

Interview questions (Appendix A) were framed according to the framework constructed for the empirical study on SBCD (for details, refer to sub-subsection 2.3.4). From the macro perspective, school /middle-level leaders and school teachers were interviewed to comprehensively explore the case schools from four directions of change (i.e., curriculum content, assessment, and administration, as well as learning processes). From the micro perspective, the person/s in charge of the most recommended SBC was/were interviewed for an in-depth investigation using forms (i.e., developmental scale, theme, type of activities, design, time, and developers) and developmental processes (i.e., “goal setting,” “design and mechanism,” “implementation,” and “evaluation and revision”) of the most recommended

SBC.

Accordingly, three versions of the interview questions (Appendix A) were made for the interview subjects in each case school:

- a) “Directions of Change – School teachers” was mainly used for interviewing school teachers from the macro perspective for four directions of change;
- b) “Directions of change – Leaders and middle-level leaders” was primarily utilized for interviewing school leaders/middle-level leaders from the macro perspective for four directions of change;
- c) “SBCD topic – school teachers/school leaders” was employed for interviewing the person in charge of the most recommended school-base subject/curriculum for the form it takes and for the developmental processes it possesses.

The interview schedules and subjects of the four case schools are listed as follows (Table 13, Table 14, Table 15 and Table 16):

***Table 13 Interview Schedules and Subjects of School A***

School A – a public school; with the comparatively highest density of culture among the public schools				
Date	Interview code	Duration	Type of interview	Interview content
2016/5/12	SA-P1	1h55min	One-on-one; face-to-face	Directions of change
2016/5/12	SA-T1	55min	One-on-one; face-to-face	Directions of change
2016/5/12	SA-T2	2h10min	One-on-one; face-to-face	Directions of change
2016/6/29		1h20min	One-on-one; face-to-face	Form and developmental processes of the SBC
2016/5/12	SA-T3	50min	One-on-one; face-to-face	Directions of change
2016/5/12	SA-T4	1h	One-on-one; face-to-face	Directions of change
2016/5/12	SA-T5	2h10min	One-on-one; face-to-face	Directions of change
2016/5/12	SA-T6	2h8min	One-on-one; face-to-face	Directions of change

**Table 14 Interview Schedules and Subjects of School B**

School B – a public school; with the comparatively lowest density of culture among the public schools				
Date	Interview code	Duration	Type of interview	Interview content
2016/6/21	SB-P1	2h5min	One-on-one; face-to-face	Directions of change
		58min		Form and developmental processes of the SBC
2016/6/21	SB-T1	45min	One-on-one; face-to-face	Directions of change
2016/6/21	SB-T2	30min	One-on-one; face-to-face	Directions of change
2016/6/21	SB-T3	24min	One-on-one; face-to-face	Piloting on the interview about the SBC
2016/7/2		30min	One-on-one; telephone interview	Form and developmental processes of the SBC
2016/6/21	SB-T4	33min	One-on-one; face-to-face	Directions of change
2016/6/21	SA-T5	25min	One-on-one; face-to-face	Directions of change

**Table 15 Interview Schedules and Subjects of School C**

School C – a private school; with the comparatively highest density of culture among the private schools				
Date	Interview code	Duration	Type of interview	Interview content
2016/6/30	SC-P1	1h35min	One-on-one; face-to-face	Directions of change; Form and developmental processes of the SBC
2016/6/30	SC-P2	1h15min	One-on-one; face-to-face	Directions of change; Form and developmental processes of the SBC
2016/7/1	SC-T1	1h	One-on-one; face-to-face	Directions of change
2016/7/1	SC-T2	1h8min	One-on-one; face-to-face	Directions of change; the SBC

2016/7/1	SC-T3	30min	One-on-one; face-to-face	Directions of change
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**Table 16 Interview Schedules and Subjects of School D**

School A – a public school; with the comparatively highest density of culture among the public schools				
Date	Interview code	Duration	Type of interview	Interview content
2016/6/3	SD-P1	22min	One-on-one; face-to-face	Directions of change
2016/7/1		42min		Form and developmental processes of the SBC
2016/7/1	SD-P2	30min	One-on-one; face-to-face	Form and developmental processes of the SBC
2016/6/3	SD-T1	1h	One-on-one; face-to-face	Directions of change
2016/6/3	SD-T2	1h	One-on-one; face-to-face	Directions of change
2016/6/4	SD-T3	1h	One-on-one; telephone interview	Directions of change
2016/6/5	SD-T4	55min	One-on-one; telephone interview	Directions of change

### **3.7.2.2 document analysis.**

Document analysis is another important instrument used in this research. Basically, there are two kinds of documents: personal documents and official documents (McMillan & Schumacher, 2010). As suggested by Yin (2009), the purposes of using document analysis in this research are threefold. First, verifying the correct titles, concepts, and names that would be mentioned in the interviews; second, by inferring the documents, more questions might occur; and third, complementing the information or findings that cannot be found from the interviews. Consequently, the documents analyzed for this research are the official documents from the higher authorities, the school timetable and document for management, and the SBC textbooks.

### 3.7.3 data analysis for the qualitative data.

**Table 17 Stages of Qualitative Data Analysis**

**References**

Stage	Creswell(2007)	Marshall and Rossman (2006)	Maxwell(2005)	Wolcott(1994)
Organizing and familiarizing	Data managing Reading/memoing	Organizing the data Immersion in the data	Reading, listening	Describe and highlight
Coding and reducing	Describing Classifying	Generating categories and themes Coding the data	Coding, memoing, categorizing	Analyze and identify patterns
Interpreting and representing	Interpreting	Offering interpretations through analytic memos	Connecting	Contextualize
	Representing, visualizing	Searching for alternative understandings Writing the report	Reporting	Display findings

Table 17 is the collection of the “steps in analyzing qualitative research data” by Ary et al. (2014). Qualitative data analysis generally goes through the process of data being broken down into smaller units, the importance being determined, and pertinent units being combined in a more general and analytical form. Gay et al. (2009) summarized the three stages in qualitative data analysis: first, the stage of reading/memoing, during which the researcher gets an initial sense of all the data and begins the search for recurring themes or common threads. The second stage is describing, which involves developing thorough and comprehensive descriptions of the setting, events, and participants in order to have an understanding of the context where the study is taking place. The last stage is classifying/coding, in which the data are typically broken down and then categorized. A general framework for the data collected from the interview about the directions of change were identified when reading the data collected from the piloting

study on School 1. Accordingly, the main data collected from the four case schools were also categorized and analyzed based on such general framework. For the data about the SBC, they were categorized and analyzed with the framework identified in the literature review section.

### **3.8 Validity, Reliability, and Ethical Issues**

Yin (2010) identified three objectives for building trustworthiness/validity and credibility/reliability. The first objective is the transparency that qualitative research procedures must be described and documented for other people to review and understand. Methodic, as the second objective, means to follow some orderly set of research procedures in order to minimize whimsical or careless work. Adherence to evidence, the third and final objective, is that qualitative research should be based on an explicit set of evidence. When reaching all those objectives, validity and reliability are difficult to address separately because they are intertwined. It is suggested that “reliability is a necessary but insufficient condition for validity in research; reliability is a necessary precondition of validity, and validity may be a sufficient but not necessary condition for reliability” (Cohen et al., 2007, p. 133).

#### **3.8.1 validity.**

Cohen et al. (2007) indicate that the earlier understanding of validity was focused on whether it has accurately evaluated what the study is trying to measure (Ary et al., 2014; Gay et al., 2009). Recently, validity could be understood with different forms for qualitative research and quantitative research (Cohen et al., 2007). In qualitative data, the focus of validity would be “the honesty, depth, richness, and scope of the data achieved, the participants approached, the

extent of triangulation, and the disinterestedness or objectivity of the research” (Cohen et al., 2007, p.133). By contrast, the foci of validity in quantitative data are “careful sampling, appropriate instrumentation and appropriate statistical treatments of the data” (Cohen et al., 2007, p.133).

### ***3.8.1.1 validity for quantitative data.***

The validity for the quantitative data collected for this research can be improved through four types of validities (McMillan & Schumacher, 2010), such as statistical conclusion validity, internal validity, construct validity, and external validity:

- **Statistical conclusion validity.** With schoolteachers as the only respondents and each school having more than 33% response rate, the school collaborative culture of each school surveyed by the SCS instrument could appropriately reflect the actual school collaborative culture.
- **Construct validity and internal validity.** After reviewing the studies related to “school improvement, effectiveness, culture, and climate as well as educational administration” (Gruenert, 2005, p.45), the developers of the SCS instrument had a 79-item pilot survey on 634 teachers in Indiana and then produced an instrument with 35 Likert-type items containing six factors that contributed to the collaborative nature of the school (Gruenert, 2005). To determine if it is still valid in a Chinese context, specifically in the context of 23 schools in K district, EFA was used as it is a precise and rigorous factor analysis method. As a result, 23 items containing two factors remained valid and reliable for this research.
- **External validity.** The results of the large amount of data, about 660 questionnaires from all



the primary schools (23 schools) in the district, reflect the district's actual school culture.

Thus, it can be the reference for other areas in Mainland China, although the results would not be exactly the same.

### *3.8.1.2 validity for qualitative data.*

McMillan and Schumacher (2010) indicate 10 possible strategies that qualitative researchers can use to enhance the validity of data.

- Prolonged and persistent fieldwork
- Multi-method strategies
- Participant language; verbatim accounts
- Low-inference descriptors
- Multiple researchers
- Mechanically recorded data
- Participant researcher
- Member checking
- Participant review
- Negative or discrepant data

Cohen et al. (2007) believe that research can never be 100% valid. Hence, the validity of qualitative data in this research cannot be achieved by using all the 10 strategies. Nevertheless, the main strategies are used in this research are introduced as follows:

- Multi-method strategies. Both document analysis and interviews were used as methods to collect qualitative data for this research and explore SBCD patterns within the schools.

Strategies such as methodological triangulation are indicated by Cohen et al. (2007) as a powerful way to demonstrate concurrent validity.

- Participant language and low-inference. As the mother tongue of both the interviewer and the interviewee, Putonghua was used during the interview. Moreover, in the preliminary research, the respondents were invited to check the interview guidelines and the questionnaires, but there was no feedback of impediment in understanding the questions, concepts, or languages.
- Participant review. The major participants were invited to review the first draft of the research about their own schools. In this way, the accuracy of representation by the researcher's synthesis was guaranteed.

### **3.8.2 reliability.**

Although presented differently in quantitative research and in qualitative research, reliability in the two kinds of research shows a similarity. In this work, reliable means the research would have similar results if it were conducted on similar respondents within a similar context (Cohen et al., 2007). Given that reliability in quantitative research and reliability in qualitative research are different but similar, it is deemed to be equal to “dependability,” “consistency,” and “replicability” in quantitative research (Cohen et al., 2007, p.146), while a synonym for “credibility,” “neutrality,” “confirmability,” “trustworthiness,” and “dependability” in qualitative research (Cohen et al., 2007, p.148).

### ***3.8.2.1 reliability in quantitative research.***

Both Cohen et al. (2007) and McMillan and Schumacher (2010) identify three Principal types of reliability in quantitative research, namely, stability, equivalence, and internal consistency.

- **Stability.** Reliability can be obtained over time and over similar samples. The quantitative results in this research were obtained from 23 schools in the same district, and the data showed they are in quite similar patterns while also presenting its reliability as stability.
- **Equivalence.** When two equivalent forms of the same instrument are conducted on the same group of respondents at the same time and get the same results, then it is said that reliability as equivalence is obtained. McMillan and Schumacher (2010) identify that reliability as equivalence can be obtained when the researcher has a relatively large number of items constructing the equivalent forms. The researcher in this research used 23 items (the SCS instrument of the result of EFA) to identify two factors, which is a relatively large number of items.
- **Internal consistency.** The most common type of reliability is internal consistency (McMillan & Schumacher, 2010). Cronbach's alpha is commonly recognized as an alternative measure of reliability with internal consistency (Cohen et al., 2007). In ***Item analysis for reliability*** (sub-sub-sub-subsection 3.6.2.2.2), the Cronbach's  $\alpha$  for Factor 1 was .940 and for Factor 2 was .942. Thus, both factors on this scale had excellent internal reliability.

### ***3.8.2.2 reliability in qualitative research.***

Cohen et al. (2007) indicate that, in reality, the reliability in qualitative research would also need replication as the quantitative research. LeCompte and Preissle (1993) suggest replication means repeating “the status position of the researcher,” “the choice of informant/respondents,” “the social situations and conditions,” “the analytic constructs and premises that are used,” and “the methods of data collection and analysis” (p.334).

In this research, four schools were selected for the case studies, in which two of the most typical schools from each group were actually trying to repeat the similar context and similar respondents to obtain reliability. By using methodological triangulation—both document analysis and interviews for exploring SBCE among the schools, the researcher was also trying to repeatedly explore the same targets with different forms of methods to obtain reliability.

### **3.8.3 ethical issues.**

Consent forms were signed both by the school as entity and the respondent subjects as individual. All respondent subjects were informed. All information related to the respondents remained confidential and are identifiable by codes known only to the researcher.

## **3.9 Summary**

This chapter has presented the research design and data analysis processes of both qualitative research (stage 1) and qualitative research (stage 2), which will collect data to the answers to Q1 and Q2, respectively. A discussion of the quantitative data results in response to Q1a will be

presented in the following chapter.



## **Chapter 4 Findings of the Results of Questionnaire Survey– Answers to Q1a**

### **4.1 Introduction**

This chapter mainly discusses the questionnaire responses to the following:

- Q1a: Which are the case schools identified through investigating the culture of the 23 schools?

The 657 questionnaires (82% response rate) collected from the 800 distributed SCS questionnaires to all 23 primary schools for large-scale piloting were examined through EFA and item analysis. According to the results, the original SCS instrument with 35 items of six-factor structure is determined valid and reliable to measure the school culture of the 23 primary schools in K district by the remaining 23 items of the two-factor structure. On the basis of the same collected data (as the questionnaires were distributed and also collected in proportion –in Table 6), this chapter presents the data analysis process in which only the data of the 23 items of the two-factor structure are used for data analysis. With two rounds of data analysis, the quantitative data were analyzed using Pearson Correlation, one-way ANOVA, and independent t-tests.

### **4.2 the first round of data analysis and results.**

The purpose of data analysis is to identify the school cultural patterns of the 23 schools and select school(s) for further studies.

**Table 18 Case Processing Summary**

Case Processing Summary						
	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Collaborative Leadership * ID of the school	654	99.5%	3	0.5%	657	100.0%
Collaborative Partnership * ID of the school	653	99.4%	4	0.6%	657	100.0%

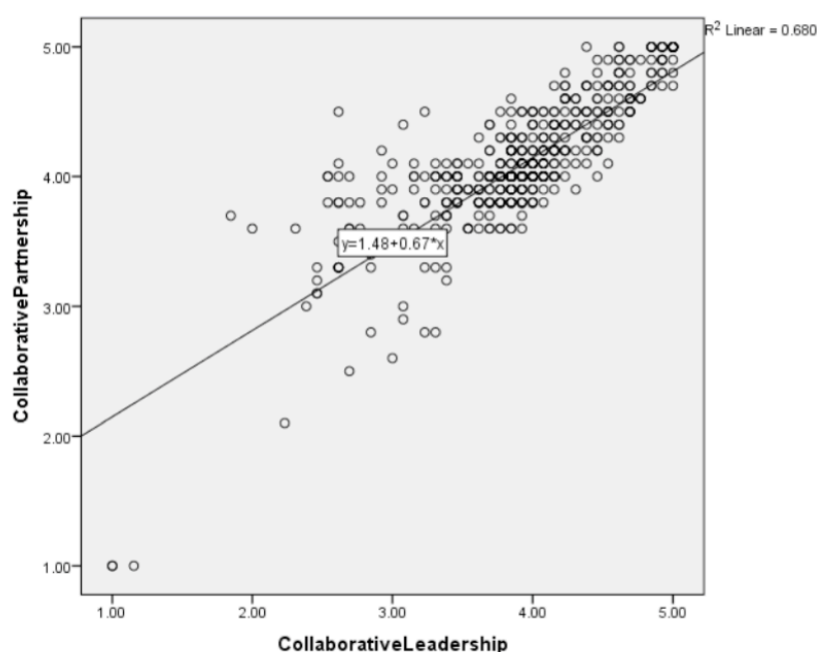
**Table 19 Report of the Means of the Two Factors among the 23 Schools**

ID of the school		Report		ID of the school		Collaborative Leadership		Collaborative Partnership	
		Collaborative Leadership	Collaborative Partnership						
1.00	Mean	4.23	4.22	13.00	Mean	4.16	4.16		
	N	19	19		N	27	27		
	SD	.35	.35		SD	.51	.55		
2.00	Mean	3.86	4.00	14.00	Mean	3.38	3.78		
	N	25	25		N	25	25		
	SD	.32	.39		SD	.74	.63		
3.00	Mean	3.85	3.99	15.00	Mean	3.91	4.00		
	N	40	40		N	30	30		
	SD	.53	.53		SD	.37	.20		
4.00	Mean	4.16	4.25	16.00	Mean	3.97	4.14		
	N	29	29		N	33	33		
	SD	.511	.42		SD	.33	.23		
5.00	Mean	4.01	4.13	17.00	Mean	3.49	4.04		
	N	36	36		N	28	28		
	SD	.66	.65		SD	.78	.43		
6.00	Mean	3.84	3.99	18.00	Mean	3.77	4.14		
	N	45	45		N	33	33		
	SD	.53	.40		SD	.47	.35		
7.00	Mean	4.09	4.25	19.00	Mean	4.00	4.10		
	N	16	17		N	28	28		
	SD	.56	.39		SD	.48	.356		
8.00	Mean	4.08	4.22	20.00	Mean	3.85	4.05		
	N	43	42		N	21	21		
	SD	.70	.65		SD	.45	.23		
9.00	Mean	4.28	4.29	21.00	Mean	3.75	3.93		
	N	33	32		N	24	24		
	SD	.41	.35		SD	.52	.27		
10.00	Mean	4.31	4.41	22.00	Mean	3.89	4.03		
	N	27	27		N	19	19		
	SD	.47	.41		SD	.51	.46		
11.00	Mean	4.04	4.16	23.00	Mean	3.97	4.24		
	N	23	23		N	24	24		
	SD	.42	.34		SD	.56	.49		
12.00	Mean	3.84	3.97	Total	Mean	3.94	4.10		
	N	26	26		N	654	653		
	SD	.60	.44		SD	.57	.46		

The items of the SCS instrument have corresponding codes ranging from 1 to 5, which

represent “strongly disagree,” “disagree,” “undecided,” “agree,” and “strongly agree,” respectively. However, Table 19 illustrating the means of the two factors among the 23 schools, the factors are clearly broadly similar; all are above 3.0 and ranges from 3.3 to 4.4. According to the results, all the 23 schools have a high density of CL and CP (collaborative school culture).

Nevertheless, the relationship between CL and CP can be further indicated by measuring the association between CL and CP by fitting the scatter plot to obtain r-square and calculating the Pearson correlation coefficient. As a statistical measure, Pearson correlation coefficient can measure the linear dependence between two variables, whether positive or negative, weak or strong (Mehdinezhad & Mansouri, 2016; Wall Emerson, 2015).



**Figure 7 Scatter Plot**



**Table 20 Pearson Correlation**

Correlations			
		Collaborative Leadership	Collaborative Partnership
Collaborative Leadership	Pearson Correlation	1	.825**
	Sig. (2-tailed)		.000
	N	654	650
Collaborative Partnership	Pearson Correlation	.825**	1
	Sig. (2-tailed)	.000	
	N	650	653

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results (Figure 7 and Table 20) show that CL is positively correlated with CP, that is, the higher the CL, the higher the CP, and vice versa. Accordingly, by considering the positively correlated relationship between CL and CP, two schools can be identified: one has the highest density of CL and CP, and the other has the lowest density of CL and CP.

Consequently, a one-way analysis of variance (ANOVA) was conducted to examine the differences among the 23 primary schools in terms of the factors CL and CP to identify the schools with the highest and lowest densities of CL and CP.

**Table 21 Report of ANOVA**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Collaborative Leadership	Between Groups	30.386	22	1.381	4.882	.000
	Within Groups	178.510	631	.283		
	Total	208.897	653			
Collaborative Partnership	Between Groups	12.045	22	.548	2.790	.000
	Within Groups	123.625	630	.196		
	Total	135.670	652			

The one-way ANOVA results (Table 21) showed statistically significant differences in CL among the group (the 23 schools), in which  $F(22, 631) = 4.882, p < .001$ . The results also showed statistically significant differences in CP among the group (the 23 primary schools), in which  $F(22, 630) = 2.790, p < .001$ .

**Table 22 Descriptive Table of the Differences among the 23 Primary Schools in terms of the Factor CL and CP**

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Collaborative Leadership	1.00	19	4.2348	.34542	.07924	4.0683	4.4013	4.00	5.00
	2.00	25	3.8646	.32047	.06409	3.7323	3.9969	2.85	4.54
	3.00	40	3.8538	.53203	.08412	3.6837	4.0240	1.00	4.92
	4.00	29	4.1565	.51128	.09494	3.9620	4.3510	3.08	5.00
	5.00	36	4.0085	.66294	.11049	3.7842	4.2329	1.15	5.00
	6.00	45	3.8359	.52929	.07890	3.6769	3.9949	2.62	5.00
	7.00	16	4.0865	.55886	.13972	3.7887	4.3843	2.69	4.92
	8.00	43	4.0787	.70070	.10686	3.8631	4.2944	1.00	5.00
	9.00	33	4.2774	.40973	.07132	4.1321	4.4227	3.38	5.00
	10.00	27	4.3105	.46911	.09028	4.1250	4.4961	3.15	5.00
	11.00	23	4.0435	.41929	.08743	3.8622	4.2248	3.00	4.92
	12.00	26	3.8373	.60465	.11858	3.5931	4.0815	2.31	4.92
	13.00	27	4.1595	.50708	.09759	3.9589	4.3601	3.23	5.00
	14.00	25	3.3754	.73860	.14772	3.0705	3.6803	2.23	4.46
	15.00	30	3.9103	.36702	.06701	3.7732	4.0473	2.85	4.69
	16.00	33	3.9744	.33290	.05795	3.8563	4.0924	3.23	5.00
	17.00	28	3.4918	.78316	.14800	3.1881	3.7954	1.85	4.85
	18.00	33	3.7692	.47106	.08200	3.6022	3.9363	2.77	4.92
	19.00	28	4.0082	.43732	.08265	3.8387	4.1778	3.31	4.92
	20.00	21	3.8462	.45313	.09888	3.6399	4.0524	2.54	4.38
	21.00	24	3.7532	.52368	.10689	3.5321	3.9743	2.46	4.46
	22.00	19	3.8947	.51103	.11724	3.6484	4.1410	3.08	5.00
	23.00	24	3.9679	.56158	.11463	3.7308	4.2051	2.62	5.00
	Total	654	3.9440	.56560	.02212	3.9006	3.9874	1.00	5.00
Collaborative Partnership	1.00	19	4.2211	.35368	.08114	4.0506	4.3915	3.80	5.00
	2.00	25	3.9960	.38996	.07799	3.8350	4.1570	2.80	5.00
	3.00	40	3.9900	.53002	.08380	3.8205	4.1595	1.00	4.90
	4.00	29	4.2483	.42394	.07872	4.0870	4.4095	3.60	5.00
	5.00	36	4.1333	.65465	.10911	3.9118	4.3548	1.00	5.00
	6.00	45	3.9889	.39556	.05897	3.8701	4.1077	2.60	5.00
	7.00	17	4.2529	.39230	.09515	4.0512	4.4546	3.70	4.90
	8.00	42	4.2190	.64816	.10001	4.0171	4.4210	1.00	5.00
	9.00	32	4.2938	.34913	.06172	4.1679	4.4196	3.80	5.00
	10.00	27	4.4148	.41016	.07894	4.2526	4.5771	4.00	5.00
	11.00	23	4.1609	.34475	.07189	4.0118	4.3100	3.50	5.00
	12.00	26	3.9692	.43797	.08589	3.7923	4.1461	2.80	5.00
	13.00	27	4.1556	.54725	.10532	3.9391	4.3720	2.80	5.00
	14.00	25	3.7840	.63290	.12658	3.5228	4.0452	2.10	4.90
	15.00	30	4.0000	.19652	.03588	3.9266	4.0734	3.30	4.60
	16.00	33	4.1394	.23444	.04081	4.0563	4.2225	3.80	5.00
	17.00	28	4.0429	.43070	.08139	3.8758	4.2099	3.00	4.80
	18.00	33	4.1364	.35162	.06121	4.0117	4.2610	3.50	5.00
	19.00	28	4.1000	.35590	.06726	3.9620	4.2380	3.60	4.90
	20.00	21	4.0476	.22939	.05006	3.9432	4.1520	3.60	4.50
	21.00	24	3.9292	.26618	.05433	3.8168	4.0416	3.30	4.60
	22.00	19	4.0263	.45563	.10453	3.8067	4.2459	2.90	5.00
	23.00	24	4.2417	.48982	.09998	4.0348	4.4485	3.20	5.00
	Total	653	4.1067	.45616	.01785	4.0717	4.1418	1.00	5.00

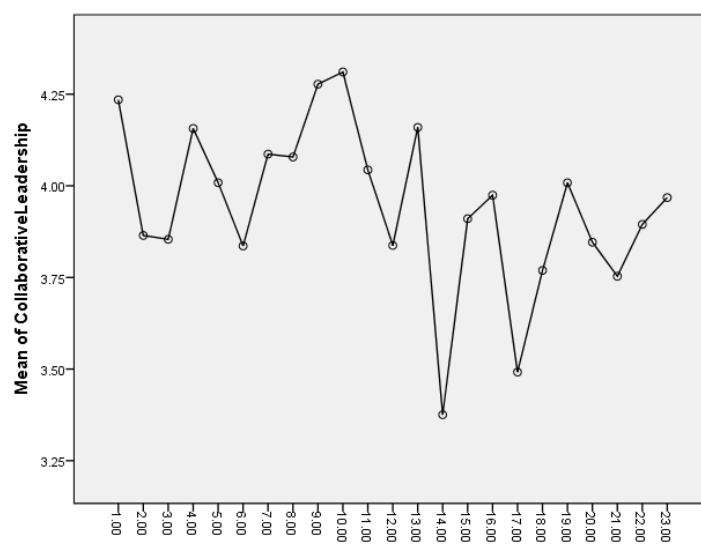


Figure 8 Mean Plots of CL

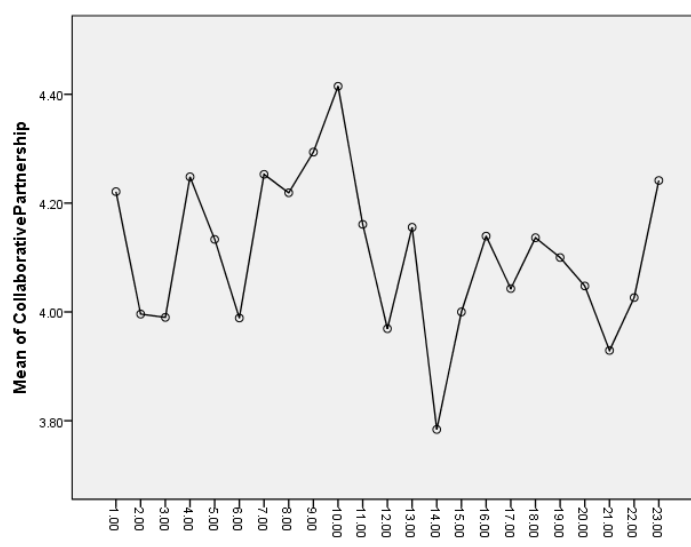


Figure 9 Mean Plots of CP

Furthermore, results in both Table 22 and the figure of mean plots (Figure 8) showed that the mean of factor CL ( $M=4.31$ ,  $SD=.47$ ) of “School 10” is the highest in the means of factor CL among the 23 schools. The mean of factor CL ( $M=3.38$ ,  $SD=.74$ ) of “School 14” is also the

lowest in the means of factor CL among the 23 schools.

At the same time, results (Table 22 and Figure 9) showed that the mean of factor CP ( $M=4.41$ ,  $SD=.41$ ) of “School 10” is the highest in the means of factor CP among the 23 schools, and the mean of factor CP ( $M=3.78$ ,  $SD=.63$ ) of “School 14” is the lowest in the means of factor CP among the 23 schools.

Therefore, among the 23 schools, “School 10” is the school with both the highest density of CL and CP, and “School 14” is the school with both the lowest density of CL and CP.

Moreover, an independent t-test was conducted to examine the mean difference in each factor between “School 10” and “School 14”. The result of t-test (Table 23 and Table 24) indicated a significant mean difference in factor CL between “School 10” and “School 14” ( $t = 5.40$ ,  $df = 40.11$ ,  $p < .01$ ), and a significant mean difference in factor CP between “School 10” and “School 14” ( $t = 4.229$ ,  $df = 40.625$ ,  $p < 0.01$ ).

**Table 23 Results of T-Test for First Round of Data Analysis (1)**

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Collaborative Leadership	10.00	27	4.3105	.46911	.09028
	14.00	25	3.3754	.73860	.14772
Collaborative Partnership	10.00	27	4.4148	.41016	.07894
	14.00	25	3.7840	.63290	.12658

**Table 24 Results of T-Test for First Round of Data Analysis (2)**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Collaborative Leadership	Equal variances assumed	11.850	.001	5.493	50	.000	.93516	.17026	.59318	1.27713
	Equal variances not assumed			5.402	40.112	.000	.93516	.17312	.58529	1.28502
Collaborative Partnership	Equal variances assumed	1.100	.299	4.297	50	.000	.63081	.14680	.33595	.92568
	Equal variances not assumed			4.229	40.625	.000	.63081	.14918	.32946	.93217

Accordingly, “School 10” with the highest density of CL and CP among the 23 schools and “School 14” with the lowest density of CL and CP among the 23 schools were selected as the two case schools for the case study on SBCD. The significant mean difference in both factors between the two schools indicate that these schools may have several differences of SBCD and also similarities because the means of their factors both range above 3.0. This finding indicates that both schools have a high density of collaborative school culture.

#### **4.3 the second round of data analysis and results.**

However, when the first round of case studies was conducted in School 10 and School 14, several differences between the two schools were determined to be dependent mainly on one attribution: School 10 is a public school, whereas School 14 is a private school. Therefore, by considering the difference between public schools and private schools, two more schools should be identified for more valid and reliable further studies of SBCD. The four schools

should be the following: the school with the highest density of CL and CP among public schools, the school with the lowest density of CL and CP among public schools, the school with the highest density of CL and CP among private schools, and the school with the lowest density of CL and CP among the private schools.

The 23 schools shown in the above tables, forms, and figures have already been tagged regularly according to the attribution of private or public schools. Schools 1 to 13 are all public schools, whereas School 14 to 23 are all private schools.

As shown in Table 22, the mean of factor CL ( $M=4.31$ ,  $SD=.47$ ) of “School 10” is the highest in the means of factor CL among the public schools, and the mean of factor CL ( $M=3.836$ ,  $SD=.53$ ) of “School 6” is the lowest in the means of factor CL. Moreover, the mean of factor CL ( $M=3.837$ ,  $SD=.060$ ) of “School 12” is the last but one in the means of factor CL among the public schools.

For factor CP, the mean of factor CP ( $M=4.41$ ,  $SD=.41$ ) of “School 10” is the highest in the means of factor CP among the public schools, and the mean of factor CP ( $M=3.97$ ,  $SD=.44$ ) of “School 12” is the lowest in the means of factor CP among the public schools (Table 22). The mean of factor CP ( $M=3.99$ ,  $SD=.40$ ) of “School 6” is also the last but one in the means of factor CP among the public schools.

As a result, “School 10” is with the highest density of CL and CP among the public schools, and “School 12” is considered as the public school with the lowest density of collaborative school culture for further studies.

The mean of factor CL ( $M=3.97$ ,  $SD=.56$ ) of “School 23” is the third highest in the means of

factor CL among private schools, yet the mean of factor CP ( $M=4.24$ ,  $SD=.49$ ) of “School 23” is the highest in the means of CP among private schools (Table 22).

The mean of factor CL ( $M=3.38$ ,  $SD=.74$ ) of “School 14” is the lowest in the means of factor CL among private schools, and the mean of factor CP ( $M=3.78$ ,  $SD=.63$ ) of “School 14” is the lowest in the means of factor CP among the private schools (Table 22).

Therefore, “School 23” is considered as the school with the highest density of collaborative school culture among the private schools, whereas “School 14” has the lowest density of CL and CP among the private schools.

Nevertheless, for reliability, independent t-tests are needed to examine and confirm if there are significant mean differences in each factor between School 10 and School 12, and between School 14 and School 23.

According to the t-test results, the screening process is justified with statistical significance ( $p < .05$ ) as follows:

**Table 25 Results of T-Test for Second Round of Data Analysis (1)**

Group Statistics					
	ID of the school	N	Mean	Std. Deviation	Std. Error Mean
Collaborative Leadership	10.00	27	4.3105	.46911	.09028
	12.00	26	3.8373	.60465	.11858
Collaborative Partnership	10.00	27	4.4148	.41016	.07894
	12.00	26	3.9692	.43797	.08589

**Table 26 Results of T-Test for Second Round of Data Analysis (2)**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Collaborative Leadership	Equal variances assumed	.238	.628	3.191	51	.002	.47326	.14833	.17549	.77104
	Equal variances not assumed			3.175	47.149	.003	.47326	.14904	.17346	.77306
Collaborative Partnership	Equal variances assumed	2.030	.160	3.824	51	.000	.44558	.11651	.21168	.67948
	Equal variances not assumed			3.820	50.455	.000	.44558	.11666	.21133	.67984

1. As it is shown in Table 25 and Table 26, a significant mean difference in factor CL exists between School 10 and School 12 ( $t = 3.19$ ,  $df = 51$ ,  $p = .002 < .05$ ), and a significant mean difference in factor CP between School 10 and School 12 ( $t = 3.82$ ,  $df = 51$ ,  $p = 0 < .05$ ).

**Table 27 Results of T-Test for Second Round of Data Analysis (3)**

Group Statistics					
	ID of the school	N	Mean	Std. Deviation	Std. Error Mean
Collaborative Leadership	14.00	25	3.3754	.73860	.14772
	23.00	24	3.9679	.56158	.11463
Collaborative Partnership	14.00	25	3.7840	.63290	.12658
	23.00	24	4.2417	.48982	.09998



**Table 28 Results of T-Test for Second Round of Data Analysis (4)**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Collaborative Leadership	Equal variances assumed	6.572	.014	-3.152	47	.003	-.59256	.18802	-.97082	-.21431
	Equal variances not assumed			-3.169	44.696	.003	-.59256	.18698	-.96923	-.21590
Collaborative Partnership	Equal variances assumed	.348	.558	-2.822	47	.007	-.45767	.16215	-.78387	-.13146
	Equal variances not assumed			-2.837	45.008	.007	-.45767	.16131	-.78255	-.13278

2. As it is shown in Table 27 and Table 28, there is a significant mean difference in factor CL between School 14 and School 23 ( $t = -3.17$ ,  $df = 44.70$ ,  $p = 0.003 < 0.05$ ), and a significant mean difference in factor CP between School 14 and School 23 ( $t = -2.82$ ,  $df = 47$ ,  $p = 0.007 < 0.01$ ).

To sum up, “School 10” (with the highest density of school collaborative culture among the public schools), “School 12” (with the lowest density of school collaborative culture among the public schools), “School 23” (with the highest density of school collaborative culture among the private schools), and “School 14” (with the lowest density of school collaborative culture among the private schools) are selected as the case schools for further studies. Therefore, the answer to:

- Q1a: Which are the case schools identified through investigating the culture of the 23 schools?

is obtained.

This manner of selecting case schools can hopefully prevent the attribution of “the difference between private school and public school” as the only reason why SBCD is different between/among the schools. In addition, by hoping to add two more schools, additional factors causing the differences of SBCD between/among the schools can be identified and explored.

#### **4.4 Summary**

This chapter mainly provided answers to Q1a. Four schools were selected as the case schools for the current study after two rounds of data analysis.



## Chapter 5: Findings of Case Studies on SBCD – Answers to Q2a, Q2b, and Q2c

### 5.1 Introduction

This chapter reports the qualitative data as findings for answering Q2 [How is SBCD implemented in the case school(s)?], and the answers to the following questions are obtained:

- Q2a What are the directions of change (i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration) in the case school(s)?
- Q2b. What forms (i.e., developmental scale, theme, type of activities, design, time, and developers) does the SBC take in the case school(s)?
- Q2c. What are the developmental processes (i.e., goal setting, design and mechanism, implantation, and evaluation and revision) of a SBC in the case school(s)?

The qualitative data based on answers to Q2a, Q2b, and Q2c are presented accordingly, with the framework conceptualized in the Literature Review (for details, refer to sub-subsection 2.3.4).

Instead of showing the qualitative findings that follow the sequences of Q2a, Q2b, and Q2c, this chapter presents the findings of each case school individually, with the main framework that includes “background of the school,” “directions of change” (i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration), “form” of the most recommended SBC (i.e., developmental scale, theme, design, time, developers, types of activities), and “developmental processes” of the most recommended SBC (i.e., goal setting, design and preparation, implementation, and evaluation and revision). Additionally, before

showing the findings of each case school, the background of the schools in K district is introduced.

## **5.2 Background of the Schools and School Curriculum in K District**

### **5.2.1 background of the schools.**

K district appeals to many migrant workers because of its economic and industrial structure. Migrant workers refer to the laborers who come from rural areas and go to cities and towns to engage in the second and tertiary industries, which mainly depend on low-tech and physical labor.

Consequently, schools in K district, especially private schools, mainly serve the children of those migrant workers. Since around 2000, when the number of children of migrant workers exceeded the public schools' receptive capacity, private schools have started to emerge. With the encouragement of the government, some businessmen seized the opportunities to establish private schools. As a result, so far, among the 24 schools (which include the elementary/primary part) in K district, 10 schools are private.

The largest difference between public schools and private schools is the financial sources. Public schools are government-funded, whereas private schools are mainly funded with self-raised money. Nevertheless, in recent years, the government has strengthened the financial supports given to private schools. For example, according to "The supervision and management of subsidies for private schools' facilities improvement in Shenzhen" (Shenzhen Education Bureau (6), 2015), the government subsidized qualified private schools with RMB

100,000 per class for their facilities improvement. In addition, in “The trial implementation of subsidies for tuition fee for the private schools of nine-year compulsory education in Shenzhen,” each primary school pupil and junior middle school student may receive RMB 5,000 and RMB 6,000 per year from the government, respectively (Shenzhen Education Bureau (2), 2012).

However, “public schools” are still the parents’ priority choice for their children, not only because the tuition fee in “public schools” is free but also because of the more stable and qualified education offered by public schools than private schools. The government’s allocation system of school places also guarantees that the children of migrant workers can also study in public schools.

Among the four case schools under study, two of them (School A and School B) are public schools, whereas the other two (School C and School D) are private schools. Schools A and B used to be the schools in the villages, and now they are serving their own residential communities. As explained by the Principal in School B, if the ratio of local pupils to non-local pupils is 4:1 in a public school in the Futian district (the economic and political center of Shenzhen), then the ratio of local to non-local pupils would be 1:9 in a public school in K district (especially for the school that serves the village). The two private schools are oriented differently, as seen in their different fees charged from the pupils. The tuition fees of the 10 private schools in K district range from RMB 2,700 to RMB 4,700 per semester for every pupil (GM Development and Finance Bureau, 2016). School A charges RMB 2,700 per semester for every pupil, while School D charges RMB 4,700 per semester for every pupil.

### 5.2.2 school curriculum and the understanding of SBCD in K district.

The following table (Table 29) shows the three-level curriculum management within a school in K district. It is released at the district level for strict compliance of all the schools.

**Table 29 Curriculum Plan for Nine-Year Compulsory Education in K District, Shenzhen**

NO. of Weekly Lessons			Grade	1	2	3	4	5	6	7	8	9
Subjects												
Core Courses	Moral Education and life		2	2								
	Moral education and the society				2	2	3	3				
	Moral Education								2	2	2	
	Chinese*		9	8	7	7	6	6	6	5	5	
	Mathematics*		3	4	4	5	5	5	4	4	4	
	English				3	3	3	3	4	4	4	
	Science	Integrated subject			2	2	2	2	4	5	5	
		Biology							2	2		
		Physics								2	3	
		Chemistry									3	
	History and the society	Integrated subject							3	3	3	
		History							2	2	2	
		Geography							2	2		
	Physical education		4	4	3	3	3	3				
	Physical education and health								3	3	3	
	Arts	Music	2	2	2/1	2/1	2/1	2/1	1	1	1	
		Art	2	2	1/2	1/2	1/2	1/2	1	1	1	
	Information technology					1	1	1	1	1	1	
	Integrative Practical activities	Total			2	2	2	2	2	2	2	
		Integrated Practices			1	1	1	1	1	1	1	
		Calligraphy			1	1	1	1	1	1	1	
Total		22	22	26	28	28	28	31	31	31		
Elective Courses									2	2	2	
Local Courses	Total		4	4	4	2	2	2	1	1	1	
	Basic English*		2	2	1	1	1	1				
	Basic Mathematics*		1	1	1							
	Basic Information technology				1							
	English skills*		1	1	1	1	1	1				
Activity Courses at school	Total		2	2								
	Calligraphy*		1	1								
	English Activities*		1	1								
Weekly lessons in total			26	26	30	30	30	30	34	34	34	

(Noted: 40 minutes per lesson)

Table 29 shows all the subjects and numbers of lessons that the pupils or students from grades 1 to 9 in K district have in one week. For example, in school, grade 1 pupils study seven subjects: Moral Education, Chinese (Chinese\*, Calligraphy\*), Mathematics (Mathematics\*, Basic Mathematics\*), English (Basic English\*, English Skills\*, English Activities\*), Physical Education, Music, and Art. Sub-subjects/courses are found under the subjects of Chinese, English, and Mathematics. The Core Courses, Moral Education, Chinese\*, Mathematics\*, Physical Education, Music, and Arts, are the six courses that are regulated by the M.O.E. at the national or central level. The Local Courses, Basic English\*, Basic Mathematics\*, and English Skills\*, are the three courses that are implemented in the schools in Shenzhen and regulated at the municipal level. The Activities Courses at School, Calligraphy\* and English Activities\*, are the two courses regulated at the local or district level. This classification means that if two grade 1 pupils come from the same province but different cities, then they would have the same Core Courses in school but different courses that are regulated at the municipal and district levels. In particular, if two pupils come from the same city but different districts, then they would have almost the same courses except for Calligraphy\* and English Activities\*, which are regulated at the district level. As shown in the table, from Monday to Friday, grade 1 pupils in K district would have 26 lessons in total. However, according to the school hours required from the pupils, a grade 1 pupil has time only for 7 lessons (every lesson lasts for 40 minutes) every day or a total of 35 lessons in a week. In other words, in a week, time for 9 lessons is spared for the school level to autonomously manage the curricula for the grade 1 pupils in each school in K district. Similarly, for the other grades in a primary school in K district, the total

numbers of weekly lessons regulated by the abovementioned school level are 26 (grade 2), 30 (grade 3), 30 (grade 4), 30 (grade 5), and 30 (grade 6). Therefore, the auxiliary times for the school level to autonomously manage the curricula for the pupils are times for 9 lessons (grade 1), 9 lessons (grade 2), 5 lessons (grade 3), 5 lessons (grade 4), 5 lessons (grade 5), and 5 lessons (grade 6).

When asked what he thinks of SBCD, the Principal in School B showed the above table to the researcher and explained that SBCD is about the auxiliary times of the school level intended to autonomously manage the curricula for the pupils. This point of view is also mostly recognized by others interviewed in this research.

### **5.3 SBCD in Case School A (School A: the school with the comparatively highest density of collaborative culture among the public schools)**

#### **5.3.1 the background and philosophy of schooling in School A.**

Established in 1945, School A was formerly a middle school with only three classes gathering around 100 students from two counties (Xu, 2014). With most students being children of overseas Chinese, School A was once a base for organizing anti-Japanese activities during the Anti-Japanese War (Xu, 2014); thus, the school could be considered as a place with a significantly historical foundation.

Since 1964, it has become a primary school for the residential committee where it is located. The Principal has served School A since 2000. During his office, School A has changed significantly, from the increase of floor space and improvement of the school environment to



the upgrades of teaching facilities. When the Principal arrived at School A in 2000, this school had only one class for each of the six grades with around 200 pupils. Today, the number of classes has increased to 24, and the number of pupils reaches 1,285.

“Education for building confidence” is the philosophy of schooling. Such philosophy of schooling has influenced the school for more than 10 years. When the Principal was asked the reason for making “Education for Building Confidence” as the philosophy of schooling, he answered:

When I arrived at this school in 2000, the number of pupils was not that much. In 2000, there were only six grades with six classes around 200 pupils in the school. Most pupils were local. You may know that there were some truck farms (in this residential committee) and some factories around. (Most) pupils were the children of those who worked in the truck farms and the factories, (therefore) their comprehensive qualities were not high, and they were lacking confidence. Finding an emcee from the pupils for the activities within the school was even difficult. (This became a bottleneck problem for the school). Therefore, the school administration tried hard to break the bottleneck. After that, once we visited some schools in Beijing and found that some schools there were working on “Education for building confidence,” I thought that such “Education for building confidence” would be also practical and helpful to our school, so, when I came back from Beijing, I raised that (concept), then worked on that for how to make it more suitable (for our pupils). (Literally translated and tidied up where necessary, 12, May 2016 )

Furthermore, the Head of the Moral Education Department (SA-T2) explains why the philosophy of schooling of each school should be and is different from one another:

First of all, our school should implement the notifications and requirements from the higher authorities. Second, it should be based on the situations of our pupils; thus, those two are the most basic points. Additionally, it should be based on (the situation of) the school. Therefore, every school may have a different philosophy of schooling. (In a word,) the requirements and notifications from the superiors are the same, but the pupils are different, so the Principal’s philosophy of schooling will be different from each other. (Literally translated and tidied up where necessary, 12, May 2016)

### 5.3.2 directions of change in School A.

#### *5.3.2.1 curriculum content of School A.*

The implemental situation of curriculum content is introduced as, “basically, we implement the curriculum plan that is released by the National Ministry of Education, and we have some school-based curriculum and some local curriculum with local characteristics” (Literally translated and tidied up where necessary, Interview with the Principal, 12, May 2016).

The statement of the Principal reflects Clause 16 in “The Compendium” (details refer to sub-sub-subsection 2.3.1.2).

Chinese\*, Mathematics, English, Music, Art, Science, Moral Education, Physical Education, Information Technology, Calligraphy, and Integrated Practices are the main subjects included in the national and local curricula studied by the pupils in school A. Normally, all the pupils in Shenzhen City and in K district use the same learning materials to study these main subjects. Meanwhile, Three Kinds of Balls (Pingpong, Basketball, and Football), Folk Music, and Practice-oriented Activities of Education for Building Confidence are recognized as school-based curricula or subjects and are characteristic courses that are autonomously managed at the school level in School A.

The pupils in School A also have other activities during the school hours, such as Class Meeting, Morning Reading, Afternoon Reading, Club Activities, The Voice (singing contest in the school), and Weekly Class Meeting, among others.

### ***5.3.2.2 learning processes in classroom teaching in School A.***

According to the philosophy of schooling, “Education for Building Confidence,” a “220” model of instruction was developed to guide the classroom teaching in School A since 2010.

The “220” model of instruction proposes two “20s” for a lesson. One lesson typically lasts for 40 minutes. The “220” model proposes that during a lesson, the time for the teacher-dominated part should not last more than 20 minutes, and the time for the pupil-dominated part should be around 20 minutes. During the pupil-dominated 20 minutes, pupils participate in various ways of learning, including playing games, group collaborations, presentation, dialogues, and singing.

Moreover, “220” is an Internet terminology that sounds like “love you” in Mandarin. Thus, proposing the “220” model of instruction is also a way of showing the love of the school to the teachers and the pupils. In terms of loving the pupils, the “220” model of instruction guides the teachers in maximizing their time to effectively select the best and carefully prepare the core courses for their pupils. In addition, the teachers facilitate the pupils to learn, think, and solve problems independently to raise the pupils’ learning interest (Shenzhen Guanming Education, 2016). In terms of loving the teachers, this model of instruction prevents the teachers from having occupational burnout and guides them in having a joyful time during their work.

### ***5.3.2.3 curriculum assessment in School A.***

#### ***5.3.2.3.1 assessment of examination orientation.***

Mid-term examinations and final examinations are held for each subject to assess the pupils’

learning outcomes of the main subjects. Although the “220” model of instruction is proposed in School A, the activities organized and content taught in class are still examination-oriented:

If my pupils learn well in those parts, then I would not take too much time on those. For example, my original plan was to take 6 lessons of time to finish this part, (but in actual only) two lessons of time are needed. Then, those four lessons of time will become the spare time and be used to teach some instead of the (unified) textbook...I want to teach them some interesting and some useful, yet at the same time, I have to teach them (according to the unified instructional plan) as to make them capable in dealing with those examinations, right? If I teach all those irrelevant to the (unified) teaching (learning) materials, then the pupils would fail in the examinations, and their parents will certainly (feel angry and) annoy me. (Literally translated and tidied up where necessary, Interview with the Head of the Moral Education Department in School A, 12, May 2016)

#### *5.3.2.3.2 school-based assessment of pupil's comprehensive virtues.*

According to the philosophy of schooling, “Education for building confidence,” School A wrote an evaluation handbook named “Star Rating—Confident and Sunshiny Juvenile” (The Handbook) to evaluate pupils’ comprehensive virtues. Similar to other school policies or school actions in School A that are implemented and enacted according to the notifications from the superiors, the Handbook was made according to the Eight Virtues proposed by the Shenzhen Education Bureau in the notification of “*The Instructions about further improving primary and middle school students’ comprehensive virtues*” in June 2014 (Shenzhen Education Bureau (4), 2014).

The eight virtues are proposed by the Shenzhen Education Bureau. First of all, our schooling should implement the notifications and requirements from the superior. Secondly, it should be based on the situations of our pupils. Thus, those two are the most basic points. (Literally translated and tidied up where necessary, Interview with the Head of the Moral Education Department in School A, 12, May 2016)

In other words, the Handbook was made by meeting the requirement of the superiors (the

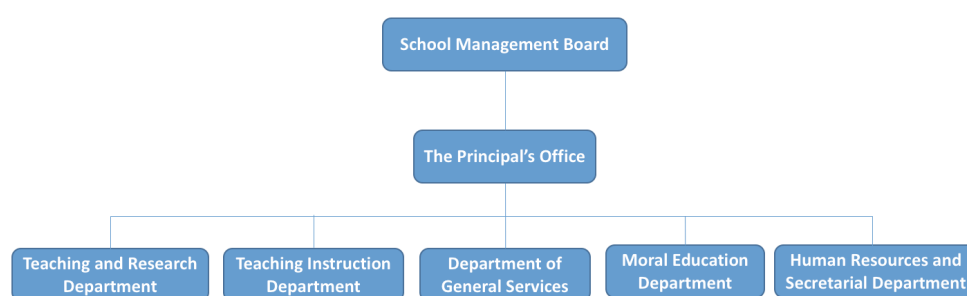
proposed Eight Virtues) and by considering the needs and situations of the pupils (Building Confidence) in School A.

The Eight Virtues include the following: the virtue of morality, the virtue of physical and psychological health, the virtue of learning, the virtue of innovation, the virtue of being international, the virtue of aesthetics, the virtue of mastering information technology, and the virtue of living (Shenzhen Education Bureau (4), 2014). Nevertheless, the Handbook refines the eight virtues, and the pupils are evaluated from three aspects (Confidence in Action, Confidence in Knowledge Learning, and Confidence in Talent and Skill) through 50 items. Moreover, the pupils are evaluated not only by their teachers but also by their parents.

#### ***5.3.2.4 curriculum administration in School A.***

School organizational structure, schoolteacher management, schoolteacher training, and parent–school communication are the four parts discussed in the following sub-sub-sub-sections.

##### ***5.3.2.4.1 school organizational structure.***



**Figure 10 School Organizational Structure of School A**

The Figure 10 shows the organizational structure of the daily operations in School A. It illustrates a traditional and typical structure that can be normally seen in most primary schools in Mainland China.

The Principal is the top leader of the whole school and the school management board. Two vice Principals assist the Principal and are separately in charge of different branches. The Principal, two vice Principals, and heads of the five departments are in attendance as permanent members of the ordinary administrative meetings. They routinely meet to plan and coordinate the overall activities and arrangements for the school.

The Teaching and Research Department is responsible for curriculum development and research. The Moral Education Department is in charge of pupil development and pupil activities. The daily management and instruction of individual teachers' teaching are the responsibilities of the Teaching Instruction Department. The Department of General Services provides the logistic supports, such as the management of school devices and finances. Apart from handling human resources, the Human Resources and Secretarial Department is responsible for receiving notifications, disseminating information, ensuring school security, and so forth.

Under the School Management Board are the Heads of each of the six grades in School A. The Heads of Grades are the intermediaries between the School Management Board and the classes (the form teachers<sup>3</sup>). Depending on the individual subject, the teachers teaching the same

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<sup>3</sup> A form teacher is a teacher responsible for a particular class in a school.

subject are also gathered as a panel to plan and develop the curriculum together. Moreover, a smaller panel exists for each subject in the range of each grade. Usually, the subject panel will also study outside or prepare teaching contests.

Horizontally and vertically, the members of the School Management Board, the Heads of Grades, the Panel Heads, and the form teachers of each class help with the normal daily operations of the whole school.

#### *5.3.2.4.2 teacher management.*

In addition to having some examination-oriented assessment systems for the teachers, School A introduced a management system called “Teacher Integral Star Management System,” which also appeals to the superiors. This management system has earned school-wide recognition because the School Management Board did not directly copy and apply such management system mechanically but had the support of all the teachers through a series of school-wide meetings for consultation. Every item in the management system had been localized and voted through as well.

This management system has aroused the enthusiasm of the teachers, who take the system seriously because the scores or results directly relate to the sum of their salaries and affect their opportunities for professional training:

That is quite good....We are ranked by the scores/system, and to be honest, in return, it is positively related to the salaries that we will get. The better you did, the more you will get. (Literally translated and tidied up where necessary, Interview with the Class teacher of the subject Information Technology, 12, May 2016)

(The teacher ranked in) the top 30 could have opportunities to be trained in other

provinces, ranked among 30 to 50 could be trained in other cities. If (the teacher ranked) outside the top 50, he could only join the training within Shenzhen City...Because of that, the teachers are inspired, and (we) want more opportunities to be trained. (Therefore, we try our best) to earn the scores...Now, in other districts, the teachers have opportunities to be trained in other countries. (Literally translated and tidied up where necessary, Interview with the Head of the Moral Education Department in School A, 12, May 2016)

The management system comprehensively involves almost every aspect of the school, such as daily teaching, teaching research, professional training, contests, pupils' examination scores, pupils' health, coordination between departments and groups, collaboration within a group, and giving advice to the school. In other words, the examination scores of the pupils are no longer the only and most important indicator:

We are inspired...You only need to work hard and your scores will be comparatively high...(however if) you do not participate in any of the work, (if) you only teach in the classroom, (but) work without engaging in the management or other activities in the school, your scores will be low. (Literally translated and tidied up where necessary, Interview with a Class teacher of the subject English in School A, 12, May 2016)

However, the management system is neither purely good nor bad. On the one hand, it could facilitate the teachers' engagement in schoolwork and collaboration. On the other hand, it pushes the teachers to do something that may not be necessary and suitable:

So, as I said, on the one hand it is good, (because) it could facilitate the teachers' work and stimulate the teachers to teach well as to make the pupils get high scores in the examinations....On the other hand, sometimes, the teachers are informed of all the work (on the Internet for the whole school), (thus) the teachers feel quite the pressure. They need to read (the notifications released on the Internet) everyday, as they are worried that they may miss any of them and so miss the opportunities to engage. Moreover, you had to apply for the work that may not suit you, because if you do not apply for it, as you know, you will get less money. So, I think it is both good and bad. (Literally translated and tidied up where necessary, Interview with the Class teacher of the subject Information Technology, 12, May 2016)



#### *5.3.2.4.3 training for the teachers.*

Schoolteachers generally have two types of professional training: those organized by the higher authorities and those organized by the school.

Basically, all schoolteachers should attend the training organized by the higher authorities. The training are about the orientation and are specifically related to the teaching subjects or relative instructional skills.

Two sub-types of training exist under school training. The first sub-type is out-of-school training, in which the school, according to its own needs, sends the teachers for training or to visit other teaching bases or schools with the approval of the higher authorities or according to the notifications released by the higher authorities. The second sub-type of training is school-based training, that is, training within the school. This sub-type training includes school orientations for new teachers, daily curriculum development, researching and planning within the panel of specific subjects, classroom observation of peer coaching, inviting experts from outside to deliver speeches for the teachers at the school, inviting teachers with specific talents or outstanding performance in specific areas to train their peers, and organizing a reading salon for the teachers across subjects.

The school has sufficient budget to support teachers for outside training for inviting experts to train the teachers in school. The Principal regards professional training as important to the teachers. Thus, he appreciates all the opportunities and actively encourages the schoolteachers to be trained:

The superiors from the Bureau attach importance to (improve teachers' professional

abilities). Every year and every semester, they would arrange the training for teachers of different levels, and those are all well done. Besides, our school has a specific budget to support teachers to have outside training and studies as to improve their professional abilities. Meanwhile, our school helps our teachers have a holistic plan for their professional development, so we have a Teaching and Research Department that is mainly responsible for coordinating those...Like the teacher who just dropped by (my office), actually, she was holding a form for applying for outside training...(As you can see), I encouraged her and urged her to seize the opportunity and try to go if possible...therefore, if conditions allow and there are opportunities, we would let the teachers go for (training) and go outside...Like, yesterday, we had invited an expert to train our teachers to improve their way of thinking...the training is the bridge between the outside and the inside. (Literally translated and tidied up where necessary, 12, May 2016)

#### *5.3.2.4 school–parent communication.*

The school has established a Parent Committee under the Moral Education Department, which is responsible for some pupil-related activities, the Head of the Teaching and Research Department (SA-T1) explains, “when we organized some large-scale activities, like, the activities for the International Children’s Day, or the pupils’ social practical activities, we consulted their opinions and invited them (the members of the parents’ committee) to join in” (Literally translated and tidied up where necessary, 12, May 2016).

Every semester, the school holds a Parents’ Meeting and a School Open Week so parents can know more about their children’s situations in school. For the frequent communication regarding pupils’ performance, teachers and parents communicate through QQ, WeChat, or telephone.

The old tradition of “home visit” has also been maintained by the school as a regular activity held every semester. While the teachers cannot possibly visit all the pupils’ homes, they do choose the most typical or unusual ones to visit:

For example, we visit the parents who are always busy and seldom come to school or communicate with us...or the parents who do not strongly support our work as they may misunderstand something...Thus, we will actively walk to their homes. (Literally translated and tidied up where necessary, Interview with the Head of the Moral Education Department in School A, 12, May 2016)

Usually, the top leader and middle-level leaders would communicate with the parents during the Parents' Meeting and when parents are invited to join the school activities:

I like to communicate with the parents...In one aspect, I join every first parents' Meeting for the parents of grade 1 pupils and every last parents' Meeting for the parents of grade 6 pupils. Why? Because when the new pupils come to school, I need to communicate with the parents about the thoughts, ways of teaching, and some requirements of the school...and for the pupils in grade 6, they are about to go to the middle schools, so I need to encourage and inspire them...For the parents of the pupils from grade 2 to grade 5, the middle-level leaders are in charge and hold the meetings. (Literally translated and tidied up where necessary, Interview with the Principal in School A, 12, May 2016)

Compared to the form teachers and the teachers in charge of the main subjects, the teachers of minor subjects, such as IT teachers or Music teachers, would have lesser opportunities to communicate with the parents.

### **5.3.3 the form of “Education for Building Confidence” in School A.**

As mentioned in the part of Curriculum Content in School A, Three Kinds of Balls (Pingpong, Basketball, and Football), Folk Music, and Practice-oriented Activities of Education for Building Confidence are recognized as the school-based curricula or the subjects and characteristic courses that are autonomously managed at the school level. When the school leaders were asked, “What SBCs do you have in your school?,” the school leaders answered “Three Kinds of Balls,” “Folk Music,” and “Practice-oriented Activities of Education for Building Confidence.” In addition, when the school leaders were asked, “Which SBC is the

best developed in your school?,” they recommended “Practice-oriented Activities of Education for Building Confidence” as the best.

However, with the concept of “Education for Building Confidence” influenced by the philosophy of schooling of “Education for Building Confidence,” School A has generated not only the school-based course “Practice-oriented Activities of Education for Building Confidence” but also a series of activities with the element of “Education for Building Confidence.”

The following reveals the activities with the element of “Education for Building Confidence” from six dimensions to show the form of school-based curriculum of “Education for Building Confidence” in School A.

#### ***5.3.3.1 developmental scale.***

The developmental scale of the SBC of “Education for Building Confidence” (EBC) is the scale of activities within School A that includes the element of EBC. The activities that involve the element of EBC are as follows. First, the Practice-oriented Activities of Education for Building Confidence is a course that is taken four times in a year for pupils in each grade. The second activity includes all the classroom teachings that have permeated with the concept of building pupils’ and teachers’ confidence by using the 220 instructional model. The third is the school environment built with the element of EBC, a small garden named the “Garden of Game for Confidence,” which is a corridor fully decorated with words about building confidence, and the sculpture of Confidence as the symbol of School A. The last type includes all the other activities organized by the school to build the pupils’ confidence, such as the singing contest,

“The Voice.” Therefore, the developmental scale of the SBC of EBC could be classified as the whole curriculum.

#### **5.3.3.2 theme.**

The theme of the SBC of EBC is Moral Education. The Moral Education Department is appointed as the main department in charge of the SBC of EBC, as it is responsible for the activities and development of the pupils. Therefore, the department is expected to help the pupils build confidence through their daily activities, behavior, and development.

#### **5.3.3.3 design.**

The SBC of EBC is considered to be a grading curriculum instead of a whole-school curriculum because pupils in different grades are taught with different curriculum objectives and contents, although these objectives have the same theme, namely, building confidence. The teaching material for the Practice-oriented Activities of Education for Building Confidence is a book edited by the teachers in School A, most of whom come from the Moral Education Department. This book is for all the pupils in School A. However, different pupils in different grades are taught different contents that are specifically designed for them. The book includes all the contents and lessons for pupils from grade 1 to grade 6. As mentioned above, pupils in each grade have four lessons of this course in a school year. Thus, this book has 24 lessons in total, with four lessons for each grade.

The 220 instructional model is likewise used in different classes for specific contents for pupils in different grades. Therefore, in general, the SBC of EBC is designed as a grading curriculum

instead of a whole-school curriculum that is “without the relatively independent, specific, and clear curriculum objectives and content designed according to the children’s grade or level” (Zeng & Zhou, 2013, p.281). However, the school environment built with the element of EBC is provided for all pupils in the school.

#### **5.3.3.4 time.**

EBC has become the philosophy of schooling and the characteristic of School A since 2010. It will be continued and developed as a long-term plan for the school because of its fruitful effects:

The effects are obvious. Firstly, I arrived at the school in the year 2000. Before 2000, there were no undergraduates in the residential committee, but now, there are undergraduates who graduated from our school. I think that the EBC is helpful. Moreover, I heard from the teachers in the middle school that some of the student emcees in the events or activities in the middle school graduated from our school...and that is also a reflection of the effects of our school’s EBC. ((Literally translated and tidied up where necessary, Interview with the Principal in School A, 12, May 2016))

#### **5.3.3.5 developers.**

The SBC of EBC involves the entire staff of School A. The textbook of the Practice-oriented Activities of EBC is edited by the entire staff of the Moral Education Department. The teachers in charge of the course (Practice-oriented Activities of EBC) are all form teachers, and other teachers are also involved whenever they are needed. The 220 instructional model is used by all course teachers. Therefore, in the dimension of “Developers,” the teachers should be classified as “Whole Staff.”

#### *5.3.3.6 types of activities.*

The types of activities should be classified as Creating. The Head of the Moral Education Department discusses the difficulty he encountered when he just received such a mission with only a concept:

This is not mature...(at the very beginning) we did not have any curriculum plan, curriculum assessment, or anything about how to implement, how to develop...nothing...just orally...Honestly, at the very beginning there was nothing to be referred to, even in the Internet, there was nothing. (Literally translated and tidied up where necessary, 12, May 2016)

### **5.3.4 the developmental processes of Practice-oriented Activities of “Education for Building Confidence”.**

The developmental scale of the SBC of EBC is the scale of the “whole curriculum.” Nevertheless, to clearly and deeply reveal the processes, this part explores only the Practice-oriented Activities of EBC, with its goal setting; design and mechanism; and implementation and evaluation, and revision, as the distinctive and commonly recognized SBC in School A.

#### **5.3.4.1 goal setting.**

The Principal proposed the original concept by focusing on the pupils and the surrounding situations.

By analyzing the pupils, the Principal found that few pupils in School A could confidently stand on the stage. Meanwhile, enlightened by the schools in Beijing that were working on

EBC, he considered that EBC might help improve his pupils' situation.

In addition, the Principal attached importance to the policies. "Only when the policies allow" is the statement repeated by the Principal numerous times during the interview about managing the school. Therefore, the surrounding situations, especially the political situations, are the considerations of the Principal when he proposed the concept.

#### ***5.3.4.2 design and preparation.***

During this process, the Moral Education Department of School A was appointed as the Curriculum Development Committee (The Committee) of the Practice-oriented Activities of EBC because building confidence adheres to the theme of moral education, and the Moral Education Department is in charge of all pupil-related daily activities, behaviors, and development. The Committee mainly worked on the edition of the textbook (including the teaching topics and themes), the design proposal of the assessment scheme, the teaching hours, the teachers of classroom teaching, and the training.

The membership of The Committee includes all six staff members of the Moral Education Department and a few experienced and capable form teachers. The Principal also actively participated in the process; for example, he edited the first lesson for the grade 1 pupils.

After the design proposal was made by the Moral Education Department, it was discussed, improved, and confirmed by the School Management Board in the meeting. They discussed the possibility of operations and the distributed tasks for relevant departments to coordinate resources.



#### ***5.3.4.3 implementation.***

The pupils of each class have four lessons of the Practice-oriented Activities of EBC (POA of EBC) for a school year. Based on the topics of the textbook, the form teachers instruct autonomously and have freedom in their instruction. Moreover, another teacher assists the form teacher of each class whenever the form teacher needs help according to the relevant topics. Therefore, the POA of EBC is typically handled by two teachers, namely, the form teacher as the main instructor and another teacher chosen by the form teacher as an assistant instructor for the related topics.

Sometimes, the parents would also participate in the class when the activities involve parent–child games.

#### ***5.3.4.4 evaluation and revision.***

As mentioned above in the part “School-based assessment for pupils’ comprehensive virtues,” an evaluation handbook for evaluating the comprehensive virtues of pupils, named “Star Rating—Confident and sunshiny Juvenile,” was designed to evaluate the effects of the POA of EBC.

The teachers of this course were trained, and their instructional abilities were improved mainly through their observation of other instructors’ teachers in the POA of EBC class and their practice in the real class:

(The teachers are) trained and facilitated through observing activities (class). No matter how much you talk, it is not better than when they (the teachers) observe (the whole teaching process) by themselves for one time, and not better than when they (the teacher)

practice in the real class... There were two new teachers who arrived at the school this year, and they did not know how to teach this course, so I arranged a teacher who had instructed this course to coach them... you need to try, try in the real class... evaluated by other teachers, (helped by the others to find) the good and the bad, so in the next class, they would carry forward the advantages and rectify the disadvantages or avoid the disadvantages. (Literally translated and tidied up where necessary, Interview with the Head of the Moral Education Department in School A, 12, May 2016)

During the School Orientation for the new teachers, they were also taught how to use the evaluation handbook and what EBC is, that is, the schooling philosophy of the school.

Therefore, this program is also a POA of EBC-related training for teachers.

In addition, some of the teachers were sent to Beijing once to study SBCD-related courses.

#### **5.4 SBCD in Case School B (School B: the school with the comparatively lowest density of collaborative culture among the public schools)**

##### **5.4.1 background of School B.**

Established in 1949, School B has a history of almost 70 years. It is located in one of the Residential Committees in K district, which is where its name comes from. The current Principal came to office in 2014. During his two-year-administration, the Principal facilitated the school's overall changes. The most profound change for the school in the past 2 years and in the past 70 years is the school's transformation from a primary school to a nine-year school (combining six primary grades and three junior middle grades). In September 2015, K district officially approved the school's transformation and authorized the school to begin enrollment for grade 7 students starting September 2016.

During the months of data collection for this study, School B was still a primary school with six

grades but was elaborately preparing for the transformation. It was expected to have 29 classes with around 1,500 pupils and 100 schoolteachers in September 2016 (Ye, 2015). During the data collection period for this study, in the school year 2015–2016, School B had 26 classes of six grades, with around 1,300 pupils.

#### ***5.4.1.1 philosophy of schooling.***

Before the Principal came to School B, he had worked for a number of key middle schools in Zhenjiang, Jiangsu Province, and Shenzhen. With a master degree and the experience of studying abroad, the Principal has his own philosophy of schooling that is related to his research interests—Career Development Plans. The Principal administers the school with a theory about career development.

The Principal considered the pursuit of happiness as important and corresponds to the developmental direction for the schools in K district proposed by the district level, that is, “Establishing the School to be filled with happiness.” However, he has his own understanding of the reason and manner of pursuing happiness:

He thinks that elite education has disadvantages, as elite education is always equal to “success.” Nevertheless, the meaning of “success” in the education area is even more parochial. Although this may mean entering key middle schools or key universities, it leads to the education of only quite a small number of children. However, education should be for all, or at least for the majority, and education for the majority should be about teaching them ways to be happy because he believes that “success belongs to the few, but happiness belongs to the majority.”

The Principal also believes that one’s development has been restricted or influenced by the

social status and economic strength of his her family. The Principal considers most pupils in School B come from common families or families with low social status, and so the proportion of the pupils who become “successful” will be small. To prevent his pupils from being cursed by “failure,” he hopes to teach them about ways to be happy.

On the basis of the theory of career development, the Principal reifies “how to be happy” into four objectives: to be a good pupil in the school, to be a good child in the family, to be a good staff member in the company, and to be a good citizen in the society (the “Four Goods”). A person would have many roles at a time and in a lifetime; however, the “Four Goods” are the four core roles for a person. One only needs to play their roles well in the four areas where they will have a “successful” life and be happy.

Therefore, the philosophy of schooling of School B is to teach the pupils to play the four roles well to have a happy life.

However, the Principal had only been in post at the school for two years. Moreover, the school is still in the stage of intense preparation for the transformation from a primary school to a nine-year school. Therefore, in the Principal’s mind, the philosophy of schooling is a part of the developmental framework for the whole school.

#### ***5.4.1.2 the New Basic Education Project (NBEP).***

As the non-governmental efforts for school improvement, the New Basic Education Project (NBEP) is a university–school collaborative education change project conducted by a team led by Professor Ye Lan from East China Normal University (Education Division, 2015; Ye, 2006). Since 1994, it has been developed and conducted in many schools in different areas in

Mainland China. It has also attracted significant attention in the education field locally and globally because it helps improve the schools in various aspects (Ye, 2006; Liu, 2014).

Different from other non-governmental educational projects for school improvement that mainly focus on a single aspect, the NBEP comprehensively aims at school transformation in four aspects: a) improvement of curriculum and instruction, b) improvement of class construction, c) improvement of school administration, and d) teacher development (Ye, 2006).

School B joined the NBEP in September 2014 and coordinated and led at the district level. Four other schools in K district participated in the three-year project as an association to learn and improve and to be instructed by the team led by Professor Ye (Liu, 2014).

In the three-year project for the five schools in K district, except for “teacher development,” three aspects are to be improved for school transformation in the five schools. Therefore, the following has been implemented in School B: a) improvement of curriculum and instruction, b) improvement of class construction, and c) improvement of school administration (Liu, 2014).

“Improvement of curriculum and instruction” is aimed at classroom teaching, and “improvement of class construction” and “improvement of school administration” are aimed at school management, respectively, in the class and school levels:

Mainly, those are about some concepts...firstly, it is comprehensive, for example, for school management...it requires returning the administrative power to the teachers, and the Principal needs to let the teachers participate in the management...called decentralization. Then, in the classroom (administration), the form teacher (also) needs to return the classroom administrative power to the pupils, to let the pupils have different administrative roles in the classroom...Those are the transformations in the administrative aspect. Then, in the curriculum (classroom teaching) aspect, for example, it proposes the decentralization and goal-oriented autonomy (in the classroom teaching) of Chinese, Mathematics, and English. (Literally translated and tidied up where necessary, Interview with the Head of the Teaching and Research Department in School B, 21, June

2016)

#### **5.4.2 directions of change in School B.**

##### ***5.4.2.1 curriculum content of School B.***

The following are the insights of the interviewees in School B on the content of curriculum: the Principal considers, “for content in Mainland China, the space of autonomy is comparatively small” (Literally translated and tidied up where necessary, June 21, 2016). Meanwhile, the Class teacher of the subject Mathematics (SB-T5) says,

Definitely, we follow the national guideline as the standard...Under the requirements of the national guideline that we could flexibly deal with the standard textbook...according to the pupils’ actual situation to combine (the contents in the textbook) or teach (the contents in the textbook) in advance or postpone (the teaching plan). (Literally translated and tidied up where necessary, 21, June 2016)

Complying with the curriculum plan for nine-year compulsory education in K district, Shenzhen (Table 29), and similar to other schools in K district, School B teaches Chinese\*, Mathematics, English, Music, Art, Science, Moral Education, Physical Education, Information Technology, Calligraphy, and Integrated Practices as the main subjects included in the national and local curricula.

The school also finds importance in Calligraphy, and it regards the subject as the school-based curriculum for the whole school. Other two school-based curricula, “Career Development Plans” and “History of the Shenzhen Communist Party,” are to be further developed in School B. However, they are not yet arranged in the school timetable.

Other activities have been organized in School B, including Class Meeting, Morning Reading,

Afternoon Reading, Club Activities, Calligraphy Contests, and a lecture about the History of the Shenzhen Communist Party.

#### ***5.4.2.2 learning processes in classroom teaching in School B.***

The classroom instruction in School B has been changed from two dimensions to theoretically improve the classroom instruction and facilitate the classroom instruction through an informationalized instructional tool or device:

That is in accordance with my philosophy of schooling, to carry out from two dimensions: the first is the (theoretical) research on classroom instruction – New Basic Education...the second is to use modern information technique/(device)(e-collection cloud service education system)...from two dimensions to improve and facilitate the classroom teaching of the whole school. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

##### ***5.4.2.2.1 learning processes instructed by the NBEP.***

The subjects taught in the NBEP include Chinese, Mathematics, English, Science, and Weekly Class Meeting. Only key teachers of the subjects have participated in the project, yet the concepts are further extended to the classroom teaching of the whole school with the help of key teachers.

The developmental needs of pupils should be the starting point, and within such a social context, the pupils with active and healthy development are needed. Therefore, this development should be the main value in classroom teaching (Ye, 2006). Thus, Ye (2006) proposes that teaching and learning should be interactive and dynamic processes between the teacher and the pupils, with “a relationship of mutual promotion, mutual creation, and

inter-construction” (Ye, 2006, p.196).

Accordingly, the Head of the Teaching and Research Department considers that NBEP emphasizes “decentralization,” “returning the right/power to the pupils,” with “goal-oriented openness”:

First, there should have an open-ended question in the class to make all the pupils to think, which is called “goal-oriented openness.” Then, with the openness...decentralization is achieved when pupils discuss in groups as “returning the right/power to the pupils” is also realized. It is no longer teacher-centered, (and no longer) does a teacher play a solo (in the classroom). (Literally translated and tidied up where necessary, 21, June 2016)

The Class teacher of the subject English (SB-T4) understands the concept of NBE more thoroughly, as she says that “openness,” “decentralization,” and “teaching the structure and using the structure” are always emphasized:

It is close to what we refer to as the concept of people-oriented. It (the NBE) is to foster the children who are with active and healthy development. The children with active and healthy development mean they are not led by the teacher... (the teacher) should let go, should let them learn by themselves, and to learn actively. What is more? The openness. Our classroom teaching should be opened... “Openness,” “decentralization,” and “teaching the structure and using the structure” are what he (the instructor in the NBEP) said most. (Literally translated and tidied up where necessary, 21, June 2016)

To explain “teaching the structure and using the structure,” the Class teacher of the subject English (SB-T4) gave an example about her English teaching:

There is a knowledge point in the textbook, “I can draw.” (In the past) very simply, we only needed to teach the pupils to learn (the sentence) “I can draw.” (More “vividly”), we may let them draw a real picture and (say) the sentence “I can draw” (loudly) at the same time. I felt that the pupils only need to learn this sentence and that is enough. However, it is different now, (to train) the pupils’ divergent thinking (is also needed). Take this sentence structure as an example, “I can do something,” (you need to let them think of) doing other things. (For example), I can sing; “sing” is the word that he/she has learned before, and “dance” (it is also a word that he/she has learned before)...so you need to use



it. Moreover, this is about “I” can, and (now) change the “person,” say, “you can,” “you can sing,” “you can dance,” “she can sing,” and “she can dance.” That is about (training) the pupils’ divergent thinking (ability by “teaching the structure and using the structure”). (Literally translated and tidied up where necessary, 21, June 2016)

Furthermore, the Class teacher of the subject English (SB-T4) explained the interactive and dynamic process between the teacher and the pupils, with “a relationship of mutual promotion, mutual creation, and inter-construction” (Ye, 2006, p.179):

Then, (you need to let) the pupils retrieve the (teaching) resources. Maybe, one pupil says, “I can sing” and “I can draw,” but when another pupil says, “she can sing” and “she can draw,” you (the teacher) need to retrieve it as a resource so it becomes what the pupil generates (and) learn by himself, but not taught by the teacher. (Literally translated and tidied up where necessary, 21, June 2016)

SB-T4 actually mentions the inclusions of the concept of “openness” of the NBE – “the generation, the capture, the reconstruction, and the utilization,” among others (Liu, 2014, para.13).

However, the teachers in School B also mentioned some obstacles and confusions that they have experienced when teaching with the concepts of the NBEP. The Head of the General Services Department refers to the high-standard demand on the teachers because a large amount of content is needed in a lesson:

Your objective for the course should be clear...you need to take a lot of time in advance...if you do not read and study the textbooks carefully, you may be confined in only one lesson...the teachers need to integrate the textbooks. For example, when I am preparing the lesson for grade 2, I may also need to consider what will be taught in grade 3 and grade 4...the exercises for this lesson need to be connected to the following exercises...(you need to) prepare for the following. (Literally translated and tidied up where necessary, 21, June 2016)

With the large amount of content in a lesson, SB-T4 considers the lack of interest in classroom

teaching because a longer time is needed to teach a large amount of content and knowledge in a lesson, whereas a shorter time is provided for games or other activities. She thinks that not all the pupils have the ability to concentrate; some pupils may need to be stimulated by games or activities.

Moreover, the Head of the General Services Department feels confused about the pupil–pupil interaction proposed in the NBEP. She thinks that when a gap exists between the academic abilities of two pupils, they would find difficulty in having an effective communication and interaction for improvement.

#### *5.4.2.2.2 E-Collection Cloud Service Education System*

Thus far, the E-Collection Cloud Service Education System has been used in classroom teaching for higher-level pupils (grade 5 and grade 6) in School B, and it will be extended to the whole school when conditions allow. This system can help the teacher have effective classroom instruction because through the system, the teacher can obtain and analyze pupils' learning outcomes immediately.

#### ***5.4.2.3 curriculum assessment in School B.***

Generally, the pupils' scores for the main subject examinations influence School B's action to adapt and facilitate school instruction:

We have examinations for every unit. For the finals, normally, we have the examination with the same paper of individual subject for all the schools at the district level...to see if the scores of the pupils in our school are above average or below average...and so to adapt the instruction and to facilitate the instruction. (Literally translated and tidied up where necessary, Interview with the Class subject teacher of English in School B, 21, June 2016)

Teachers of different subjects may have their own ways of assessing their pupils as well:

Take the English subject as an example. I teach grade 1, and there is little content that can be assessed with written examinations, so I encourage them to practice oral English. Normally...the school has no demands...but I have oral examinations in the middle and the final of a semester for my pupils. (Literally translated and tidied up where necessary, Interview with the Class subject teacher of English in School B, 21, June 2016)

#### ***5.4.2.4 curriculum administration in School B.***

As mentioned above, in addition to the improvement of classroom teaching, the three-year NBEP joined by School B also instructs the school for the improvement of the school administration.

By helping the Principal analyze the situation and participate more as a leader in curriculum development, the NBEP instructs the Principal to have a school-wide planning for school improvement (Ye, 2006).

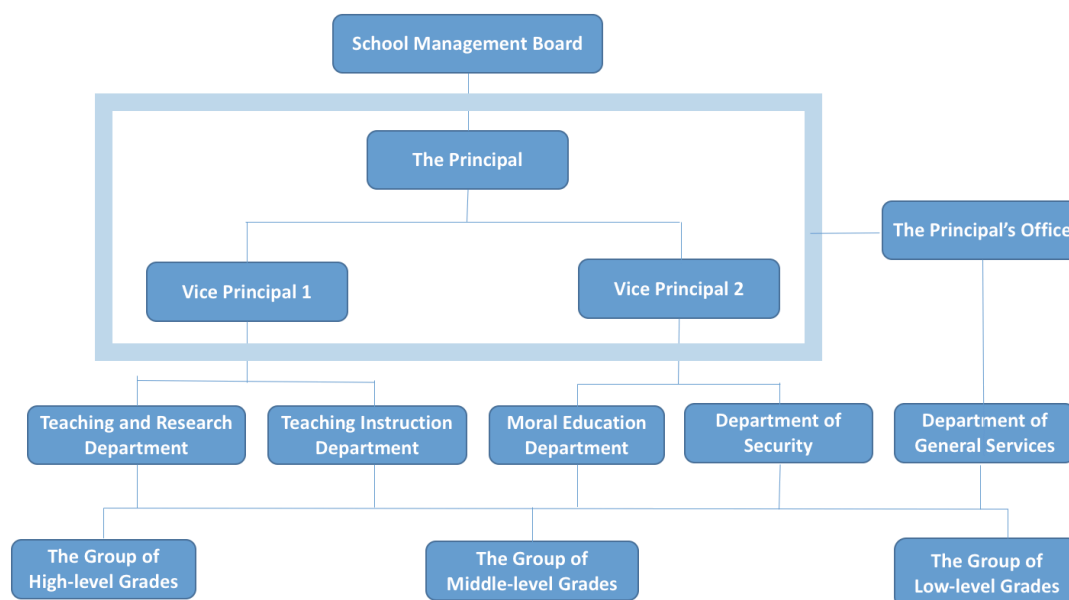
In the part about *The Philosophy of Schooling* of School B, the Principal's administrative concept was revealed theoretically and comprehensively. The activities administrated and organized for School B are supposed to be in accordance with such a schooling philosophy—fostering the pupils to carry out the four core roles well as to enjoy a happy life.

The following sub-sub-sub-subsections show the situations of school administration in School B in four aspects.

##### ***5.4.2.4.1 school organizational structure of School B.***

Instead of completely following the organizational structure administrated by the previous Principal, the current Principal implements a reform on the school organizational structure by

setting up groups of grades as in year grade levels.



**Figure 11 School Organizational Structure of School B**

The previous organizational structure was a traditional and typical type of structure that could be seen in most primary schools in Mainland China: the Principal is assisted by two vice Principals, who are separately in charge of different departments, and five different departments are under the Principal's Office. Instead of simply retaining the old structure, the Principal adds the three groups of grades and makes the three group leaders join the School Management Board (Figure 11). The school organizational system is transformed from department management to grade management:

The management system has a great change. Basically, it is totally different from the previous one because the previous (management system) is a department management system...but now the management is grade-oriented. (Literally translated and tidied up where necessary, Interview with the Principal in School B , 21, June 2016)

The six grades are divided into three groups of grade levels. Grades 1 and 2 are combined as the group of low-level grade; grades 3 and 4 are the group of middle-level grade; and grade 5 and grade 6 comprise the group of high-level grade. The teaching and instructional activities within the school are grade-oriented. The Heads of the three groups of grades work as a “small Principal,” because all the departments work to assist them, and the teaching, moral education, human resources, financial resources, and teaching facilities are all under their command.

The advantages and reasons for the Principal to establish such a grade-oriented management system are discussed as follows:

The first reason is related to the disadvantages of the department management system. The Principal considers the activities organized in a department management system are always for the whole school at a time, and so the activities are implemented with formalism. In other words, the activities are not effective because they are not target-relevant. The activities organized in a grade management system would be different:

When we are informed by the superior to organize an activity, if I think the activity would be suitable for the pupils in lower grade, then I will directly authorize the group of low-level grade to carry out the activity...That is called target-relevant in education. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

Second, the middle-level leaders in the school are not active enough:

Most of the middle-level leaders are absent...I am now working as the Head of the departments, vice Principals, and the Principal...One vice Principal is now working as a volunteer in another school, the other vice Principal has been promoted... A new vice Principal will not arrive until the next semester. For the departments, the Head of the Moral Education Department is studying outside as an exchange leader; the Head of the Teaching and Research Department is working at another school as an exchange teacher. (Literally translated and tidied up where necessary, Interview with the Principal in School

B, 21, June 2016)

The third reason is related to the advantages of the grade management system. The Principal has realized the functionality of the grade management system when he worked in a junior middle school, and he considers the primary school as needing even more attention because of its large span from grade 1 to grade 6. In addition, this system of management is commonly recognized by numerous schools, as it also meets the requirement of the NBEP for decentralization.

#### *5.4.2.4.2 teacher management.*

##### *-philosophy in teacher management*

As introduced previously, the Principal has a master degree. He majored in economics. Therefore, his management always reflects the concepts or theories of economics.

The Principal says that in Economics, a core issue is the study of human nature. Human beings are rational, and so they live for material and spiritual satisfaction and enjoyment. For the people-oriented management in School B, he attempts to satisfy the teachers based on two dimensions, material and spiritual.

To satisfy the teachers' material needs, the Principal benefits the teachers whenever the policies and the documents allow. For example, he bought sportswear for the teachers who participated in the Tug-of-War match organized at the district level.

However, the Principal works more on satisfying the teachers' spiritual need than their material needs because of the school's limited budget. First, the school holds monthly birthday parties

for the teachers. Second, the Principal supports, as well as joins, the teachers in their participation in cultural and sports activities organized by their superiors and the school. Third, he implements two days off for the teachers in School B: one is for the teacher's birthday, and the other is called "day off without reasons." The teachers may also apply their days off on any days they want in a year. Fourth, teachers usually regard the training out of school as a benefit; therefore, as much as possible and as policies allow, the school financially supports the teachers for outside training.

The teachers are also awarded for their teaching achievement (mainly related to the examination scores of the pupils) and are awarded from material and spiritual dimensions. Moreover, the teachers who are outstanding and have improved their performance can be awarded.

In addition to being "people-oriented," "relaxing control over small ones" is the other economic concept involved by the Principal in his management. The Principal considers that too many disturbances from the outside occur, for example, "unnecessary assessments" or "unnecessary activities" that take up too much time in school. The Principal thinks that the most important things for the school are the examination scores, pupils' health, and sufficient time and energy for teachers to focus on their teaching and instruction. Therefore, he acts as a gatekeeper to remove unnecessary activities or assessments at the beginning when the school receives notifications from the superiors. As a result, he never applies for the activities that do not benefit the school, and he treats those that he must apply for differently: he tries his best for the important ones, and he works on the less important ones in a general manner.

Another characteristic of the Principal's management style is shown in the following:

Sometimes, some teachers (in the school) may think that I am arbitrary. Why am I arbitrary? Because I believe that they could not understand thoroughly what I am working for, I take a tough stance on management. I just (told) them to follow my orders, as a result, they found that my decision was correct. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

*-obstacles in teacher management*

A high turnover of the teachers became an obstacle in School B's management. Normally, two kinds of teachers work in schools in Mainland China. One includes registered teachers, and the other includes permitted teachers. Registered teachers are considered as permanent employees who work for the government and thus receive salary from the government. Permitted teachers have working contracts with the school as temporary staff, and so they receive salary from the school. The permitted teachers' salaries are likewise significantly less than those of registered teachers.

As an old problem, the proportion of permitted teachers in School B reached 50%. This school has the most number of permitted teachers in K district, although the government regulates the proportion of permitted teachers in a school to lower than 15%.

In the summer of 2015, the government gave a directive to the human resources of the schools, stating that a school could only enter into a contract with one permitted teacher two times. This sudden directive caused one-third of the teachers to leave School B. The large proportion of permitted teachers means a high turnover of teachers in a school, an issue that may bring a school difficulties in operations and management.

To address this issue, with the help of the government, School B should have recruited around



50 registered teachers in 2016. Three official ways are used to recruit registered teachers for schools. The first is to recruit teachers outside Shenzhen. The second is to transfer outstanding registered teachers from other schools as new teachers. The third is to recruit teachers within Shenzhen; this method is the main mode of recruitment for the majority of registered teachers for the school.

However, this year, for some reason, the government did not carry out the third way (the main way) of recruiting registered teachers in Shenzhen. As a result, School B recruited seven new teachers through the first way, four outstanding teachers through the second way, and no teachers through the third way. School B should have had around 50 new registered teachers this year, but it only has 11. Therefore, School B must wait for the official recruitment next year, and the remaining 40 posts will again have to be filled temporarily by the permitted teachers. Moreover, the two-child policy has an influence on the school because it affects the permitted and registered teachers.

As a whole, the turnover of human resources in School B brings considerable difficulties to the school in management and daily operations.

#### *5.4.2.4.3 training for the teachers.*

Similar to teachers in School A and other normal schools, teachers in School B have academic training that are organized by the higher authorities. The school also organize outside training and school-based training for the teachers.

The Principal actively supports the teachers to have outside training because of his philosophy of teacher management to satisfy teachers' spiritual need and the sufficient budget of the

school:

There are no problems with the budgets. The public schools in Shenzhen have abundant budget for teaching and instructions. All are supported when the financial policies allow. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

Almost all of the teachers in School B have had outside school training during the two-year tenure of the Principal, and because of the NBEP, the outside school training were almost all relevant to the NBEP.

School B has two sub-types for school-based training: subject-relevant academic training within a subject panel, and training to meet teachers' spiritual needs.

The Principal places importance on school-based training to meet the teachers' spiritual needs, because this type of training meets the philosophy of the school, that is, to be happy. Such school-based training provide teachers with opportunities to know all walks of life, broaden their horizons, open their minds, release their occupational burnout, and broaden their social contacts. This kind of school-based training is organized in two ways: inviting experts to the school to communicate with the teachers through a forum and organizing the teachers to visit other working places.

#### *5.4.2.4.4 school–parent communication.*

For the Principal, school–parent communication means two kinds of communication: communication with and the support of current pupils' parents, and communication with and the support of society.

School B establishes three levels of parent committees for current pupils' parents: school level,

grade level, and class level. Parents and the school communicate most frequently at the class level for pupils' situations.

The Principal regards the support from society to be significant, and he has a wide social network, which is partly reflected by his ability to easily invite experts from various fields to the school to have school-based training for the teachers, for example, doctors in key hospitals, professors from universities, and entrepreneurs from famous enterprises.

### **5.4.3 SBCs in School B.**

As mentioned above, School B encountered some difficulties in school management: the new arrival of the Principal, the transformation of the school from primary school to nine-grade school, the high turnover of teachers, and the absence of middle-level leaders. However, the Principal is trying his best to continue designing a developmental framework for the whole school, as well as promote and facilitate all the missions and tasks in the school accordingly.

Three school-based curricula are included in the developmental framework constructed by the Principal: “Career Development Plans,” the “History of the Shenzhen Communist Party” (HSCP), and “Calligraphy.”

The school develops HSCP as a school-based curriculum because the Principal majored in history. As such, he is interested in History, and he has benefitted from and realized the function of history for people, which is to understand all events thoroughly from a historical perspective. Moreover, he has the relevant social resources and support from related government departments. As a result, he has successfully lobbied for the establishment of an educational base of HSCP. School B has organized some relevant activities, for example,

displaying boards with HSCP, inviting an expert to speak on HSCP, and editing the HSCP textbook for the pupils in School B.

“Career Development Plans” is another SBC in School B, but it is still in the process of preparation. The Principal has studied career development as a province-level subject for a long time with other scholars, so he has the research experience and resources related to this field. This dimension is also in accordance with the philosophy of schooling of School B to educate pupils to be good staff members (one of the “four goods”) in the future. In addition, career development is related to the Eight Virtues proposed by the Shenzhen Education Bureau in the notification of “*The Instructions about further improving primary and middle school students’ comprehensive virtues.*” School B is an experimental school or site for developing pupils or students with the eight virtues.

Calligraphy was originally established by the upper level as a national and local curriculum for all the schools in K district. However, since 2014, after becoming the Principal in School B, the Principal has strengthened Calligraphy as a characteristic of and a SBC in School B. Compared with the other two SBCs introduced above, which were developed at the very beginning in School B, Calligraphy has been developed for a longer time and is comparatively well developed. The following sub-subsection refers to the form of Calligraphy and the processes of the development of the Calligraphy curriculum in School B as a way to understand the situation of SBCE in School B from a micro-perspective.

#### **5.4.4 the form of “Calligraphy”.**

The form of Calligraphy is revealed concretely from six dimensions discussed as follows.

#### ***5.4.4.1 developmental scale.***

Originally, Calligraphy was established as a course in the timetable stipulated by the district level, and regulation states that the course could be combined with the Words Writing lessons in the Chinese course. However, School B set the subject as an individual course in the school timetable for the pupils to take once a week. In addition to the Calligraphy course taken by every pupil, Calligraphy is also a club activity held three times a week for members. Moreover, a Calligraphy contest is held once a year. The construction of a school environment with the elements of Calligraphy is also included as part of the developmental scale of Calligraphy in School B. School B once paid for a Calligraphy teacher from an art education training institute to conduct a Calligraphy training course for the school teachers, which is also called buying-service on training for Calligraphy.

In summary, the activities with the element of Calligraphy in School B include the Calligraphy course, the Calligraphy club, the Calligraphy contest, the school environment construction with the element of Calligraphy, and the buying-service on training for Calligraphy. Therefore, the developmental scale of Calligraphy in School B is classified as “Part of the whole curriculum.”

#### ***5.4.4.2 theme.***

The theme of Calligraphy is classified as “art accomplishments,” which include the activities that could improve the art appreciation and creative abilities of pupils.

#### ***5.4.4.3 design.***

Every class in School B has a Calligraphy course once a week. The textbooks used are uniform materials selected by the district level, but textbooks are different for different levels of pupils. Low-level grades study pen-and-ink Calligraphy for basic practice, whereas middle and high-level grades are upgraded to studies on Chinese (brush) Calligraphy for higher-level practice.

Hence, the Design of Calligraphy is a grading curriculum because it is target-oriented, with different levels of pupils having different levels of learning contents.

#### ***5.4.4.4 time.***

As a schooling characteristic of School B, Calligraphy has been strengthened since the arrival of the Principal, and it has been continuously improved in various aspects. This improvement will continue because the Principal has realized the significance of Calligraphy to the pupils. Thus, Calligraphy is constructed as a long-term plan in School B's developmental framework.

#### ***5.4.4.5 developers.***

As a SBC, Calligraphy is related to the activities of pupils under, supposedly, the Moral Education Department. As the theme of Calligraphy is classified as “art accomplishment,” the subject Panel of Art is the panel responsible for carrying out and having substantial involvement in all related activities.

Therefore, except for the Calligraphy contest, which would need the assistance of the form

teachers and other staff, all school activities related to Calligraphy mainly involve the members of the Panel of Art and the Principal.

#### ***5.4.4.6 type of activity.***

As shown in the district-level timetable for all schools in K district (Table 29), Calligraphy is established as a subject in the national and local curricula. Given that the Principal considers Calligraphy as significant, Calligraphy is chosen from the existing contents listed by the upper level. Thereafter, it is strengthened to become a characteristic of School B. Therefore, the type of activity of Calligraphy could be classified as “Choosing.”

#### **5.4.5 the developmental processes of “Calligraphy”.**

The main persons involved in the development of the Calligraphy curriculum are the members of the Panel of Art and the Principal. In particular, the Panel of Art has two teachers: Mr. L and Ms. H. Mr. L is the chief, and teacher Huang is the assistant. The following sub-sub-subsections reveal the processes of the development of Calligraphy-related activities by these key persons.

##### ***5.4.5.1 goal setting.***

The Principal emphasized that he is the designer of the developmental framework for the whole school. Therefore, he is the impetus behind choosing Calligraphy as one of the school-based curricula in School B:

The Calligraphy is oriented by me – the human resources, the financial resources, the

related teaching facilities and materials, all are oriented in every process by me in macro. As the Principal, I am the designer of the overall developmental framework...I did it all by myself, no one could help as a substitute. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

He also pointed out his reason for developing Calligraphy in School B, which is related to the orientation and the philosophy of his schooling.

First, he wants School B to be internationalized because this characteristic is a need and a trend for the future development of schools in Shenzhen. He considers that when a school is more nationally characterized, it is more international:

I have a goal (for my school)... it is to be international. Why? Actually, I feel that to run a school is like to run a business...like producing products...to have my own characteristics. Because this is a school in Shenzhen, compared to other schools in inner mainland, the schools in Shenzhen have the biggest difference...It is international...Shenzhen is an international city....Within such an (internationalized) environment and conditions, we (the school) have to be international....I follow the idea that the more we are nationally characterized, the more we are being international...That may be because of my experience of having been to other countries...(When communicating with others in abroad), what others admire and expect are the uniqueness of your own culture...That could be Calligraphy. (Literally translated and tidied up where necessary, 21, June 2016)

Second, the curriculum benefits the pupils in examinations and job recruitment. When pupils have beautiful writing, they can improve in the exams and gain an advantage over others in job recruitment. Therefore, the subject has influenced one profoundly for a lifetime.

#### ***5.4.5.2 design and preparation.***

During this process, the Panel of Art works as the Curriculum Development Committee with two main members: Mr. L and Ms. H, with Mr. L playing the main role. The Principal explains that Mr. L is chosen as the executor because he has special skills in Calligraphy and talent and



enthusiasm toward the subject.

Mr. L says that when he has ideas for the development of Calligraphy, he would first inform his direct superior. After he receives the official agreement from the school, which allows him to proceed with the idea, he would begin to write a proposal about the idea, including the time and the mode of assessment.

The Moral Education Department is his direct superior. Normally, the Panel of Art informs and applies for everything related to the idea through the ME department and then through the school management board. The Head of the Moral Education Department will help propose the idea in the meeting of the school management board. After the proposal is approved, Mr. L and Ms. H will begin to implement the idea.

Bypassing the direct superior for applications and approvals is generally not allowed. Nevertheless, the Head of the Moral Education Department has been absent for a long period because of exchange studies. Thus, for a year, Mr. L has directly communicated with the Principal for the development of Calligraphy. The Principal and the Panel of Art (Mr. L and Ms. H) are the main persons involved in the development of Calligraphy.

#### ***5.4.5.3 implementation.***

The developmental scales of the activities with the element of Calligraphy in School B could be classified as “part of the whole curriculum.” Specifically, they include the Calligraphy course, the Calligraphy club, the Calligraphy contest, the school environment construction with the element of Calligraphy, and the buying-service on training for Calligraphy.

Moreover, a book about the introduction of the basic knowledge of Calligraphy was edited by

the Principal and the panel to help the pupils understand additional information about Calligraphy. Another book about the basic skills of Calligraphy is being edited by the panel as well. However, the main textbooks used in the Calligraphy course in School B are uniform textbooks regulated at the district level.

Every class takes a Calligraphy course once a week, and members of the Calligraphy club hold their activities three times a week. Calligraphy courses and Calligraphy club activities are instructed by Mr. L and Ms. H.

The School Calligraphy contest was proposed by Mr. L. It is held once a year, and the school leaders and the form teachers assist as invigilators. In addition to being invigilators, Mr. L and Ms. H are mainly responsible for checking and marking the pupils' work.

The school leaders (the Principal) are inspired and become the proponents of decorating the school environment with Calligraphy elements after they visited other schools. Still, Mr. L and Ms. H play the main role in implementation, for example, finding Calligraphy-related materials for decorations.

At one time, Mr. L proposed a buying-service on training for Calligraphy for the teachers in School B. The cost of the buying-service was supported by the school.

Overall, the Panel of Art composed of Mr. L and Ms. H plays the main role in implementation.

#### ***5.4.5.4 evaluation and revision.***

Thus far, in the evaluation of pupils' level of Calligraphy, the pupils are evaluated in two ways.

The first includes holding mid-term and final examinations, which simply assess the quality of the pupils' Calligraphy work, and publicly listing the results of the assessments with the pupils'

names on the list. The second is to encourage the pupils to have grading tests for qualifications and certificates issued by the formal Calligraphy institute.

In general, revisions are always in progress:

(It is like) moving forward on (the goals for the school) with two legs. One is designing the developmental framework, and the other is carrying forward within the developmental framework. (Literally translated and tidied up where necessary, Interview with the Principal in School B, 21, June 2016)

To address the issue of the lack of qualified Calligraphy teachers, School B plans to have additional buying-service of professional Calligraphy training for the pupils, as well as to recruit registered teachers with talent or skills in Calligraphy. In addition, the school cooperates with a famous Calligraphy teacher to improve the qualification of Calligraphy in the school and characterize the school with Calligraphy. It does so by entering into a contract with famous Calligraphy teachers who have already entered into contracts with seven other schools in Shenzhen with Calligraphy as their characteristics.

Thus far, no formal Curriculum Development Committee for Calligraphy exists in School B. The Principal intends to establish this committee, which involves all the form teachers, the Heads of the Groups of Grades, the Panel of Teaching and Research Department, and the Panel of Chinese Subject, with Mr. L (the Panel of Art) as the head.

The Principal has also successfully lobbied to make School B a site for Calligraphy grading tests.

The school Calligraphy tests for teachers will also be held in School B.

To improve the evaluation system of Calligraphy in School B, the Principal proposes relating

pupils' levels of Calligraphy with their qualifications of being certified as Merit pupils.

## **5.5 SBCD in Case School C (School C: the school with the comparatively highest density of collaborative culture among the private schools)**

### **5.5.1 background of School C.**

School C is a non-government-funded nine-year school belonging to the Shenzhen Yuanhenjia Education Group (the Group). With 3 schools, 13 kindergartens, 3 training centers, and 21 other educational institutions, the Group has businesses related to early child education, primary and junior middle school education, after-school education and professional development training, and educational research and educational information consultation (Shenzhen Yuanhengjia Education Group, 2016).

#### ***5.5.1.1 organizational structure of the education group.***

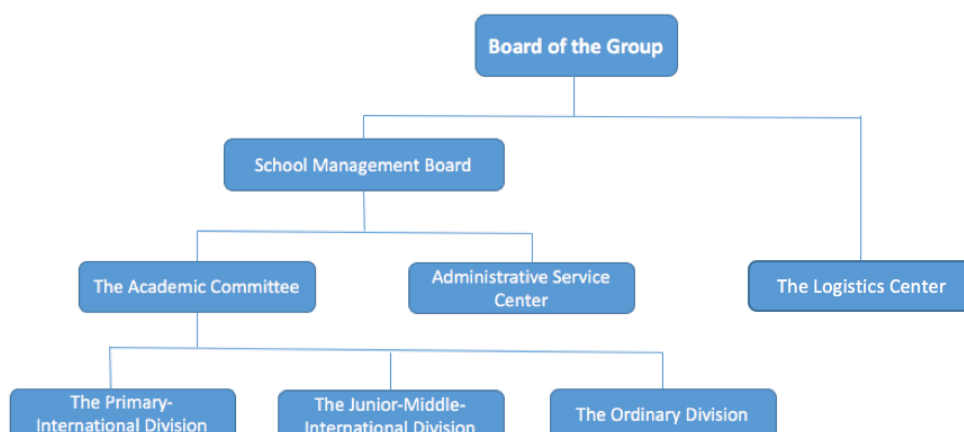
All members of the Group answer to the Board of the Group. The founder of the Group, the Chairman of the Board, has the highest authority. An Advisory Committee involving distinguished experts is set for the consultancy of the strategic decisions for the Group. In addition, a Chancellor represents the Board of the Group to supervise the schools and provides professional advice for the Board.

The Group has 12 departments, including nine departments for the executive and general operations of the Group, namely, Central Office, Human Resources Department, Department of Publicity, Department of Foreign Affairs, Financial Department, the Logistic Department, Engineering Department, Information Technology Department, and Property Department, and

three departments for the academics within the Group. These departments include the General Teaching and Research Department for the International Division, the General Teaching and Research Department for the Early Child Education Division, and the General Teaching and Research Department for the Division of Training Centers.

***5.5.1.2 School C – the organizational structure of the primary school in the international division.***

School C was established in 2001, with the school vision of “better education makes full humanness, perfect morality and wonderful life.” Since 2011, it has been transformed from a school with large classes (around 50 pupils) to a school with small classes (with the maximum of 30 pupils), with the purpose of becoming the school with the best quality of education in the area. Accordingly, School C has the highest tuition fee in the area. At present, three divisions are set in School C – the Primary-International Division, the Junior-Middle-International Division, and the Ordinary Division. The Primary-International Division includes 24 classes of 6 grades (from grade 1 to grade 6) in small-sized classrooms. The Junior-Middle-International Division consists of 6 classes of 3 grades (grade 7, grade 8, and grade 9) in small-sized classrooms. The Ordinary Division consists of the remaining untransformed classes in a large-sized classroom composed of grade 4, grade 5, and grade 6 pupils. The transformation will result in classes of 9 grades (grade 1 to grade 9) in small-sized classrooms.



**Figure 12 School Organizational Structure of School C**

Above the three Divisions are three parallel centers or committees (Figure 12). The logistics center in School C is under the vertical management of the Group's Logistic Department for managing the pupils' hostel, school buses, dining, and school security. The Academic Committee of School C is also under the Group's General Teaching and Research Department for the International Division, which handles the curriculum-development-related affairs. The Administrative Service Center handles the general affairs within School C, for example, team building, human resources, and teaching services.

Three Principals manage School C together. Principal Y is the Principal of School C and is in charge of the whole school, especially of the Ordinary Division. In addition, he holds the post of Head of the Mathematics and Science subjects panel in School C. Vice Principal C is responsible for the Primary-International Division and the Humanities-related subjects (Chinese, Arts, and others) panel in School C. Vice Principal Z is in charge of the Junior-Middle-International Division and the Head of the English subject panel. Each Principal

in the school holds two positions; they horizontally hold an administrative position and vertically hold an academic position.

In addition, Vice Principal Z is in charge of the Group's General Teaching and Research Department for the International Division (for all three schools of the Group) and the Director of the Department. Meanwhile, Heads of subject panels are chosen from each of the three schools of the Group to become the Heads of subject panels for all the three schools of the Group. Vice Principal C, who is also the Head of the Humanities-related subjects panel (from the first school of the three schools in the Group), is in charge of the Humanities-related subjects for all the three schools of the Group, wherein a vice Principal or Head of English subject panel (from the second school of the three schools in the Group) is responsible for the English subject for all three schools in the Group. Meanwhile, the Head of the Mathematics and Science subjects panel from the third school of the three schools in the Group is the Head of the Mathematics and Science subjects for all three schools in the Group. However, because this study mainly focuses on primary schools, the Primary-International Division of School C is the main focus of the case study on School C.

### **5.5.2 directions of change in School C.**

When the Vice Principal in charge of the Primary-International Division and Humanities-related subject in School C (SC-P1) was asked about SBCD, he initially explained it in terms of his (and therefore the school's) understanding of the curriculum. He considers that the real product of a school is the curriculum instead of the pupils; a pupil may have the characteristics of the school, yet still has his own features. School C understands "curriculum"

from a macro-perspective – curriculum is about all the teaching and instructional activities that could affect the pupils:

We used to know that a curriculum must have teaching materials, for example, the plan of teaching content, second, the plan of teaching implementation, and then the assessment of the curriculum, so on and so forth; such a series (of actions) is called curriculum (development)... When one is called a school-based curriculum, the teaching materials of the school-based curriculum should be (first) brought out. It seems that we have teaching materials of the SBC and so we have a SBC... (In fact) it is not like that. Once we visited a kindergarten. One of the instructional designs in the kindergarten was that the children were required to bounce down the last stair when they went downstairs to participate in the sports exercises. They (the teachers' in the kindergarten) called "the last bouncing down" as a curriculum. They considered it was good for their growth when they kept doing that ("the last bouncing down") for a long time. We were shocked by that; thus, that influenced us a lot in the understanding of "curriculum." (Literally translated and tidied up where necessary, Interview with SC-P1, 30, June 2016)

Therefore, SC-P1 defines SBCD of school C as the transformations in every aspect of School C from four dimensions, including teaching contents, ways of implementation, time arrangement, and assessment.

However, the following are still taken from four aspects, namely, curriculum content, learning processes, curriculum assessment, and curriculum administration, to reveal all the changes in School C.

#### ***5.5.2.1 curriculum content.***

Chinese, Mathematics, English, Music, Arts, Science, Physical Education, Classroom Meeting, Morning Reading, Club Activities, and school-level performances and contests are the curricula or activities presented in the school timetable. They are the regulated national and local curricula that are similar to other public schools. Although Moral Education, Information



Technology, Calligraphy, and Integrated Practices are absent from the school timetable, they are integrated with and involved in other extension-curricula and upgrading courses. In general, the changes in curriculum content of School C are stated as follows:

First, Moral Education involves an afternoon meeting as a multiple afternoon class meeting course held every day for around 20 minutes: Mondays for news reports, Tuesdays for studies on Chinese ancient civilization, Wednesdays for studies on international culture, Thursdays for storytelling, and Fridays for sharing.

Second, Moral Education is also integrated with Integrated Practices and becomes a monthly practice with the theme of moral education.

Third, the courses or activities for Music, Arts, Physical Education, and various special skills training are combined and taught in three levels—the teaching of basic knowledge and skills as regular courses in the first level, the interest-oriented training as club activities in the second level, and the professional training for pupils with talents and special skills for various contests in the third level.

Fourth, the Chinese subject mainly follows the guidelines outlined at the national or local level and uses the uniform textbook used by other schools in the area to cope with the examinations held by the higher authorities. However, it has two Chinese reading extension-curricula for the pupils in a week.

Fifth, as the Chinese subject is examination-oriented and thus should also follow the guidelines made at the national or local level, and because it uses uniform textbooks, the subject of Mathematics that is also held weekly has two extension-curricula for training the mathematical

thinking skills of pupils.

Sixth, English, as the main characteristic of School C, has undergone significant changes and has many differences from the subjects in other schools. When other schools follow the guidelines made at the national or local level, in using the uniform textbooks and having a maximum of five lessons in a week, School C has completely different teaching materials and textbooks for English, which are above the ordinary level, with 9 to 10 lessons for the pupils per week.

#### ***5.5.2.2 learning processes in the classroom teaching of School C.***

Based on the small class size, the learning processes for the pupils have been changed accordingly in three aspects. The first concerns the infusion of the idea of “flipped classroom”<sup>4</sup> (explained in sub-sub-sub-subsection 5.5.2.2.1) for almost all subject teachings in the school. The second is specifically designed for language teaching (English and Chinese) by using POSSE Reading Strategies<sup>5</sup>. The third involves the change of classroom teaching time from 40 minutes for each lesson of every subject to 20 minutes, 40 minutes, or 80 minutes for different lessons according to different subjects.

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<sup>4</sup> “Flipped classroom”: Inverting the elements of typical class and homework. The flipped classroom is a pedagogical model that directs pupils to review before the class session and instructs them to have exercises, projects, or discussions during the time in class (Mok, 2014).

<sup>5</sup> POSSE Reading Strategies: As a reading comprehension strategy, the POSSE strategy facilitates the readers to learn effectively by combining reading and learning practices (Englert & Mariage, 1991).

#### 5.5.2.2.1 *“Flipped Classroom”*.

This instructional method is used for all the subjects taught in School C. The idea of an “flipped classroom” is about giving time and power back to the children in the classroom. In particular, it is realized by providing a preview list designed by the teacher to the pupils for every lesson and guiding the pupils to present, discuss, question, complement, and explore in class. Collaboration in groups is the normal form of this method.

#### 5.5.2.2.2 *POSSE Reading Strategies*.

POSSE Reading Strategies are used for language subject teaching and help the teachers improve their abilities and skills in designing and preparing preview lists with effective questions for the pupils. Language teaching with POSSE Reading Strategies no longer traditionally starts with words and phrases but instead begins with reading as a whole:

You have been educated in the Mainland so you may know that, (traditionally) the teacher’s analysis of a text starts from the words, the phrases, then paragraphs to paragraphs, at the end is about the main idea of the whole text...traditionally, it follows such a process. (However), we now pay more attention to the whole reading. The words and phrases are taught along with the text, (they are) not concentrated and (taught) separately. Therefore, the structure of instruction has been changed. We (now) start from the whole. (Literally translated and tidied up where necessary, Interview with SC-P1, 30, June 2016)

#### 5.5.2.2.3 *the change of teaching time*.

The normal teaching time for each lesson is 40 minutes. Lessons for main subjects still take 40 minutes in School C. The changes implemented are the following: the afternoon meeting lasts for 20 minutes, and the club activities last for around 80 minutes. SC-P1 emphasizes the

change of teaching time in *School C*.

### ***5.5.2.3 curriculum assessment in School C.***

#### ***5.5.2.3.1 development bank.***

School C has an integrated and systematic assessment system for the pupils called “Development Bank.” Pupils’ daily behaviors and studies at home and in school are comprehensively assessed to facilitate their development. A virtual currency, D (Development)-Money, is equal to pupils’ assessment scores.

When a pupil performs well, he or she obtains additional D-Money. Similarly, D-Money is withheld when the pupil performs poorly. Therefore, normally, some pupils are rich in D-money, whereas others are in debt. Moreover, the D-Money earned by pupils accumulates weekly, and through regular auctions, the D-Money may be exchanged for gifts, real money (supported by pupils’ parents), or the right to use classroom devices. In such a way, the pupils are urged and encouraged to perform better in every aspect. Meanwhile, parents are expected to learn to focus on their children’s entire development instead of mainly focusing on their scores in examinations, and the pupils learn to develop financial concepts.

Basically, the assessment is operated by teachers and parents because pupils’ daily behaviors and studies at home and in school are assessed. The general aspects assessed in the “Development Bank” system are listed as follows:

1. The pupil’s performance in class (normally, the pupil is assessed as a member of the group)
2. The quality and effectiveness of the pupil’s homework (this aspect is assessed by the

teachers and the parents)

3. The specific ability or skill tests (e.g., Oral English test, Chinese Reading test, Reciting Test of Classical Chinese Ancient Works, and Rapid Fire Mental Calculation)
4. The regular examinations on main subjects

#### *5.5.2.3.2 the portfolio of pupil's development.*

The portfolio of a pupil's performance and development during every semester is shown as a handbook with words and pictures. This comprehensive portfolio includes the pupil's performances in practices, the pupil's works or handcrafts, the detailed records of D-Money, teachers' comments in words, and other inclusions.

#### *5.5.2.4 curriculum administration in School C.*

##### *5.5.2.4.1 teacher management.*

This sub-sub-sub-subsection includes five points, which refer to typical management, heavy workload, and working spot, as well as high turnover and assessment of teachers at School C.

*-vertical academic management and horizontal administrative management in the responsibility system of the division*

As introduced above ("Background"), the Primary-International Division is under the leadership of Vice Principal C. He holds the administrative post as the Principal in charge of the division and, at the same time, holds the academic post of Head of the Humanities-related subjects for the whole school. Such a combination of vertical and horizontal management is

also embodied within the division. The six grades are divided into three groups of grades, and so three Heads of the Groups of Grades exist. Each Head of the Groups of Grades is also the Head of a subject panel for the whole division. Therefore, the combination of vertical and horizontal management is also embodied within the division.

In general, every teacher holds two or more posts in the division.

*-heavy workload*

A teacher may have 12 to 15 classes in a week. SC-P1 confesses that teachers in private schools have significantly heavier workloads than teachers in public schools, and he thinks that the root cause is the significantly fewer teachers in private schools than in public schools. Consequently, the heavy workload confines teachers' activeness and autonomous consciousness:

Comparatively, the teachers in private schools have much heavier workloads than (the teachers) in the public schools, (because) they have more management affairs, for example, pupils' dining issue, transportations (school buses), pupils' accommodations, in which the teachers should all participate; they have to participate in all those services. Therefore, their concentration on teaching and instruction (will be confined) for not having enough time. This is a normal issue in private schools. (The root cause) is that few private schools would have more teachers than in the public schools. In public schools, for example, a Chinese teacher may be in charge of one class, (but) in private schools, a (Chinese) teacher may be in charge of two classes; thus, the workloads are double. Maybe that could answer your question about why they lack autonomy, (yet) that is related to their experience. (However), when they are busy, they would have no time to think, to read and to learn, as a result, they would only do what they are required. (Literally translated and tidied up where necessary, Interview with SC-P1, 30, June 2016)

The Class teacher (SC-T3), who is a music teacher, reflects that she has 19 classes weekly, yet she enjoys her work because unlike other teachers, she does not hold any other post in addition to being a music teacher. Moreover, she has experienced the change from the large class size to

the small class size, so she says that she feels thankful for the “covert” reductions of teaching loads.

*-high turnover of teachers*

The high turnover of teachers is a characteristic and normal obstacle of the management for private schools because all the teachers in private schools are permitted teachers who have working contracts with the school as temporary staff.

Nevertheless, when a teacher has worked for School C for a long period of time, in turn, he or she receives a high salary. Such a school policy is expected to be effective in attracting teachers to stay longer.

*-the working spot*

The form teacher and vice form teacher of every class are required to work in the classroom, and their office tables are set in the classroom. Except for all the form teachers and vice form teachers, all other teachers and the school leaders work in the same space.

*-assessment for the teachers*

At the end of every semester, the division organizes some examinations for the teachers to help promote their abilities. An example is the examinations on the use of POSSE Reading Strategies by language teaching teachers in designing and preparing preview lists with effective questions for the pupils.

At the very beginning when the division was established, numerous experts were invited to the

headquarters of the Group to train the teachers' various abilities. At the end of the training, the school also organized some examinations and competitions related to the training for the teachers' improvement, for example, the speech contest and the examinations about teaching theories.

At the end of every semester, the pupils and their parents complete a teacher evaluation survey to provide feedback on teachers' teaching and instruction.

Similar to the pupils' "Development Bank" assessment system, all of the abovementioned aspects and others would be considered in a comprehensive integral assessment system for the teachers. Every teacher's scores are announced monthly, and the outstanding teachers are awarded a prize. The Chairman of the Board adopted an upgraded integral assessment system from the United States when he visited the country, as the Group has a branch in the United States.

#### *5.5.2.4.2 training for the teachers.*

The teachers in School C also have two kinds of training. The first kind of training includes subject-related academic training organized by the higher authorities, where all the teachers should participate. The second kind of training is organized by the Group or division.

The second kind of training in School C has three sub-types. The first sub-type of training is outside school training. Outside school training are mainly related to the English subject because School C has bilingual education as its characteristic. Moreover, as the division chooses a different English textbook instead of the uniform textbook regulated by the superiors, outside school training are affiliated training organized by the textbook publisher. The second



sub-type of training is the training in the headquarters organized by the Group or the General Teaching and Research Department for the International Division. Many experts have been invited to the headquarters to train the teachers, especially at the very beginning when the International Divisions were established. Actually, the majority of training in the headquarters are held by the General Teaching and Research Department for the International Division, with the Heads of subject panels as the lecturers or instructors. The training include orientations for all the new teachers of the Group, training for the new semester in every summer, academic seminars joined by some of the teachers, and others. The third sub-type of training is the division-based training, which are mainly about subject-related teaching and research activities held within a subject panel. A reading-sharing activity and a regular meeting for pupils' management are also held regularly in the division.

SC-P1 explains that in private schools, the funds used for teacher training are usually not enough, which affect teachers' curriculum teaching and research ability.

#### *5.5.2.4.3 school-parent communication.*

Three divisions are established under the school-parents' committee: Reading Promotion Division, Division for the Volunteers, and Division for Fellowship.

The school has four days specifically allotted for the parents.

The first is Parents' Education Day. In the first day of school in every semester, parents are required to come to school with their children. When the children share the things they have experienced during the summer and while their homework is being checked by the teacher in the classroom, the parents get together in the meeting room for two things: they are informed

about the teaching and instruction plan for their children in the new semester, and they are told about the events where they need to participate and cooperate. The parents are likewise trained by the experts in education for children's family education.

The second day for the parents, held in the middle of the semester, is a Parents' Learning Day. Instead of training the parents, the school invites the parents to join the classroom teaching to become their children's classmates. They learn and join in the teaching activities with their children to know more about the teachers' mode of instruction and the school's educational changes.

The third is the Sharing Day for the Parents. Toward the end of the semester, parents are invited to watch their children's show. The show is a kind of the school's achievement exhibition about children's artistic education. Parents receive and check their children's learning outcomes by watching their children's show.

The fourth day is the School's Reception Day for the parents. After the final examination and on the last day of school in every semester, the teachers talk to the parents of their pupils individually and face-to-face for about 15 to 20 minutes in the allocated time slot. The teachers discuss the pupils' learning performance and other performances during the past semester. The pupil's learning situations are analyzed and, accordingly, the teachers suggest to the parents a summer plan and instruction for their children.

In addition to the four days arranged for the parents are two usual ways where the school or teacher communicates with the parents. One way is to communicate with the parents through WeChat or other communication devices. The other way is to communicate through the

“Weekly Echo Wall” for individual pupils. The teacher evaluates the pupil by grade and comments on the pupil’s performances in the school during the past week. The parents receive the “Weekly Echo Wall” and return it back to the teacher with feedback and comments on their child’s performances during the weekend.

Moreover, the school fully uses the parents as resources and has organized so-called Parents-as-Lecturers activities to enable pupils to learn more out of the textbooks. The parents have been invited to promote reading in the school by telling stories from the books to the pupils. They also share their professional experiences to the pupils by acting as teachers to teach pupils about some skills or knowledge (e.g., a parent who is a dentist teaches about oral health, or a parent who is good at cooking teaches the pupils how to make a dish). Furthermore, parents who own factories or enterprises invited the pupils to visit their work places.

During the examinations, the school invites some parent volunteers to the school as the invigilators, with the intention of showing the school’s reliability and validity of teaching and instruction.

Parents are likewise regularly invited to the school to be trained and educated by experts in education.

SC-P1 explains that all methods that have been employed by the school for the frequent and effective communications with the parents aim to not only help parents grow and develop with their children but also to allow them to understand the curriculum reform of the school. As a result, the parents can support and cooperate with the school through correspondence with the schooling philosophy and concept for a smooth and successful school curriculum development

and reform.

### **5.5.3 “Reading” as the SBC in School C.**

School C understands curriculum quite differently from other schools in the area. For School C, a curriculum includes all the teaching and instructional activities that could affect the pupils. Hence, SBCD is defined as the changes involved in every aspect in School C and understood from four dimensions, namely, content, implementation methods, time, and assessment. SBCD is understood from a macro-perspective in School C.

Therefore, when asked, “Which SBC is the best developed in School C?”, the Vice Principal in charge of the Junior-Middle-International Division and English subject in School C (SC-P2) considered from a macro-perspective and said that “Reading,” as an element and the SBC, is involved in every aspect of the development of School C.

Accordingly, the following sub-sub-subsection reveals the form of “Reading” as an element in School C from six dimensions. Furthermore, the processes of the development of the “Chinese reading extension-curriculum/course” is introduced. This curriculum or course is the key area that shows the school-based development of the element of “Reading” in School C.

In general, “Reading” could not be well developed in School C without three sources of support. The first is the great support from and the proposal by the Chairman of the Group. The second is the whole recognition of all members of School C about the significance and advantages of reading for the pupils. The third includes the financial support (the district level has financial input to support all schools in establishing and developing a reading environment) and actions (instead of taking government action, the Deputy Director General of K (district)

Education Bureau, Director Wu, donated some of his books to School C as personal support) from the superiors.

### ***5.5.3.1 the form of “Reading” as an element in School C.***

#### *5.5.3.1.1 developmental scale.*

“Reading” as an element involves the following activities in School C: Chinese subject (national curriculum) teaching, English subject (national curriculum) teaching, Chinese reading extension-curriculum courses, English reading extension-curriculum, extra reading period for 30 minutes every day, Morning readings (course) for 20 minutes, Afternoon Meeting for 20 minutes about Chinese ancient literature, Literature Recitation Contests, Reading month (day) activities (e.g., pupils participate with their parents: presentation of parent–child reading and contest on the development of a reading room environment at home), and monthly reading–sharing among teachers from the Division. School C has effectively developed the reading environment for the pupils and teachers. In addition to reading in the classroom and in the Learning Resources Center (school library), the pupils can read anywhere in the school, as public “reading corners” are found everywhere; pupils can read even when they are waiting for the school bus that will bring them home.

#### *5.5.3.1.2 type of activities.*

The Group recognizes that “Reading” brings advantages to the pupils and the teachers, and thus chooses “Reading” to become the key developmental direction for the Group as a whole.

They extend the element of reading to as many aspects of schooling as possible. Therefore, “Choosing” is the type of activity.

#### *5.5.3.1.3 time.*

As a development strategy of the Group, “Reading” is a long-term plan in School C.

#### *5.5.3.1.4 developers.*

The activities with the element of “Reading” figure on a large scale in the school. When the scale is wider, more people become involved with the activities. In addition to involving the whole staff of the school, the developers also include the parents, who participate by preparing and developing their part of the presentation. Moreover, some experts outside the school are somehow helpful in improving the quality of the development of “Reading,” because some staff members are trained outside by experts in the related area. For example, the two administrators of the Learning Resources Center (School Library) joined the basic librarians’ professional training organized by the municipal Children’s Library. Additionally, Principal Y and Vice Principal Z are members of the Fifth Shenzhen Reading Promotion Training Team. Therefore, the developers of “Reading” include the entire staff, parents, and experts.

#### *5.5.3.1.5 design.*

In general, different levels of pupils read books at different levels. The different reading lists for different levels of pupils are provided by two administrators of the Learning Resources Center who work professionally on this aspect.

#### *5.5.3.1.6 theme.*

The theme of “Reading” should be classified as the “Expanding National Curriculum,” which includes “reading” as a normal element.

#### *5.5.3.2 the developmental processes of the Chinese Reading Extension-Curriculum.*

##### *5.5.3.2.1 goal setting.*

In 2008, during the 10th anniversary of the founding of the Group, the Chairman reported in the annual report about setting “Reading” as the key element of the future construction for the Group as a whole, as he considers one’s reading history to be one’s spiritual development history.

##### *5.5.3.2.2 design and mechanism.*

As introduced above, Vice Principal C is in charge of the Primary-International Division and the Head of the Humanities-related subject panel of the whole school. Thus, he has become the main person for organizing the development of the Chinese Reading Extension-Curriculum. The curriculum is developed from two dimensions: theoretical instruction as the software of the curriculum development and resource supports as the hardware of the curriculum development.

Under Vice Principal C’s leadership, the entire staff of the Chinese subject panel within the Division is responsible for determining the related theories of reading and reading instruction.

In addition, the reading resources are supported from three aspects. First, they are supported by

the two administrators of the Learning Resources Center who work on the reading lists for different levels of pupils. After choosing the basic reading lists, they discuss with the Chinese subject panel for the final decisions. Second, the Group continues to have financial input for the development and improvement of the reading environment for the pupils, for example, the establishment of the Learning Resources Center and the public reading corners found in different locations in the school and the purchase of books. The third aspect is the cooperation between the school and other libraries for reading resources, for example, the cooperation with Shenzhen Children's Library and K (district) Library.

#### *5.5.3.2.3 implementation.*

Pupils in every class take the Chinese Reading Extension-Curriculum (the Reading courses) twice a week. All Chinese and Mathematics teachers in the Division are instructors of the Reading course. Given that pupils in different grades have different levels of reading ability, the pupils in lower-level grades may focus on the story picture books, whereas those in the middle and high-level grades, in addition to reading the story picture books, may begin to read literature.

The Mathematics teachers mainly instruct the reading courses involving story picture books, and the Chinese teachers mainly instruct the literature reading courses. For the reading courses involving story picture books, the teachers must lead the sharing and organize the related activities for the pupils, for example, drawing, performing, and practicing. In the literature reading courses, the teachers should first generally introduce the book to raise the pupils' reading interest. After about half a month of reading, the pupils may be required to have related



performances and simple reading tests on the things they have read.

#### *5.5.3.2.4 evaluation and revision.*

The teachers may improve their instruction by observing the teaching and instruction in reading classes of other teachers. Moreover, they will discuss within the panel, and they may gain improvement from the reading-sharing activities organized by the Division for the teachers within the Division.

To evaluate the pupils' reading ability and assess the effectiveness of the reading courses, the pupils have related presentations and simple reading tests on the things they have read.

### **5.6 SBCD in Case School D (School D: the school with the comparatively lowest density of collaborative culture among the private schools)**

#### **5.6.1 background of School D.**

K district is a typical area with a high density of migrant workers, and School D in K district is a typical school with a high density of the children of migrant workers.

As the Principal in School B mentioned, in the public schools in the Futian district (the best-developed area in Shenzhen), the ratio of local pupils to non-local pupils is approximately 4:1, whereas the ratio of local pupils to non-local pupils is 1:9 in School B (a public school in K district). However, the percentage of non-local pupils in School D (a private school in K district) is 100%.

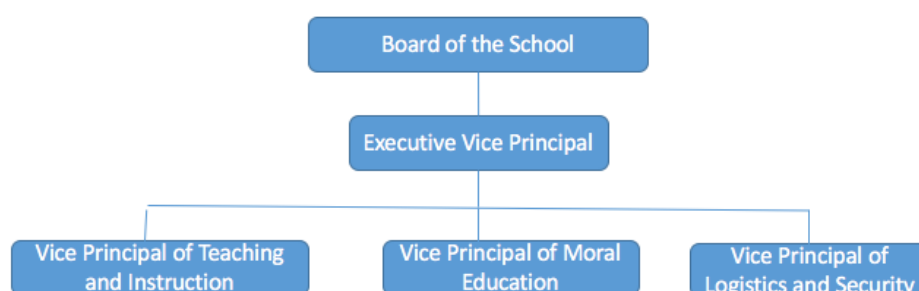
Every private school charges differently because they target different levels of pupils from different families. The tuition fee of the 10 private schools in K district ranges from RMB

2,700 to RMB 4,700 per semester for every pupil (GM Development and Finance Bureau, 2016). School D charges RMB 2,700 per semester for every pupil.

School D, a private school with a kindergarten and a nine-grade school (from grade 1 to grade 9), follows the schooling philosophy of “pupil-centered education, quality-oriented education.” Established in 1999, it currently has 51 classes from grade 1 to grade 6 with around 2,500 pupils. The number of pupils in School D is twice of that in a public primary school (e.g., School A or School B), and the school has contributed significantly (similar to other private schools) to the area (K district) by receiving and setting a place for the children of migrant workers when their number has exceeded the receptive capacity of public schools.

#### *5.6.1.1 the organizational structure in School D.*

Mr. L and Mr. Z are the two founders of School D, and they are the two Principals (according to the teachers in School D) in the School Board with the highest authority in the whole school, as shown in Figure 13. Mr. L seldom comes to school but is responsible for the school’s public relations, while Mr. Z as the Principal works in the school mainly on school management issues and affairs. However, both of them hardly participate in academic affairs.



**Figure 13 School Organizational Structure of School D**

When asked about what he thinks of the schooling philosophy of School D, the Executive Vice Principal in School D (SD-P1) said:

Maybe, for that, I could just talk the talk, because that does not follow my will. Why? Because the bosses (the two Principals) participate too much...It is beyond my control. How could I handle that?.....I could just show my obedience. (Literally translated and tidied up where necessary, 3, June 2016)

According to the Class teacher of the subject Chinese (SD-T2), the Principals' (the bosses) "philosophy" of running the school could somehow be shown:

Things could not be perfect, they are just trying to be closer to the standards...because this is a private school, sometimes, the profits of the bosses' (business) should be considered...for this, as an employee, I could totally understand. (Literally translated and tidied up where necessary, Interview with SD-T2, 3, June 2016)

Under the leadership of the Vice Principal of Teaching and Instruction are three directors and a teaching researcher (called the "Head of subject panel") set for each subject. One director is under the Vice Principal of Moral Education, and another director assists the Vice Principal of Logistic and Security.

## **5.6.2 directions of change in School D.**

### ***5.6.2.1 curriculum content in School D.***

Without implementing too many changes, the school rigidly obeys the curriculum plan from the higher authority:

We rigidly follow the curriculum setting standard of Shenzhen to arrange the school curriculum plan. All subjects (of the standard curriculum setting) are definitely set (within the school), and have enough lesson periods. That is the principle which could not be

violated. (Literally translated and tidied up where necessary, Interview with the Executive Vice Principal in School D, 3, June 2016)

As shown in Table 29 (in sub-subsection 5.2.2), similar to other schools, School D teaches the following as the main subjects: Chinese, Mathematics, English, Music, Art, Science, Moral Education, Physical Education, and Information Technology. Moreover, other regular school activities, such as Class Meeting, Morning Reading, and Afternoon Reading, are conducted in the school.

In addition, Rope Skipping, Di Zi Gui (Standards for being a Good Pupil and Child), and Poetry Reading are the characteristic activities of School D.

#### ***5.6.2.2 learning processes of the classroom teaching in School D.***

Traditional receptive learning is a feature presented during normal classroom teaching in School D. Interactions occur between the teacher and the pupils in classroom teaching. However, the teachers in School D think that the knowledge points in the textbook are still vital. Therefore, the teachers usually talk more during classroom instruction, and they recognize receptive learning during the class, as the Class teacher of the subject Mathematics (SD-T3) explains, “besides the teaching materials, a chalk is the main (instructional instrument)” (Literally translated and tidied up where necessary, 4, June, 2016). The Class teacher of the subject Chinese (SD-T4) introduces:

Every day in every class we have interactions (between the teacher and the pupils), it is impossible that a teacher talks all throughout a course and the pupils listen all along...(However), the teacher talks more! The interactions in my class between me and the pupils are about ask-and-answer questions and pupils reading the texts in different roles...some texts are suitable to have role play, so I may require the pupils to perform in

the class...Normally, the basic knowledge should be paid attention to. There should be various learning activities in the class in which others join for classroom observation. (the normal classes and the open classes) should be treated differently...Sometimes, it is good to have various learning activities in the class for a lively atmosphere...(However), if the teacher has to do that every day and every class, they will be exhausted, and what's more...the pupils will not get high scores...Honestly, a school, a boss, what he needs is the (pupils' high) scores as the brand...This is the fact in the Chinese society. (Literally translated and tidied up where necessary, 5, June 2016)

The teachers may have explained their traditional method of teaching, as the Class teacher of the subject Chinese (SD-T2) says he does not have enough time:

(My) concept of instruction has been changed...Maybe the teacher should talk less and make the pupils explore more and research more for understanding...Generally, I try to teach like that, yet there are still some distances...Maybe it is because of too many classes...In private schools, (teachers) do not have much time to explore how to teach in the next class, or how to organize...It is not like in the public schools, (comparatively there are) more teachers and more time (for the teachers in public schools). (Literally translated and tidied up where necessary, 3, June 2016)

Furthermore, the Class teacher of the subject Mathematics (SD-T3) talks about the school's reaction to allowing his class to undergo a different learning process:

Because I found that it is difficult to explain (a knowledge point) clearly with the textbook, I wanted to bring the children to the factory...to have practical activities... (However), for that, first, a school bus is needed; second, that also takes some money; third, it should consider the security issue.....I applied for that, the Teaching and Instruction department had approved, (then) the vice Principal had (also) approved, nevertheless the boss did not. (Literally translated and tidied up where necessary, 4, June 2016)

The Class teacher of the subject Mathematics (SD-T3) further explains that when the creativity (learning process) of the pupils is related to money, things become difficult to process in the private school.

The Class teacher of the subject Mathematics (SD-T1) also considers the pupils' weakness in

mastering basic knowledge as an impediment to pupil-centered instruction.

### ***5.6.2.3 curriculum assessment in School D.***

In general, the main assessment for the pupils in School D is the examination for each subject. Class teacher of subject Mathematics (SD-T3) says, “examinations are the main assessment” (Literally translated and tidied up where necessary, 4, June 2016), when the Class teacher of the subject Mathematics (SD-T1) explains, “for this...I don’t know if I could use the word “defective” or say ‘no’...maybe ‘no’ is more correct. Our assessment is not multiple...that is (to see) the scores in examinations” (Literally translated and tidied up where necessary, 3, June 2016).

### ***5.6.2.4 curriculum administration in School D.***

#### ***5.6.2.4.1 teacher management.***

In general, teachers in School D are tightly managed. Class teacher of subject Mathematics (SD-T3) comments, “you are hired by the boss, and the boss needs to make a profit, and so he would use up the teacher/(human) resources. It is impossible that he has a bad bargain” (Literally translated and tidied up where necessary, 4, June 2016).

*-busy with daily affairs*

Superiors comprising the human resources in School D could be presented in the three following aspects. First, 60% of the teachers in School D are subject teachers and form teachers. Second, a director of the Teaching and Instruction Department would also be the form teacher

of a class, which is a unique and specialized characteristic of School D. Third, the usual number of weekly classes for every teacher is approximately 20.

*-bonus*

The school has established a bonus for teachers. In the past, the bonus is directly and solely related to the pupils' examination scores. After the teachers were consulted, a new prize (a bonus) called "comprehensive quality" prize was proposed. The assessment for the prize is not only related to the pupils' scores in examinations but also to a series of comprehensive assessment items, including the management of the class, attendance rate, length of service in the school, discipline, and other factors.

*-high turnover of teachers*

The high turnover of teachers is a common feature of all private schools because all teachers in private schools are permitted teachers.

Despite teachers in School D receiving greater bonuses with longer periods of service, they worry about the school shutting down and therefore leave. As the Class teacher of the subject Mathematics (SD-T1) explains, "the number of pupils will no longer increase...the economics is restructuring (in this area), many factories and companies have moved to other areas..." and a large number of pupils move with their parents to other cities or areas. Therefore, the teachers in School D are not only busy with the instructional and pupil management, they must focus on "business attractions" by having perfect communication with the current parents and prospective parents.

#### *5.6.2.4.2 training for the teachers.*

Similar to other schools, School D has two levels of training for teachers. The first level of training is organized by the higher authorities, in which all the teachers (teachers from the private and public schools) should participate.

The second level of training is organized by the school, and this level also has two sub-levels. The first sub-level of training includes the outside training organized by School D, and some features are included in this sub-level of training.

Hardly any school-organized outside training are conducted for the subject teachers because of two reasons: the teachers have no time, and the school does not want to spend excessively on training:

for the normal teachers, besides the government's organization, no boss will send a normal teacher to have training outside...First, they may consider that (the training organized by) the government is already too much...so, the boss is not willing to spend the money...(At the same time), the teachers themselves do not want to go...they (the teachers and the boss is like) have a tacit agreement, they do not want to spend too much time on that...(Literally translated and tidied up where necessary, Interview with the Class teacher of the subject Mathematics in School D , 4, June 2016)

The kind of outside training that the school organizes is usually for leaders and middle-level leaders or the Heads of subject panels. The training for the leaders or middle-level leaders are usually about school management.

The second sub-level of training includes school-based training for the teachers. Normally, the school leaders or middle-level leaders are the speakers. In the training held by the Heads of subject panels, some subject-related topics are usually discussed with the panel.

School-based training are typically hosted by those who have been sent out for training. They



come back to the school and train other teachers, acting as middle men to convey the new information back to the school and the teachers. This kind of training has been encouraged by the government (Shenzhen Education Bureau (3), 2014).

The other kind of school-based training involves the improvement of teachers through peer observation of classroom instruction and teaching.

The teachers in School D reflect that they improve mainly through their own independent learning.

#### *5.6.2.4.3 school–parent communication.*

The communication between the school and parents is frequent, and the Class teacher of the subject Chinese (SD-T2) even considers that “the parent is God.” As introduced above, teachers in School D must focus on teaching and management in the school and on “business attraction” for the school. Generally, teachers of School D communicate with the parents in three ways. First, usually for over a month in every semester, teachers visit the homes of each pupil’s family. Second, through the telephone and other devices, teachers frequently communicate with the parents to determine the learning situation of a pupil. Third, every semester, a parents’ meeting is held in the school (e.g., their children’s homework are checked by the parents in the meeting; therefore, before the parents’ meeting, the school spends a significant amount of time assessing the way teachers correct homework).

### **5.6.3 the SBCs in School D.**

Di Zi Gui (Standards for being a Good Pupil and Child), Poetry Reading, and Rope Skipping

are commonly recognized as the three characteristic activities or curricula in School D. However, the Vice Principal in charge of the Moral Education Department in School D (SD-P2) considers Di Zi Gui as the most well-developed curriculum among the three, saying, “Because this is a whole school (curriculum), everyone is learning, it has a form, it has contents, it has effectiveness. I think it is (the most well-developed one)...”. To this end, the following sub-sub-subsections reveal Di Zi Gui in greater detail.

#### ***5.6.3.1 the form of “Di Zi Gui”.***

Di Zi Gui is a book containing the standards and rules for children to be good. Li Yuxiu in the Qing Dynasty (1661–1722) wrote it according to parts of the Analects of Confucius, which guide and teach the children to be good and live harmoniously with others. In recent years, traditional Chinese culture became popular in school teaching. Since 2008, School D has chosen Di Zi Gui as the rules and standards for guiding its pupils’ behavior at home and at school.

##### *5.6.3.1.1 developmental scale.*

The activities with the elements of Di Zi Gui in School D are implemented in three aspects, “reciting,” “learning,” and “assessing.” In particular, the activities are Afternoon Readings, reciting while walking to the playground for morning exercises, school decorations with the elements of Di Zi Gui, monthly activity of Moral Education, recitation contests between classes, and monthly assessment of pupils’ overall behavior according to the items in Di Zi Gui. The school allocates time for its pupils to learn and recite Di Zi Gui. In addition, the pupils’

behavior in school (inside and outside the classroom) and at home are assessed according to the things they learned from Di Zi Gui. Therefore, this activity should be classified as a “whole curriculum.”

#### *5.6.3.1.2 type of activity.*

Di Zi Gui is a classical Chinese literature; therefore, “choose” should be the type of activity for it.

#### *5.6.3.1.3 time of commitment.*

Di Zi Gui has been implemented in School D since 2008, and it will continue to guide the pupils to be good at home and in school. This implementation should be a long-term commitment for the school and for the pupils.

#### *5.6.3.1.4 developers.*

The members of the Moral Education Department are the main developers of this curriculum. They designed the entire plan and all materials for implementation, and then the plan and materials were approved by the leaders and middle-level leaders in the school management meeting.

#### *5.6.3.1.5 design.*

Di Zi Gui has seven chapters in total. The members of the Moral Education Department edited the seven chapters and allocated them equally to the six grades. In other words, pupils in

different grades learn different chapters and contents; thus, this curriculum can be classified as a “grading” design.

#### *5.6.3.1.6 theme.*

Basing on the theme of the Moral Education Department, which is moral education, the department is in charge of Di Zi Gui.

#### ***5.6.3.2 the developmental processes of “Di Zi Gui”.***

##### *5.6.3.2.1 goal setting.*

Traditional culture education is a characteristic of School D and also its schooling philosophy. Mr. Z raised this concept and proposed using Di Zi Gui to guide and educate the pupils. He considers that, nowadays, people in the society have lost traditional Chinese morality. Thus, he wants to cultivate pupils with traditional moralities, such as respecting teachers, being grateful to their parents, remaining harmonious with their classmates, learning to learn, learning to live, and being good.

##### *5.6.3.2.2 design and mechanism.*

Accordingly, the Moral Education Department is assigned with the development of Di Zi Gui as a school-based curriculum. The members of the department made a proposal for implementation and assessment, and after the school management board approved the proposal, they began to edit the school-based teaching materials.

Di Zi Gui has been developed and implemented since 2008. However, when the researcher

conducted research in the school, no one could tell how and who had participated in editing the teaching materials because of the high turnover of the staff in the school.

#### *5.6.3.2.3 implementation, evaluation, and revision.*

The activities of Di Zi Gui in School D are about “learning,” “reciting,” and “assessing.”

- “Learning”: The pupils learn different chapters according to their grade, and they are instructed by their form teacher in the Afternoon Readings on Tuesdays and Thursdays.
- “Reciting”: Two periods are allotted for the pupils to recite in the school. For 20 minutes during the Afternoon Readings, they may recite. They likewise recite together when they walk in line from their classroom to the playground for their morning exercises.
- “Assessing”: The pupils’ learning of Di Zi Gui is assessed in two ways. One is the recitation contests between the classes to assess pupils’ reciting abilities. The other is an assessment form with 58 items to assess their behaviors in living, learning, and acting at home and in school. This assessment is performed by parents and teachers.

Moreover, the curriculum is reviewed or may be revised through reports to the school management board at the beginning of every semester.

## Chapter 6: Data Analysis and Discussion

### 6.1 Introduction

This chapter discusses the study according to the findings found from both quantitative research and qualitative research. This discussion consists of the answers to the remaining research questions (the answers to Q1a, Q2a, Q2b, and Q2c were obtained in Chapter 4 and Chapter 5):

- Q1b: What are the main characteristics of the cultures of the 23 schools?
- Q2d: What are the similarities and differences of SBCD among the case school(s)?
- Q2e: What emerges in terms of similarities and differences of SBCD among the case school(s)?

The answer to Q1b is about the discussions on culture, whereas the answers to Q2d and Q2e are discussions on SBCD.

The presented framework of the discussion part for Q2d is about the comparison of all the four case schools with “the directions of change,” “the form of a SBC,” and “the developmental processes of a SBC” discussed individually to find the similarities and differences among the schools.

Discussions on the findings of the research and the answers to the other research questions (especially Q2d) are the answers to Q2e. Meanwhile, the discussions will also refer to the points reviewed in the literature review (Chapter 2), for example, the factors affecting SBCD, the forces of curriculum change, and change strategies of curriculum.

## 6.2 Discussions on the Findings of Quantitative Research – the Answer to Q1b

The large-scale piloting in the original SCS instrument is conducted with the data collected from all 23 primary schools in K district (the target schools for this study). After the large-scale piloting, the new SCS instrument with 23 items containing two new factors (CL and CP) were considered reliable and valid in the context of 23 primary schools in K district. Therefore, based on the data collected in proportion from the 23 schools for large-scale piloting, mainly focused on the data of the 23 reliable and valid items that contain Factor CL and Factor CP, the cultural pattern of the 23 targeted primary schools in K district was identified with further data analysis.

The scale of the items of SCS instrument ranges from 1 to 5 which represent “strongly disagree,” “disagree,” “undecided,” “agree,” and “strongly agree,” respectively. The results of the data analysis (subsection 4.2) show that the means of the two factors of all the 23 schools are above 3.0 and range from 3.4 to 4.4. All the 23 schools are considered with a high density of collaborative school culture. All the 23 schools in K district are similar in school culture of a high collaborative school cultural pattern, with both high Collaborative Leadership and high Collaborative Partnership culture.

Moreover, when further analyzing the data for identifying the relationship between CL and CP of the schools by fitting the scatter plot to obtain the r-square and calculating the Pearson correlation coefficient, this researcher found that the school with the higher CL has the higher CP, and vice versa. By dividing the schools into two groups, public schools and private schools (for reasons, refer to subsection 4.3), four schools were identified by conducting one-way

ANOVA and t-test to confirm a significant mean difference in both Factors CL and CP between the school with the comparatively highest CL and CP and the school with the comparatively lowest CL and CP (for details, refer to subsection 4.3). Two schools (with the comparatively highest collaborative culture and with the comparatively lowest collaborative culture) were identified from each of the two groups (public schools and private schools).

Thus, the 23 primary schools in K district are similar with a high collaborative culture (both high CL and high CP). Moreover, sub-patterns in the similar high collaborative culture were observed: the school with the comparatively highest collaborative culture and the school with the comparatively lowest collaborative culture in the respective groups (public schools and private schools) because they are significantly different in statistics.

### **6.3 Discussions on the Findings of Qualitative Research – Answers to Q2d and Q2e**

This subsection is about discussions on the findings of this research, especially on the findings of qualitative research, for answering two remaining research questions:

- Q2d: What are the similarities and differences of SBD among the case school(s)?
- Q2e: What emerges in terms of similarities and differences of SBCD among the case school(s)?

#### **6.3.1 comparisons of the case schools – the answers to Q2d.**

In this sub-subsection, the findings from the four case schools are compared with the framework of “directions of change”, “form of a SBC” and “developmental processes of a SBC”. The comparisons of “directions of change,” “form of a SBC,” and “developmental



processes of a SBC” in Schools A, B, C, and D are summarized in Tables 39, 40, and 41, respectively to discuss the similarities and differences of SBCE among the four case schools.

### ***6.3.1.1 comparisons of “Directions of Change” in School A, School B, School C, and School D.***

The “directions of change” include four directions: “curriculum content,” “learning processes,” “curriculum assessment,” and “curriculum administration.” Additionally, some sub-directions are identified when analyzing the findings of each case school. When analyzing the data about the “curriculum administration” of each case school, “philosophy of schooling,” “organizational structure,” “teacher management,” “teacher training,” and “school–parent communication” were all considered as the sub-directions of “curriculum administration.” However, in the findings of each case school (in Chapter 4), for better illustration, the sub-directions “philosophy of schooling” and “organizational structure” do not strictly follow “curriculum administration” because these two sub-directions may be presented in the part of “background of the school” in the findings. In this sub-sub-subsection, as shown in Table 30, the sub-direction “philosophy of schooling” is presented with other directions because “philosophy of schooling” is a representative characteristic of each case school.

**Table 30 Comparisons of “Directions of Change” in School A, School B, School C, and School D**

	School A (Public-highest)	School B (Public-lowest)	School C (Private-highest)	School D (Private-lowest)
Philosophy/Vision	Confidence Education	Four Goods	Better Education (International Education)	Pupils-centered and quality-oriented Education (Common Education)
Curriculum content	National curriculum oriented	National curriculum oriented	-National Curriculum -Extension-curriculum	National curriculum oriented
Learning Processes	220 Model	-New Basic Education -E-Collection	-Flipped Classroom -POSSE Reading Strategies -change of teaching time	Traditional
Curriculum Assessment	-Examination-oriented -Confidence evaluation handbook	Examination-oriented	-Development Bank -Portfolio of pupils’ development	Examination-oriented
<b>Curriculum Administration:</b>				
a. Organizational Structure	Department Management	Changing from Department Management to Grade oriented management	Group Management (Division management)	Department Management
b. Teacher Management	-Examination oriented -Integral Assessment System	-Examination-oriented -people-oriented (spiritual and materials)	Integral Assessment System	Examination-oriented
c. Teacher Training	-Government organized -outside (school organized) -School-based	- Government organized -outside(school organized) -School-based	-Government organized -Group-based -Division-based	-Government organized -School-based
d. School-parent Communication	-Parents meeting -home visit -telecommunication	-Parents meeting -telecommunication	frequent and all-round	-Parents meeting -home visit -telecommunication

[Note(the same as in Table 31 and Table 32): Public-highest: the school with the comparatively highest density of collaborative culture among the public schools; Public-lowest: the school with the comparatively lowest density of collaborative culture among the public schools; Private-highest: the school with the comparatively highest density of collaborative culture among the private schools; Private-lowest: the school with the comparatively lowest density of collaborative culture among the private schools]

#### *6.3.1.1.1 school philosophy and vision.*

Among the four case schools, two were public schools (School A and School B), while the other two were private schools (School C and School D). The largest difference between public schools and private schools is that private schools operate for profit, whereas public schools do not.

School A, School B, and School D targeted pupils from common families in K district and set their schooling philosophy accordingly. The Principal of School A believed that “without confidence, one could not be independent, missions could not be completed successfully and knowledge could not be obtained” (the motto for the pupils in School A). By considering the lack of confidence shown in his pupils’ behaviors and performances and hoping that the pupils could be better, he decided on “Confidence Education” as the philosophy of schooling. Based on the theory of Career Development Plans, the Principal of School B attempted to develop his pupils to be “good pupils, good children, good citizens, and good staff” (Four Goods) to gain happiness in their lives. The founders of School D focused on the pupils and wanted to establish a quality school, as they considered their pupils as common and thus decided on a normal and quality education that may suit them (as they named their school after the meaning of a school for the commons). All the Principals and founders of the three schools set the school philosophy or vision by considering the situations of their pupils. However, the Principals of School A and School B established hopes and visions, whereas the founders of School D set “negatively” by “imagining” that their pupils would always be normal and should be normal.

The founders of School C set high standards and high goals for the school and for the pupils, including developing the best school with the highest quality in the area, by targeting the pupils from comparatively rich families in the area. Therefore, they aimed for better education with the characteristics of international (bilingual) education and small class size to teach their pupils about humanity, perfect morality, and wonderful life.

#### *6.3.1.1.2 curriculum content.*

The curriculum content in School A, School B, and School D were national curriculum-oriented, and the key curricula in School C were national curriculum-oriented. The key curricula in the primary schools were Chinese, Mathematics, and English, which must be assessed with area-wide examinations or above. Therefore, SC-P1 of School C admitted that they did not dare change the curriculum content of Chinese and Mathematics. As a critical factor, assessments still confine the change of curriculum content to the schools.

However, School C changed the curriculum content of English. They ensured that their pupils could cope with the English examinations well by teaching and changing English content to a higher level and with greater difficulty. Meanwhile, a majority of the curricula within School C had been changed significantly through the integration of some other subjects and the development of extension-curricula for the three main subjects (additional details are seen in sub-sub-subsection 5.5.2.1).

#### *6.3.1.1.3 learning processes.*

For the learning processes, School A, School B, and School C had their own characteristics.

However, the 220 instructional model of School A and the various changes in School C (e.g., flipped classroom, POSSE Reading Strategies, and change of teaching time) were “school-based” initiative changes, whereas the new basic education of School B was an action imposed by the higher authority. Organized at the K district level with the other four schools in K district, School B joined the project conducted nationwide by an expert panel. The difference between School B and School A or School C was that the learning processes (New Basic Education) were imposed actions initiated by the administration instead of the school.

Meanwhile, School D retained a traditional instruction for the pupils. They (the interviewees) complained that they wore many hats: they had 20 classes a week; the school was not supportive (especially with finances); they lack professional training; and their pupils had learning abilities that were very common.

#### *6.3.1.1.4 curriculum assessment.*

The assessment systems for pupils in School A, School B, and School D were examination-oriented, whereas a different assessment system was adopted by School C. The assessment system for the pupils in School C was a comprehensive system that included the Development Bank and a portfolio of pupils’ development. The system comprehensively assessed and recorded the pupils’ overall behaviors and performance. The “examination scores” were only one of the items in such a comprehensive system and occupied a normal proportion.

#### *6.3.1.1.5 curriculum administration.*

##### *-school organizational structure*

School A and School D had an organizational structure of traditional department management. School B was changing its organizational structure from department management to grade-oriented management. Managed by the Group, School C had a division management structure.

It was explained that the change of School B from department management to grade-oriented management was due to the Principal's own experience. Before coming to School B, the Principal had worked in several junior middle schools for years. Grade-oriented management was the normal management structure in middle schools, so he had seen and realized the advantages of such a management structure. The Principal considered that such a structure was also needed, perhaps even more, in primary schools because the span in primary schools (six grades) was larger than that in junior middle schools (three grades). In addition, School B had a special situation where almost all middle-level leaders were absent, triggering the Principal's determination to adopt the grade-oriented management in the school.

Although School D had a traditional department management structure and School C had a division management structure, they had some similarities. A leader or middle-level leader in School C or School D wore many "hats" at one time because of the nature of private schools, that is, they operate for profit and must therefore make the best use of human resources.

However, the leaders or middle-level leaders in School C and School D wore the "hats" in different styles. In particular, School C made the best of use of human resources in a regular

manner. For example, Vice Principal C, who was also the Head of the Primary-International Division, was in charge of the Chinese subject of the whole school. In a regular manner, horizontally and vertically, a leader held positions in management and academics at the same time. However, School D may be different and had a less regular manner. For example, a director of the Teaching and Instruction Department was also a form teacher (the teacher in charge of a class).

### *-teacher management*

In teacher management, some similarities and differences between public schools and private schools exist.

Almost all teachers from private and public schools complained that they were too busy. Normally, a subject teacher in a public school had only approximately 10 classes in a week. However, they reflected that excessive external interferences were unrelated to their subject teaching. Constrained by the political factors and the administration or higher authority, they must cope with the activities or complete the missions that were organized or assigned by the upper level (outside the school), as the government and the higher authorities were the “big boss.”

Different from public school teachers, private school teachers explained that the government (or the higher authorities) was not their “big boss” and is not the entity that keeps them busy. Instead, their “big boss” was the person who recruited them—the boss or chairman of the school. Nevertheless, with fewer external interferences compared with public school teachers, private school teachers were even busier than public school teachers. Normally, they had more

classes than public school teachers. For example, a teacher in School D had around 20 classes a week, and a teacher in School C had around 12 to 15 classes a week. By comparison, a teacher in School A or School B had only around 10 classes a week. Private school teachers must also be responsible for significantly more services that could not be offered to the pupils in public schools, for example, pupils' school bus services from home to school (and from school to home) and pupils' dining and dormitory services in school. Teachers in private schools were busy because of the nature of private schools; that is, the schools operate for profit. Therefore, the schools made full use of its human resources by recruiting as few staff as possible to save money.

The high turnover of teachers is a common obstacle of private schools. Teachers in private schools are permitted teachers, and they have comparatively low salaries. However, as a public school, School B also had such an obstacle, yet this issue was a special situation in the special period of School B. Issues would be addressed in the near future when the official and normal recruitment of registered teachers by the government resumes.

In terms of the assessment system for the teachers, School A, School B, and School D were examination-oriented, which was consistent with the examination-oriented assessment system for the pupils in these schools. This system is also confined by the great overall attention to the examination tradition and the assessment system for all the schools.

However, in addition to paying attention to the examination tradition, the Principals of School A and School B established an extra assessment or bonus for their teachers. For example, School A had a comprehensive star integral assessment system to facilitate teachers in



collaborating actively with others and actively engaging in the school missions. The Principal of School B regarded humans as rational and desiring of spiritual and material satisfactions, so he provided the teachers with extra holidays and organizes monthly birthday parties. Consistent with its comprehensive assessment system for the pupils, School C also had a comprehensive assessment system for the teachers.

### *-teacher training*

All the teachers, whether from public or private schools, must regularly participate in the teacher training organized by the government. In such a way, the government intends to ensure the professionalism of the teachers and guide their development in a suitable direction.

With the approval of the government, the public schools(School A and School B) sent its teachers for outside professional training according to the needs of the school. The training was supported by the school budget provided by the government. The schools had the autonomy to choose its favorite training for its teachers from the list provided by the government.

For school-based teacher training, School B had more diverse training than School A because the Principal of School B was good at taking advantage of his own social network. Therefore, he was able to invite experts from various areas to speak and conduct forums for the teachers.

A comparison of School C and School D reveals that, because of the negative motivation of the Principal and the teachers, fewer teacher training are provided for the teachers in School D. Teachers in School C had more professional in-service training, especially for the teachers of English, which was the characteristic and the focus of School C.

*-school-parent communication*

Generally, School A, School B, and School D used traditional ways to communicate with parents, for example, through regular parents' meetings, school open days, home visits, and telecommunications. School C had more frequent, diverse, scientific, and effective communication with parents (see in sub-sub-sub-subsection 5.5.2.4.3.).

Among the four schools, the Principal of School B understood school-parent communication in a broader view. He thought that in addition to the school and parents, the outside world (the society) should also be included in the communication. Therefore, he made the best use of his own social resources and network by organizing and providing frequent communication between the school and the society to improve the school.

**6.3.1.2 comparison of the forms of the SBC in School A, School B, School C, and School**

**D.**

This sub-sub-subsection compares the four case schools with six dimensions, as shown in Table 31:

**Table 31 Comparison of the forms of the SBC in School A, School B, School C, and School**

**D**

	School A (Public-highest) (Confidence Education)	School B (Public-lowest) (Calligraphy)	School C (Private-highest) (Reading)	School D (Private-lowest) (Di Zi Gui)
Form:				
Developmental Scale	Whole Curriculum	Part of the whole curriculum	Whole Curriculum	Whole Curriculum
Type of activities	Creating	Choosing	Choosing	Choosing
Developers	Whole staff	-(so far)Small groups of teachers	Whole staff	Small groups of teachers

		-developing		
Theme	Moral education (Confidence Education)	Art (Calligraphy)	Expanding national curriculum (Readings)	Moral education (Di Zi Gui)
Design	Grading	Grading	Grading	Grading
Time	Long-term plan	Long-term plan	Long-term plan	Long-term plan

#### *6.3.1.2.1 developmental scale.*

The form of SBCs in School A, School C, and School D could be classified as “whole curriculum,” as the activities related to the theme of the SBC prevailed in the whole school. For example, the concept of “Confidence Education” of School A was conducted in all classroom teaching, and the pupils’ minds, behaviors, and actions in School D and at home were guided by the rules of Di Zi Gui. Furthermore, in School C, the atmosphere of reading prevailed in the whole school.

However, somehow limited by the theme of SBC and because of its short developmental period, the SBC in School B (Calligraphy) involved only part of the curriculum in the two-year developmental period. It was still under the process of upgrading.

#### *6.3.1.2.2 developers.*

The SBC in School B (Calligraphy) was still being developing. In the progression plan of the Principal, he decided to involve all the teachers and established an official SBC developmental committee to improve the development and foster the teachers and the pupils’ awareness of the significance of Calligraphy. Therefore, in the near future, the SBCs of School A, School B, and School C would involve the whole staff of the school. However, by the time of research, the

developers of the SBC in School B involved only a small group of theme-related teachers as those in School D.

Normally, the school involves all teachers in the development of SBC with the intention of making the SBC a feature that prevails in the school and facilitating the collaborations between teachers. As the SBC in School C, Reading may only be related to the language subjects (Chinese and English) according to its theme. Yet, the Head of the Division intentionally involved the Mathematics teachers to be teachers of the Chinese reading extension-curriculum and invited the whole staff in the Division to participate in the activity of reading and sharing.

#### *6.3.1.2.3 design.*

It was commonly recognized by the schools that pupils from different grades had different levels of learning ability. Therefore, all the contents and activities of SBCs in the four schools were instructed and organized by grade level.

#### *6.3.1.2.4 type of activity and theme.*

Generally, the type of activity in each case school was directly related to the theme of the SBC.

#### *6.3.1.2.5 time.*

All SBCs in the four schools were long-term plans because the development of SBC was an action approved and directed by the government, as stated in “The Compendium” (2001), and the SBCs became the characteristics of each case school.

School A had developed “confidence education” for more than 10 years. For the new arrival of

the new Principal and its special situation, School B had made “Calligraphy” a SBC for two years. Since 2008, “reading” had become a significant element for the future development of Yuanhengjia Education Group to which School C belonged. The “Di Zi Gui” had existed in School D for a long time, but no one in School D was able to tell the exact year when the SBC was started.

The development of SBC in the schools is a long-term mission.

***6.3.1.3 comparison of the developmental processes of the SBC in School A, School B, School C, and School D.***

This sub-sub-subsection compares the case schools with four developmental processes – goal setting, design and mechanism, implementation and evaluation and revision (Table 32).

***Table 32 Comparison of the Developmental Processes of the SBC in School A, School B, School C, and School D***

	School A (Public-highest) (Confidence Education)	School B (Public-lowest) (Calligraphy)	School C (Private-highest) (Reading)	School D (Private-lowest) (Di Zi Gui)
<b>Processes:</b>				
Goal setting	-Focus on the pupils & Situation analysis -Proposed by the Principal	-Focus on the pupils & Situation analysis -Proposed by the Principal	-Focus on the pupils & Situation analysis -Proposed by the chairman	-Focus on the pupils & Situation analysis -Proposed by the boss
Design & Mechanism	-planned and improved by individual department - the school management board with the right of final approval	-planned and improved by individual department -the school management board with the right of final approval	-Division-based -the school management board with the right of final approval	-planned and improved by individual department - the school management board with the right of final approval
Implementation	Diverse and With autonomy	-With less autonomy -In the process of developing	Diverse and With autonomy	Fixed
Evaluation & Revision	-classroom observing for teaching improvement -related assessment for the pupils	-In the process of developing	-classroom observing for teaching improvement -related assessment for the pupils	Related assessment for the pupils

#### *6.3.1.3.1 goal setting.*

The goals of the SBCs of each of the four schools were established by the top leader(s) of the school or the Group. By considering the philosophy of schooling, focusing on the pupils' needs, and analyzing the situations happening, the top leaders established the general goal and assigned the work of design and development to a subordinate department or division.

#### *6.3.1.3.2 design and mechanism.*

Normally, according to the theme of the SBC, the theme-related persons were involved in the design process. In addition, because SBC was a kind of pupil activity, the Moral Education Department was in charge because the department was responsible for pupil activities. As the “Confidence Education” of School A and “Di Zi Gui” education of School D had the theme of moral education, all the staff members of the Moral Education Department were involved in the design process. “Calligraphy” of School B had the theme of “Art,” so the Panel of Art with the specific and professional Calligraphy-related skills was involved in the design process, but the Moral Education Department was still the department in charge. However, because the Head of the Moral Education Department of School B was absent (studying in another school for a long period), the Panel of Art became the team in charge of the SBC development process. Nevertheless, this situation was a special case.

Different from School A, School B and School D, with a division management structure, School C (the research mainly studies the Primary-International Division of School C) received the order from the top management of the Group about developing “Reading” as the

Group's development strategy. The Head of the Division (Vice Principal C) became the main person in charge of the "Reading" SBC. However, Vice Principal C was the Head of the Division and the Head of the Humanities-related subject panel of the whole school. Thus, he led the whole Chinese subject panel and two professional administrators from the Learning Resources Center (School Library) as the exploratory team to start designing and developing the SBC. Along with the development, an increasing number of staff members of the division became involve, and the members of the Chinese subject panel were no longer the main developers. This situation became a division-based mechanism, where all the leaders and staff members in the division were involved in developing, revising, and improving the SBC.

#### *6.3.1.3.3 implementation.*

An increased number of teachers participated in the implementation process of SBC in School A and School C, and they had more autonomy during the process. However, the participants in the implementation process of SBC in School B and School D were fixed, and they had less autonomy during the process.

School A implemented the SBC according to the school-based teaching materials. Without detailed instructions and only leading by the set topic of every section, the form teachers and their assistant teachers (not fixed, teachers were invited according to the related topic) autonomously designed the teaching as an integrative practical class that could have diverse learning processes.

The learning processes of the "Reading" SBC in School C were instructed by the POSSE Reading Strategies, and the pupils' learning was facilitated by involving and setting diverse

learning activities related to the reading materials.

Comparatively, the autonomy presented in the implementation process in School C was more theoretical and normative, whereas the teachers in School A implemented the SBC more arbitrarily.

The learning processes and content of SBCs of School B and School D were fixed and already set for the implementers. As a result, they had less autonomy during the process.

The situation of the implementation of SBC was directly related to its planning in the design processes.

#### *6.3.1.3.4 evaluation and revision.*

The evaluation of pupils in every school was theme-related. The schools did not put excessive stress on the pupils, as the SBCs were not examination-oriented.

With a special situation, School B was still in the process of framing, and so it had significant future plans for the revision and evaluation of Calligraphy SBC.

Under the instruction of the theories of reading, teachers in School C revised and improved the SBC by conducting discussions and observing other teachers' reading classroom teaching.

With the instruction of theories, they felt at ease during the implementation process, and they could improve accordingly.

Although teachers in School A also improved by observing other teachers' classroom teaching and had enough autonomy, they expressed their confusion and uncertainties during the process, as the "Confidence Education" was new to them without any references and instructions.

No classroom observations were needed for the teachers' teaching improvement for the SBC in



School D. Reciting was the main activity of pupils in the SBC, so the teachers had no excessive work in preparing for the class. The teachers' main job was to assess the pupils' recitation of Di Zi Gui. Any changes and development of the SBC in School D were proposed by the ME department in the meeting where new events were reported for every new semester.

Basically, the evaluation of SBC was set in the process of design, and the mechanism of the development of SBC decided the revision process of SBC.

### **6.3.2 the answers to Q2e.**

This sub-subsection presents the discussions of the answers to Q2e:

- Q2e: What emerges in terms of the similarities and differences of SBCD among the case school(s)?

The discussions for Q2e are focused on the differences and similarities of SBCD among the case schools by referring to and considering the previous parts of the thesis, which include the literature reviews, findings, and discussions for the answers to the other research questions.

#### ***6.3.2.1 variations of SBCD in a similar cultural pattern of high collaborative school culture.***

The findings indicate that the 23 schools in GM district were dominated by high collaborative school culture. In other words, the 23 schools have similar cultural patterns. Based on density of collaboration, Schools A, B, C, and D were selected as case schools by further identifying sub-patterns in high collaborative cultural pattern with significant differences in statistics (in subsection 4.3). School A demonstrated the highest density of collaborative culture among

public schools. School B exhibited the lowest density of collaborative culture among public schools. School C had the highest density of collaborative culture among private schools. School D had the lowest density of collaborative culture among private schools. Sub-patterns with significant differences in statistics were identified, but the 23 schools shared high-level similarities in collaborative cultural pattern (high CL & high CP).

A comparison of the directions of change of the four case schools, as well as the form and developmental processes of the SBC of the four case schools (in sub-subsection 6.3.1), showed that the four case schools demonstrated similarities and differences in SBCD. However, the findings indicated that the similarities and differences of SBCD among the four case schools cannot be explained by the high collaborative school cultural pattern. In other words, the similarities of SBCD or the differences of SBCD among the case schools were not directly affected by high collaborative culture (high CL & high CP) despite significant differences in statistics among the 23 schools (schools with comparatively high density of collaboration vs. schools with comparatively low density of collaboration).

The findings indicate that the density of school collaborative culture in a high/same collaborative cultural context/pattern cannot explain similarities and differences in SBCD among the four case schools. The schools were dominated by similar/high collaborative school culture (high CL & high CP), but variations in SBCD exist.

#### ***6.3.2.2 westernized-SBCD identified in Mainland China when curriculum is regarded as experience.***

This sub-sub-subsection further confirmed and explained in detail the viewpoint raised in

sub-sub-sub-subsection 2.3.2.2.2 (Understanding SBCD in Mainland China) that the function of SBCD and the understanding of SBCD are greatly affected by the conceptualization of “curriculum.” The concept of “curriculum as experience” was utilized to emphasize the idea as a concept opposite to “curriculum as content.” Specifically, “curriculum as experience” pertains to “curriculum as total learning experience in school,” which emphasizes the unconfined development and implementation of SBCD within a single subject. This approach focuses on the overall/any curriculum changes/activities within the school. “Curriculum as content” is about “curriculum as subjects/subject content/formal subject.” Most schools in Mainland China developed and implemented SBCD based on “curriculum as content.” These schools only focused on the development of SBCs/a SBC and did not pay attention to overall curriculum changes within the school.

First, this research explored and studied SBCD with the conceptualized framework by regarding curriculum as experience. The exploration of SBCD when considering curriculum as experience refers to analysis of any activities within schools. Thus, instead of focusing on Clause 16 (three-level management policy) in “The Compendium” where SBCD became an important topic in Mainland China, the present study focuses on Clause 2 (directions of change) in the “Compendium” as a directive instruction of overall curriculum change for schools. The SBCD of the case schools was comprehensively explored with the four directions of change. The SBCD of the case schools was explored with a SBC using form and developmental processes by considering a SBC as one of the activities within the school. This study considered curriculum as experience and focused on overall curriculum changes within the

school. The four directions of change of the overall school, the form of a SBC, and the developmental processes of a SBC comprise the framework used to explore the four case schools in this study.

The findings on the developmental processes of SBCs showed teacher enactment and pupil engagement from goal setting process, design process, implementation process, to evaluation and revision process; these findings indicated that the SBCD models of each case school were consistent with those of Skilbeck (1984) and OECD (1979), which focused on the situation and the pupils.

Findings about the forms of the SBCs indicated that the groundwork was laid for schools in Chinese context to develop and implement SBCD with a westernized concept; this concept pertains to “curriculum as experience,” which enabled schools to develop and implement westernized SBCD. Findings about “the forms of the SBC” in the four case schools (see Table 31) showed that the developmental scale of the SBC of each case school broke through the place reserved and permeated as “whole curriculum” or “part of the curriculum.”

SBCs in the school broke through the place reserved by the central authority and wholly or partially permeated the curriculum. An emphasized and intensively developed SBC was essential in the SBCD of every school. This SBC became a feature of SBCD in Mainland China because of policies from the central authority that regulated the allocation of a reserved place (auxiliary time) for the regulated timetable. This approach facilitated the development of SBCs by considering curriculum as content. However, without self-realization and intentions, SBCs in most schools wholly or partially permeated the school curriculum. The schools

unintentionally eliminated place/curriculum reserved. Thus, SBCs permeated not only reserved spaces, but also other learning areas within the school. This finding means that most schools may have utilized curriculum as content at the beginning of SBCD, but they unintentionally terminated the process by involving other learning areas (as taking curriculum as experience). Thus, the schools intentionally developed and implemented SBC in a reserved space by considering curriculum as content. However, unintentional curriculum changes permeated most of the schools. This finding suggests the potentials of the schools to get rid of the concept of “curriculum as content.” Similarly, this finding indicates that the groundwork was laid out for the schools in Chinese context to enable them to develop and implement SBCD by systematically considering and framing curriculum changes for the whole school (as taking curriculum as experience).

Findings about the directions of change of the four case schools showed the significance of considering the concept of “curriculum as experience” instead of the concept of “curriculum as content” when developing and implementing SBCD. The majority of the schools considered the concept of “curriculum as content” and those that focused on developing SBCs when implementing SBCD. School C was the only case school that considered the concept of “curriculum as experience” to develop SBCD. School C implemented changes in all “directions of change” (Table 30). According to the findings, all four case schools underwent changes in directions. However, School C was the only school that intentionally implemented changes in all the directions because it was the only school that considered the concept of “curriculum as experience” to comprehensively and thoroughly change the

curricula. Schools A, B and D did not show similar results as School C. Therefore, SBCD was implemented and developed more effectively when curriculum was regarded as experience. SBCD was also westernized when systematic developmental framework was implemented for curriculum changes (taking curriculum as experience), but in a highly collaborative Chinese context.

In conclusion, the context of Mainland China seems highly centralized with high collaborative culture. However, the groundwork was laid to enable schools to develop westernized SBCD because this concept can be identified within the schools. Properly understanding the concept of SBCD, especially with regard to curriculum as experience, is critical to an effective SBCD implementation.

### ***6.3.2.3 the affecting factors.***

Referring to the literature review about the factors affecting SBCD (sub-sub-sub-subsection 2.3.3.1.2), this study examined the findings and discussions in the previous part of this study. The following, the factors significantly affecting SBCD among the case schools in this study are to be identified; moreover, the relationship of those identified factors will be discussed.

#### ***6.3.2.3.1 the identified factors in this study.***

From a macro-perspective, the four schools have been compared in terms of their directions of change, and from a micro-perspective, they have been compared in terms of the processes and the form of SBC adopted. Consequently, by referring to the sub-sub-sub-subsection about “the factors affecting SBCD” (sub-sub-sub-subsection 2.3.3.1.2) in the literature review, some

factors have been identified as those that caused the differences and the similarities among the four case schools:

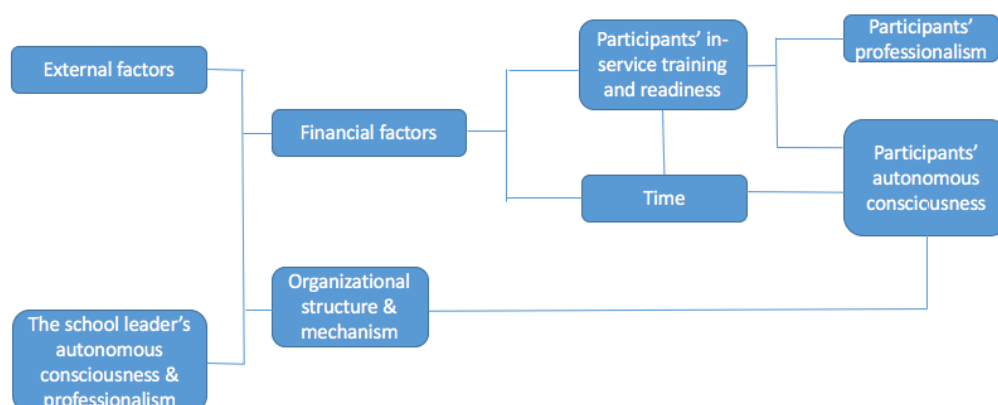
- **Professionalism.** This factor is about the professionalism and leadership of the participants and the school's top leaders, mainly involving their professional knowledge, curriculum skills, professional judgment, interpersonal skills, and others.
- **External factors.** The external factors constrain the whole school, including the political factors, the administration and supervisory personnel's attitudes, the expectations and motivations, and the constraints made by the assessment.
- **Participants' in-service training and readiness.** When participants receive more in-service training, they have greater confidence to participate in the curriculum development processes. In turn, when participants have greater confidence, they receive their training more effectively and they become more professional.
- **Participants' autonomous consciousness.** Participants' autonomous consciousness is about their consciousness of the need for change and development and their critical role in the processes of change and development. These processes are closely related to their interests in innovative approaches and motivation and their control, responsibility, and ownership.
- **Financial factors.** Financial factors are always fundamental and critical to the operations of a school.
- **Time.** This factor is not only about the time used for classroom teaching but also about the time that is available for teachers to prepare and develop the curriculum.

- **Organizational structure and mechanism.** This factor could be affected by the school leaders' professionalism. However, as it has greatly affected the form and the process of the SBC, it is to be discussed separately in the following sub-sub-sub-subsection.

#### *6.3.2.3.2 relationship of the identified factors.*

This sub-sub-sub-subsection first reveals the relationship of all the factors that were identified in the previous part (sub-sub-sub-subsection 6.3.2.3.1). Then, the relationship between “organizational structure and mechanism” and “participants’ autonomous consciousness” is further discussed by heightening the importance of factor “organizational structure and mechanism.”

*-the relationship*



**Figure 14 The Relationship between the Identified Factors**

This sub-sub-sub-sub-subsection explains the relationship and effects of each factor in the school (Figure 14).



Generally, in each public school in the same area (especially in Shenzhen City), the funds allocated by the government were equal and sufficient. By comparison, in private schools, the financial support by the government was less. However, this situation was decided by the nature of private schools, which should operate for profit and be self-reliant. Therefore, the differences between private schools and public schools caused by government-allocated finance were great, and so the external factors (especially the government) affected the financial factors.

Meanwhile, the school leaders' (especially the top leaders) interests in innovations and motivations and their professionalism also affected both the school by influencing the amount of funds that the school can receive from the government, and the use of the funds in the school. For example, in addition to the constant budget provided by the government, the school leaders may justifiably and legally apply for special funds from the government for school improvement in various aspects. These funds were available to all private schools (Shenzhen Education Bureau (1), 2011).

Therefore, the factors of "time" and "participants' in-service training and readiness" were affected greatly by financial factors, especially in private schools. Regarding the manner in which financial factors affected the factor of "time," the nature of private schools is referred to again: as private schools operate for profit, they encounter difficulties in minimizing the spending of the whole school, and because human resources require one of the largest spending, certainly, the schools may recruit as few staff members as possible; therefore, the number of teachers in a private school normally is significantly fewer than the number of teachers in a

public school. Thus, in School A (a public school), a teacher typically had 10 classes a week, whereas in School D (a private school), a teacher normally had 20 classes a week. As a result, teachers in private schools had a workload that was almost double that of teachers in public schools. Accordingly, the available time left for the teachers in private schools was less. They considered that thinking more consumed energy, and so they only followed the orders from the top management for the things they were required to do without autonomous consciousness.

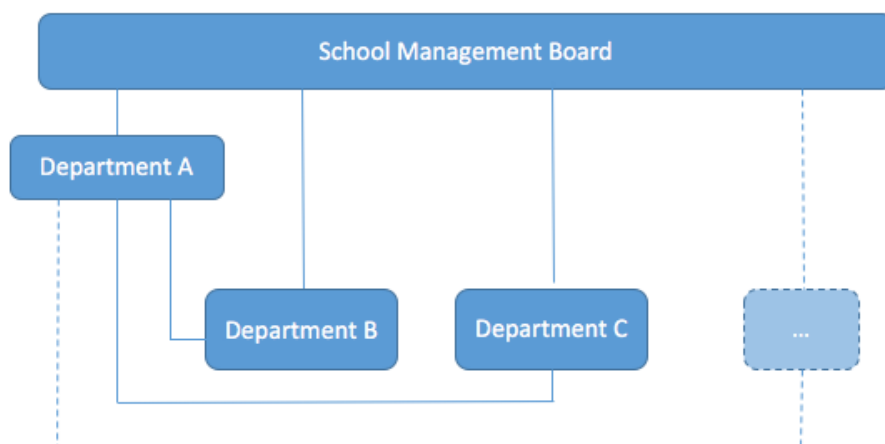
Similarly, the financial factors also affected the teachers' in-service training and readiness. First, for the teachers with excessive workload, they did not have enough time for training, especially for long-term training. Moreover, to save on expenses, private schools spent as less as possible on teacher training, except for the training officially regulated by the government. As a result of the constraints of time and money, the teachers had less in-service training, which accordingly affecting their professionalism. They had less realizations and enlightenment from the training about why they were responsible and were actually playing a critical role in school improvement and pupils' development.

The professionalism and autonomous consciousness of participants were not only affected by time, in-service training, and financial factors, they were also affected by the school organizational structure and the curriculum developmental mechanism, both of which were mainly affected by the professionalism and autonomous consciousness of the school's top leader. However, in a centralized system, the external factors also had effects on those aspects. For example, every school was required to write a book by introducing its management system, which must be checked and approved by the higher authorities. Nevertheless, for the school

organizational structure and mechanism, the professionalism and autonomous consciousness of the school's top leader were still the main factors.

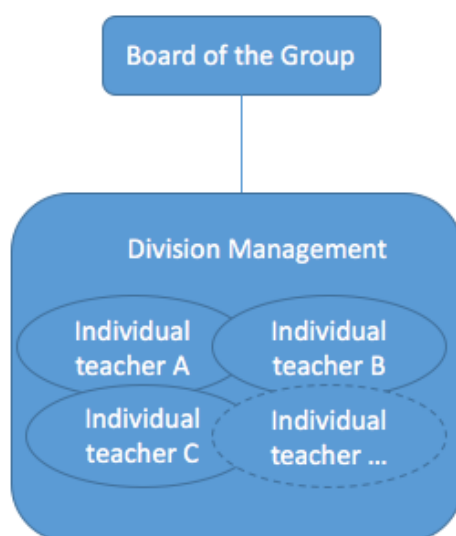
*-the importance of “organizational structure and mechanism”.*

This part is taken from a micro-perspective to determine the effects of school structure and mechanism on the autonomous consciousness of teachers. As shown in previous findings, School A, School B, and School D had a departmental management system. As a result, during the development process of the SBC, the mechanism was used with the effects of the departmental management system (Figure 15). In a department management system, the school allocates the assignment to one department (Department A in Figure 15). For example, in School A, when developing the SBC (Confidence Education), the Moral Education Department was the department with the main responsibilities. As a result, during the processes, the other departments only acted as assistants instead of collaborators. Accordingly, except for the members in Department A, all the other members of the other departments had less autonomous consciousness as they felt fewer responsibilities and less ownership and control when joining the process.



**Figure 15 The Mechanism of Departmental Management System during the Developmental Processes of an SBC**

However, School C had a group management system. Instead of assigning a group of people (a department) as the persons in charge, everyone was responsible and actively joined in the process (Figure 16). Their ownership, responsibilities, and feelings of control increased, and, consequently, their autonomous consciousness increased as well.



**Figure 16 The Mechanism of a Group Management System during the Developmental Processes of an SBC**

***6.3.2.4 the forces of curriculum change in this study.***

The forces of curriculum change in the four case schools are discussed in this sub-sub-subsection by referring to sub-sub-sub-subsection 2.3.3.1.1 about “forces of curriculum change” in the literature review.

Two kinds of forces were considered as pressures that caused the changes within the schools (as reviewed in sub-sub-sub-subsection 2.3.3.1.1): the external force and the internal force. For the schools in this study, external force has been the main impetus. In Mainland China, which is a centralized country, the consideration always emphasized by the schools is “only when the policies allow” as repeated by the interviewees during the interviews. The education system is changing with other social institutions, as “it would be more surprising, not say disturbing, if the education system were to stand still while all else changed” (Kelly, 2009, p.1). Therefore, the schools were allowed to change and began to change after they received the orders from the higher authorities. At the same time, the forces were the constraints, including the policies and regulated assessment or those affected by the administrative and supervisory personnel’s attitude, expectations, and motivations. Similarly, affected by the already existing hierarchy in the school, the internal forces mainly came from the school’s top leader, caused by his or her self-interest in innovative approaches and motivations and involving the leaders’ professionalism.

### ***6.3.2.5 the changing strategies of the schools in this study.***

The changing strategies used by the case schools in this study are discussed in this sub-sub-subsection by referring to “change strategies of curriculum” in sub-sub-sub-subsection 2.3.3.1.1 in the literature review.

Regardless of the management system used by a school, power-coercive strategies, normative–re-educative strategies, and empirical–rational strategies, all were the changing strategies used by the higher authorities and the schools for change. Within a hierarchy system, the higher authorities, from top to bottom, used power-coercive strategies to allocate the missions to the school for changing; for example, the schools received the order (i.e., the release of the “Compendium”) from the higher authorities as to implement SBCD. At the same time, by using normative–re-educative strategies, the higher authorities educated and trained the school leaders on the importance of the mission and the critical role of every participant; for example, the teachers, both from the private and public schools, received regular in-service and government-organized teacher training. When the school leaders received and analyzed the mission with their own school situations and their own professionalism, they were actually using empirical–rational strategies and acted accordingly with autonomous consciousness.

As a hierarchy system also existed within the school, from top to bottom, the school leaders used power-coercive strategies to allocate the missions to the teachers for changing. At the same time, by using normative–re-educative strategies – the school-based teacher training, the teachers were trained and educated on the meaning and value when they engaged in the new commitments. As a result, with the empirical–rational strategies, the rational self-interest

instinctively appealed to the teachers, and they automatically acted with their professionalism accordingly.

#### ***6.3.2.6 unexpected findings – the NBEP and SBCD.***

As introduced in sub-sub-subsection 5.4.1.2., coordinated at the district level, School B together with the other four schools in K district joined the three-year NBEP as a government-organized action. By joining the project, the other schools and the overall educational quality of the district could be improved with the help and influence of the schools and teachers who have joined the project. In other words, the value of the NBEP is expected to have far-reaching effects not only in the four schools but also the whole district.

On account of the far-reaching influence of the NBEP on SBCD of the schools, considering whether these two are inconsistent with each other or have positive mutual effects is necessary.

In considering the situation of subject teaching that mainly focuses on “knowledge transmission,” the value promoted by NBEP is about transforming from mainly transmitting basic knowledge or concept from textbooks to nurturing a new generation with capacities for active and healthy development in modern society (Ye, 2002; Ye, 2006). Researchers of NBEP believe that subjects and subject contents are resources and methods for “educating people” in classroom teaching, though “educating people” is the essential goal (in classroom teaching) (Ye, 2002). The NBEP considers the essential mission of exploring people’s potential vitality for basic education as developing the individual to have the capacity for active development, given that people act not only within the material environment but also according to the spiritual environment; that is, individuals are affected by the external and internal worlds (Ye,

2002).

Therefore, in the researcher's understanding, Ye (2002, 2006) is in fact promoting the concepts and values that are prevalent in the international world and have had great effects on the pervasiveness of educational reform across Asia since the end of the 20th century. Individuals should obtain and develop basic knowledge for the social world and the generic skills, positive values, and attitudes necessary for lifelong learning (Kennedy, 2013).

Ye (2002) also believes that the thing that should be reformed is not setting a new curriculum from the top but rather requiring school-based action for the school to realize the value of "educating people," which has also met the core of SBCD on decentralization.

The NBEP suggests that school transformation should include value promotion, re-focusing, open structure, interactive proofs, and motivation internalization (Ye, 2006). All of which are specifically implemented as follows. At the school-based level, with the learning process shifting from teacher-centered to student-centered with multiple and mutual interactions, teachers of a specific subject (individual subject) teach the pupils with basic knowledge or concepts and nurture them with generic skills as well as positive values and attitudes by "teaching content structuring," "flexible teaching planning," "dynamic evolving in the teaching process," and "multiple progressive teaching evaluation" (Ye, 2006; Ye, 2002). In other words, in individual subject teaching, teachers try their best to reach the target of meeting the value of "educating people" with basic knowledge, generic skills, and positive values and attitudes. The promotion of "educating people" with basic knowledge, generic skills, positive values, and attitudes by NBEP is limited and confined to individual subject teaching. This



observation is reflected in the studies on case School B (one of the schools that joined the NBEP project) where the teachers are trained by focusing on individual subjects and the relevant teaching materials and areas where few collaborations and interactions of teachers among subjects are available.

The contents of NBEP include four aspects: “improvement of curriculum and instruction,” “improvement of class construction,” “improvement of school administration,” and “teacher development.” Although the Principal is encouraged to take an active role in comprehensive school planning and school-level systematic reform (in “improvement of school administration”), as instructed by the NBEP group, the planning and reform of the school are confined and restricted by the discipline or subject. In fact, the NBEP group guides the school reform by considering the curriculum as content and dividing them into individual subjects.

The researcher expects that the schools in K district (also the schools have joined the NBEP) will grow and develop together with the NBEP to establish a new framework by breaking through the confines of subjects to reach the commendable value of “educating people” for lifelong learning by regarding curriculum as experience instead of content.

## Chapter 7: Conclusions and Implications

### 7.1 Overall Conclusions

This study had investigated the culture of 23 primary schools in K district, Mainland China. After identifying the cultural patterns, this researcher selected four schools as case schools. From both macro and micro perspectives, this study had explored the directions of change (i.e., curriculum content, learning processes, curriculum assessment, and curriculum administration) of the school, the form (i.e., developmental scale, theme, type of activities design, time, and developers) and the developmental processes (i.e., goal setting, design and mechanism, implementation, and evaluation and revision) of a SBC, for a deep and comprehensive understanding of SBCD in the schools. Resultantly, two main research questions with seven sub-questions have been answered in this study, as follows:

Q1: What are the cultures in the 23 schools like?

- Q1a: Which is(are) the case school(a) identified through investigating the culture of the 23 schools?
- Q1b: What are the main characteristics of the cultures of the 23 schools?

Q2: How is SBCD implemented in the case school(s)?

- Q2a. What are the directions of change (i.e., philosophy of schooling, curriculum content, learning processes, curriculum assessment, and school administration) in the case school(s)?
- Q2b. What forms (i.e., developmental scale, theme, type of activities, design, time, and

developers) does the SBC take in each case school(s)?

- Q2c. What are the developmental processes (i.e., goal setting, design and mechanism, implementation, and evaluation and revision) of a SBC in the case school(s)?
- Q2d. What are the similarities and differences of SBCD among the case school(s)?
- Q2e. What emerges in terms of the similarities and differences of SBCD among the case school(s)?

The answer to Q1a (presented in Chapter 4) was found by investigating the culture of 23 primary schools in K district with the valid and reliable new SCS instrument (after piloting the remaining 23 items containing two factors from the original SCS which has 35 items containing six factors) for the district. By dividing the schools into two groups (the group of public schools and the group of private schools), with quantitative data analysis using independent one-way ANOVA and t-test, this researcher identified the following four case schools: School A (public school) with the comparatively highest density of school culture among the public schools, School B (public school) with the comparatively lowest density of school culture among the public schools, School C (private school) with the comparatively highest density of school culture among the private schools, and School D (private school) with the comparatively lowest density of school culture among the private schools.

The answer to Q1b was presented in Discussion (in subsection 6.2). The quantitative data indicated that all the investigated schools are in the similar cultural pattern with a high collaborative culture, although two subcultural patterns were further identified for the selection of case schools. Therefore, all the investigated schools had a similar school culture.

Furthermore, the two new factors of the valid and reliable new SCS instrument for the district were redefined as Collaborative Leadership (CL) and Collaborative Partnership (CP). Therefore, the new SCS instrument with 23 items containing two factors was considered as suitable for investigating the collaborative school culture in a Chinese context.

The answers to Q2a, Q2b, and Q2c were presented together as a whole chapter (Chapter 5) by revealing them in each of the case schools. The qualitative findings of each case schools were presented with the framework of directions of change, the form, and the developmental processes, which were consistent with the three answers.

The answers to Q2d were presented in sub-subsection 6.3.1 in Chapter 6 Data Analysis and Discussion. All the qualitative findings of the four case schools were compared with the framework of directions of change, the form, and the developmental processes by identifying the similarities and differences among them.

Sub-subsection 6.3.2 presented the answers to Q2e with discussions on empirical findings and discussions from the previous sections, which were also closely related to the reviews in the Literature Review. Although the schools were found to be similar with high collaborative school culture, the variations of SBCD could also be identified. SBCD in each school was affected by both external and internal forces. Empirical–rational strategies, normative–re-educative strategies, and power–coercive strategies all were used when implementing SBCD from top to down. “Professionalism,” “external factors,” “participants’ in-service training and readiness,” “participants’ autonomous consciousness,” “financial factors,” “time,” and “organizational structure and mechanism” were identified as the affecting

factors. The relationship of the affected factors was also revealed. NBEP instructions on the case School B considers curriculum as content, which may impede the future development of SBCD when considering curriculum as experience for school improvement, teacher development, and pupil learning.

## **7.2 Implications**

### **7.2.1 various orientations in SBCD led by different conceptions of the curriculum**

At the beginning of this study, all the case schools were expected to regard curriculum as content/school subjects; that were expected to, in the main, focus on SBC/s for SBCD implementation because the schools were all in a bureaucratic and administrative Chinese context.

Among the four case schools, School C regarded curriculum as the total experience of students within the school instead of regarding curriculum as content/school subjects; thus, this school underwent thorough changes in all directions of change while the other three case schools did not. These findings implicate that different conceptions of the curriculum varied the SBCD orientations.

Therefore, the practical implications for the change in curriculum policy in Mainland China lead schools to appropriately understand curriculum by regarding curriculum as experience and made schools realize the significance of SBCD for thorough internal change.

The significant document for SBCD in Mainland China, “The Compendium of National Curriculum Reform in Basic Education (tentative)” (“The Compendium”), ushered in the

official launch of SBCD in Mainland China; Clause 2 of this document provides clear instructions on how schools should evolve in the directions of change (i.e., curriculum structure, content, assessment, and administration, as well as learning processes). However, most schools in the Chinese context understand curriculum as content/school subjects, such that they focused on Clause 16 (the three-level management policy) instead of Clause 2 when interpreting SBCD in “The Compendium”. When interpreting Clause 16, the schools divided the curriculum into three pieces/levels – national, local, and school-based curricula – with a focus on developing a school-based curriculum. The perspective between Clauses 2 and 16 was discussed in p. 49 (2.3.2.2.2 Understanding SBCD in Mainland China), which explained why SBCD is understood differently in China compared than it is in the West.

Therefore, the practical implications for change in curriculum policy for this study direct the attention of the schools to Clause 2 in “The Compendium”, which should initially have been based on understanding the curriculum as experience. Only when the schools could understand the conception of curriculum appropriately could they realize how Clause 2 includes the expectations and significance relative to the introduction of SBCD in Mainland China.

### **7.2.2 implications of the conceptual and theoretical framework**

Instead of mainly focusing on SBC/s similar to other SBCD studies in Mainland China, this study explored SBCD with any/all school activity/ies from macro and micro perspectives by regarding the curriculum as the total in-school experiences of pupils. Macro and micro perspectives explored SBCD with all in-school activities and by focusing on a SBC (the most recommended SBC within the school), respectively. These perspectives comprised the

conceptual framework of this study, and accordingly, the SBCD in individual schools was thoroughly revealed.

Therefore, this conceptual framework could be recommended for thorough SBCD explorations of studies in other areas, especially in Asia, where curriculum is regarded as content and which mainly focused on SBC/SBCs when studying SBCD. Moreover, this conceptual framework can raise the conception of the curriculum of the schools, which can help improve curriculum development in school.

However, by further considering the mainstream (from the Western world) and domestic literature (in Mainland China), the theoretical framework was specifically set for SBCD exploration in Mainland China. From the macro perspective, the school curriculum was explored with four directions of change, which has considered and synthesized the five directions of change in Clause 2 of “The Compendium” by M.O.E. (2001) and Fullan (1991)’s three dimensions. From the micro perspective, the most recommended SBC in schools was revealed through the form it assumed and the developmental processes it involved, which have also considered and synthesized mainstream and domestic literature; these research include Marsh et al. (1990)’s matrix, Wu (2000)’s matrix, Zeng and Zhou (2010)’s distinct dimensions, and the developmental processes of the models by OECD (1979) and Skilbeck (1984). Thus, the theoretical framework of this study was specifically set for the SBCD explorations in the Chinese context; thus, it is suitable for use in schools in other areas in Mainland China.

## 7.3 Limitations and Directions for Future Studies

### 7.3.1 limitations

The findings indicated that the SBCD variations in the schools were dominated by a similarly/highly collaborative school cultural pattern (high CL and CP). Therefore, SBCD among the schools have similarities and differences that cannot be explained by culture (CL and CP). This limitation of the study particularly in sampling the same culture pattern (high CL and CP) lessened the impact of CL and CP on SBCD.

Therefore, the researcher suggests a different means of choosing case schools in future studies, in which key items, which load the highest and lowest rather than the scale as a whole, are used to reveal more differentiations.

This process means that: take this study as an example. The corresponding codes of the SCS questionnaire ranged from 1 to 5, which represent “strongly disagree”, “disagree”, “undecided”, “agree”, and “strongly agree”, respectively. Therefore, “1 to 3” represents a low collaborative culture, whereas “3 to 5” denotes a high collaborative culture. Moreover, considering the two factors, namely CL and CP, it was assumed that schools could be identified in different cultural patterns; thus, case schools could be identified accordingly: 1) low CL and high CP; 2) high CL and CP; low CL and CP; high CL and low CP. However, all the 23 schools in this study were identified with the same cultural pattern – high CL and CP cultural patterns. Furthermore, no schools could be identified in the other three cultural patterns. Finally, the case schools were further identified according to the sub-cultural patterns within the high CL & CP patterns. Therefore, it is suggested that, instead of choosing case schools according to the scale



as a whole – with cultural patterns, it might be better to look at the Pattern Matrix (SPSS Output – Final Results of EFA) in Table 7 to choose case schools. In Table 7, the highest loading item for Factor 1 (CL) was item 22, and the lowest loading item item 18; for Factor 2 (CP), the highest loading item was item 21, and the lowest loading item item 19. Accordingly, it might be better to choose the schools with the highest scores in item 22, the lowest scores in item 18, the highest scores in item 21, and the lowest scores in item 19 as the four case schools for this study. In such manner of choosing case schools, more differentiations might be revealed.

### **7.3.2 directions for future studies**

In this study, the main purpose of “school culture” was to select a case school (in order to choose as much SBCD variation as possible), and the results of the study indicate that the four schools have varied SBCD (in “6.3.2.1 the SBCD variations in a similar cultural pattern of high collaborative school culture”), which verified the selection strategy for the case schools.

SBCD is affected by many factors, as elaborated upon in the Literature Review (“2.3.3.1.2 Studies on SBCD in the Western context” – “Factors affecting SBCD”); these factors include time, participants, and school culture, as well as political, financial, and administrative factors. As the main focus of the current study has been to thoroughly explore SBCD within the schools in the district, “school culture” as one of the factors affecting SBCD should also be explored. Therefore, this study confirms that the 23 schools are in the high CP and CL cultures (in “6.2 Discussions on the quantitative research findings – Answers to Q1b”); however, this study further confirms that these two (CL and CP) have only minimally affected the differences of

SBCD among the four case schools. Furthermore, culture is just one of the factors because this study mainly aimed to thoroughly explore SBCD; however, the study should not focus on this factor alone. Therefore, many other factors that influence the SBCD of the four case schools, especially those that greatly affect their similarities and differences, have been revealed and discussed (in “6.3.2.3 Influential factors”).

This study selected case schools through the underlying dimensionality of the survey instrument (viewing the scale as a whole), in which the schools with the comparatively highest CL and CP and with the comparatively lowest density of CL and CP. However, future studies could mainly and solely focus on cultural factors when choosing case schools. For example, the researcher (in a future study) might look at the highest loadings in the SPSS output of the final EFA results to select the case schools, as in Table 42. This table showed the schools with the highest scores in the highest loading item 22 in factor 1(CL), the lowest scores in the highest loading item 22 in factor 1(CL), the highest scores in the highest loading item 21 in factor 2 (CP), and the lowest scores in the highest loading item 21 in factor 2 (CP). Moreover, the researcher (in a future study) can look at the key items with the highest and lowest loads to provide further and detailed item analysis for the studies that mainly and solely focused on cultural factors. Given that the items irrelevant to the focus of the measure can potentially generate skewed, insufficiently heterogeneous data, to select case schools which have adequate representation of heterogeneity, a balance between schools that scored high and low on the item scale is therefore necessary.

In this study, the main purpose of “school culture” has been to choose a case school in order to

select various SBCD as possible, and the study results indicate that the four schools have varied SBCD (p. 237 “6.3.2.1 Variations of SBCD in a similar cultural pattern of high collaborative school culture”); this result verified the manner in which the case schools were selected, whereas in future studies, where cultural factors are the main and only focus, the researcher (in a future study) is suggested to consider the highest loadings in the SPSS output of the final results of EFA to select case schools.

On September 13, 2016, the general framework of “Key Competencies for Student Development in Mainland China” (Key Competencies) was authoritatively released (Lin & He, 2016). The general framework of the Key Competencies was the result of a three-year research by a research panel of the Beijing Normal University, which involved almost 100 experts from all over the country. The curriculum standards, construction of curriculum, and assessment for primary and middle school students will be revised and instructed accordingly in the near future (Lin & He, 2016). The Key Competencies for student development are the necessary characters and crucial competencies that students should maintain for life-long development and social development.

The release of the framework on the “Key Competencies” has begun a further strengthening of decentralization, with SBCD entering a new phase in Mainland China. Key competencies empower schools administrators to be confident and have a reliable foundation to implement SBCD. Planning for the whole school will be targeted-oriented and policy-based, and so the Principals are assured to create a new framework for the schools to remove obsolete or less important contents, restructure the subjects, open up new space for learning, and infuse the Key

Competencies. An effective implementation of SBCD should be grounded on the framework of the curriculum as experience.



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## Appendix A: Interview Schedules

Directions of Change - School teachers:

1. How long have you been the Principal / (state position) in this school?
2. What is your perception of a good school? How does a school become good? What is your school's mission/philosophy of schooling? Why?
3. What is the current direction of your school in each dimension of change?
  - Approaches to teaching
  - Curriculum content
  - Learning processes
  - Assessment
4. How did the school policies or regulations come about? Have the teachers participated in the process?
5. Can you introduce the organizational structure of your school? How do the departments collaborate with one another?
6. How do you participate in school management?
7. Does the school support your work?
8. What happens if the teachers have different opinions during discussions with other teachers? Do they enjoy sharing?
9. How do the teachers in your school collaborate? Are there any opportunities for them to collaborate? Has the school offered any opportunities to improve the teachers' collaborations?
10. Within the school or outside the school, is there any in-service training for improving teachers' professionalism? Do you use any personal method to improve your self-professionalism? Do you think that you follow the new trend of classroom instruction? How does the school regard teachers' creations?
11. Do you think that the school has enough time for teacher planning for their classroom teaching?
12. Do you communicate frequently with the parents? Do the parents trust you and support your work?
13. Do the pupils support your work? Do they enjoy the learning process and could they complete their work well?
14. Are there any impediments or facilitating factors during your work?
15. Do you know "The Compendium"?

Directions of Change - Leaders and middle-level leaders:

1. How long have you been the Principal / (state position) in this school?
2. What is your perception of a good school? How does a school become good? What is your school's mission/philosophy of schooling? Why?
3. What is the current direction of your school in each dimension of change?
  - Approaches to teaching
  - Curriculum content



■ Learning processes

■ Assessment

4. How did the school policies or regulations come about? Have the teachers participated in the process?
5. Can you introduce the organizational structure of your school? How do the departments collaborate with one another?
6. How do you participate in school management?
7. Do the teachers support your work?
8. How do the teachers in your school collaborate? Are there any opportunities for them to collaborate? Has the school offered any opportunities to improve the teachers' collaborations?
9. Within the school or outside the school, is there any in-service training for improving teachers' professionalism? How does the school regard teachers' creations?
10. Do you think that the school has enough time for teacher planning for their classroom teaching?
11. Do you communicate frequently with the parents? Do the parents trust you and support your work?
12. Are there any impediments or facilitating factors during your work?
13. Do you know "The Compendium"?

SBCE topic – schoolteachers/schoolleaders:

1. What is your perception of SBCE?
2. How many SBCEs are there in your school? Would you please introduce the best SBCE in your school?
3. Did your school have any developmental committee for the SBCEs? Who are the developers? What is the mechanism to improve and to facilitate?
4. Why was the SBCE developed? What is the goal setting?
5. Who decides the contents and the learning processes?
6. Are there any discussions between the teachers for the SBCE?
7. What is the assessment system? Who decides on the assessment system?
8. Besides the classroom teaching, are there any related activities?
9. Is there any in-service training for the teachers to improve their professionalism for SBCE?
10. Are there any impediments or promoting factors during the implementation?

## Appendix B: interview Code List

Interview Code List

<b>School A</b>	SA-P1	School Principal in School A
	SA-T1	Head of Teaching and Research Department in School A
	SA-T2	Head of Moral Education Department in School A
	SA-T3	Interviewed Class teacher of Subject Chinese in School A
	SA-T4	Interviewed Class teacher of subject Information Technology in School A
	SA-T5	Interviewed Class teacher of Subject English in School A
	SA-T6	Interviewed Class teacher of Subject Chinese in School A
<b>School B</b>	SB-P1	School Principal in School B
	SB-T1	Head of General Services Department in School B
	SB-T2	Head of Teaching and Research Department in School B
	SB-T3	Interviewed Class teacher of subject Calligraphy in School B
	SB-T4	Interviewed Class teacher of subject English in School B
	SB-T5	Interviewed Class teacher of subject Mathematics in School B
<b>School C</b>	SC-P1	Vice Principal in charge of the Primary-International Division and Humanities-related subject in School C
	SC-P2	Vice Principal in charge of the Junior-Middle-International Division and English subject in School C
	SC-T1	Interviewed Class teacher of subject Mathematics in School C
	SC-T2	Interviewed Class teacher of subject Chinese in School C
	SC-T3	Interviewed Class teacher of subject Music in School C
<b>School D</b>	SD-P1	Executive Vice Principal in School D
	SD-P2	Vice Principal in charge of the Moral Education Department in School D
	SD-T1	Interviewed Class teacher of subject Mathematics in School D
	SD-T2	Interviewed Class teacher of subject Chinese in School D
	SD-T3	Interviewed Class teacher of subject Mathematics in School D
	SD-T4	Interviewed Class teacher of subject Chinese in School D

## Appendix C: School Culture Survey

### School Culture Survey

**Directions:** Please indicate the degree to which each statement describes conditions in your school using the following scale:

1=Strongly Disagree   2=Disagree   3=Undecided   4=Agree   5=Strongly Agree	1	2	3	4	5
1. Teachers utilize professional networks to obtain information and resources for classroom instruction.					
2. Leaders value teachers' ideas.					
3. Teachers have opportunities for dialogue and planning across grades and subjects.					
4. Teachers trust each other.					
5. Teachers support the mission of the school.					
6. Teachers and parents have common expectations for student performance.					
7. Leaders in the school trust the professional judgments of teachers.					
8. Teachers spend considerable time planning together.					
9. Teachers regularly seek ideas from seminars, colleagues, and conferences.					
10. Teachers are willing to help out whenever there is a problem.					
11. Leaders take time to praise teachers who perform well.					
12. The school mission provides a clear sense of direction for teachers.					
13. Parents trust teachers' professional judgments.					
14. Teachers are involved in the decision-making process.					
15. Teachers take time to observe each other teaching.					
16. Professional development is valued by the faculty.					
17. Teachers' ideas are valued by other teachers.					
18. Leaders in the school facilitate teachers working together.					
19. Teachers understand the mission of the school.					
20. Teachers are kept informed on current issues in the school.					
21. Teachers and parents communicate frequently about student performance.					
22. Teacher involvement in policy or decision making is taken seriously.					
23. Teachers are generally aware of what other teachers are teaching.					
24. Teachers maintain a current knowledge base about the learning process.					
25. Teachers work cooperatively in groups.					
26. Teachers are rewarded for experimenting with new ideas and techniques.					
27. The school mission statement reflects the values of the community.					
28. Leaders support risk taking and innovation in teaching.					
29. Teachers work together to develop and evaluate programs and projects.					
30. The faculty values school improvement.					
31. Teaching performance reflects the mission of the school.					
32. Administrators protect instruction and planning time.					
33. Disagreements over instructional practice are voiced openly and discussed.					
34. Teachers are encouraged to share ideas.					
35. Students generally accept responsibility for their schooling, for example by being mentally engaged in class and completing homework assignments.					



## Appendix D: EFA processes

Two common rotation techniques are used, namely, orthogonal rotation (e.g., varimax, quartimax, and equamax) and oblique rotation (e.g., direct oblimin and promax). The biggest difference between these two rotation techniques is that orthogonal rotation involves uncorrelated factors, whereas oblique rotation involves correlated factors (William & Brown, 2012; Yong & Pearce, 2013). Therefore, in this research, oblique rotation was selected. Moreover, compared to direct oblimin, promax is more favorable owing to its speed in larger datasets; it can result in greater correlations among the factors and achieve a simple structure (Gorsuch, 1983; Yong & Pearce, 2013). Thus, a promax rotation was adopted for the EFA in this research.

Principal component analysis (PCA) was also selected. Seven extraction methods are used in factor analysis, PCA, Principal axis factoring (PAF), maximum likelihood, unweighted least squares, generalized least squares, alpha factoring, and image factoring. PCA and PAF, the most commonly used extraction methods (Henson & Roberts, 2006; Tabachnick & Fidell, 2007, Thompson, 2004; William & Brown, 2012), have no significant difference between them, specifically when the variables have high reliability (Gorsuch, 1983; Thompson, 2004). PCA is a data reduction technique and the default extraction method in SPSS (Costello & Osborne, 2005). Thus, it was used to conduct EFA in this research.

The factor structure was determined by considering the scree test, eigenvalues above 1.0, and the amount of variance explained. The eigenvalues and scree test (i.e., scree plot) are used to determine the number of factors to retain (Yong & Pearce, 2013). Kaiser's criterion is a rule of

thumb that suggests retaining all factors above the eigenvalue of 1 (Kaiser, 1960), which is the default in most statistical software packages (Costello & Osborne, 2005). The scree test is one of the alternate tests (i.e., Velicer's MAP criteria, parallel analysis, and scree test) for factor retention (Velicer & Jackson, 1990). Although the other two methods are accurate and easy to use, they are unavailable in most frequently used statistical software and difficult to calculate; thus, the scree test is the best choice (Costello & Osborne, 2005). The scree test combines both eigenvalues and factors (Cattell, 1978), and the data points above the "break" (i.e., point of inflexion) are the number of factors to be retained. Moreover, the test is only reliable when there is a sample size of at least 200 (Yong & Pearce, 2013).

The Kaiser-Meyer-Olkin (KMO) measure verifies the sampling adequacy (Kaiser, 1970; Kaiser, 1974) and ranges from 0 to 1. Normally, 0.50 is considered suitable for factor analysis (Hair et al., 1995; Tabachnick & Fidell, 2007), but Kaiser (1974) recommended 0.60 as the threshold. KMO is recommended when the cases-to-variable ratio is less than 1:5 (Williams & Brown, 2010). The Bartlett's test of sphericity is used to confirm that the example has patterned relationships (Yong & Pearce, 2013); it should be significant ( $p < .05$ ) to consider factor analysis as suitable (Hair et al., 1995; Tabachnick & Fidell, 2007).

Costello and Osborne (2005) clarify three conditions where the "cleanest" factor structure should meet for the best fit to data: "item loadings above .30," "no or few item cross-loadings," and "no factors with fewer than three items" (p.3). Specifically, for the first condition, .32 is indeed a good rule of thumb for the minimum loading of an item, as cited by Tabachnick and Fidell (2007). However, if the factors include many complex variables, for pragmatic

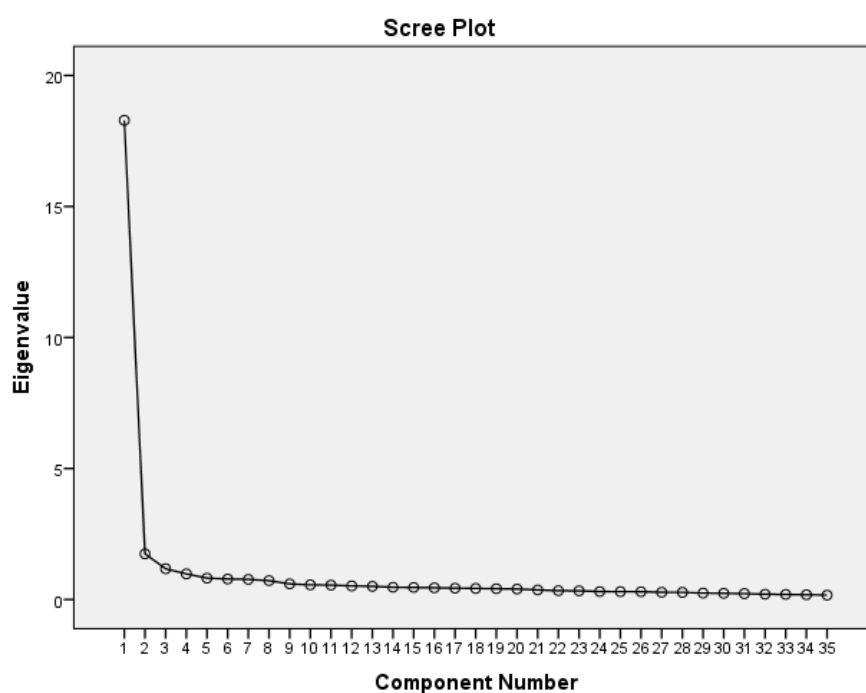
reasoning, a different significant loading cut-off of .40 can be selected (Yong & Pearce, 2013). About the “crossloading” item indicated in the second condition, Costello and Osborne (2005) explain that it is an item that loads at .32 or higher on two or more factors. They further indicate that if several adequate to strong loaders at .50 or more than .50 appear on each factor, dropping the cross-loading item from the analysis is preferred. For the third condition regarding the number of items within the factor, Costello and Osborne (2005) consider a factor with less than three items generally weak and unstable. Normally, factors with at least three items per factor above .32 is desirable (Yong & Pearce, 2013), and factors with five or more strongly loading items per factor (.50 or better) are considered desirable as solid factors (Costello & Osborne, 2005).

In the analysis for this research, when setting the missing values option and the coefficient display format, the researcher selected suppress small coefficients using an absolute value below .40 (for the “many complex variables” – items with the number 35). Exclude cases listwise was selected to prevent overestimation of factors within the large dataset, and sorted by size was also selected for the ease of interpretation to display the loadings in a descending order (Yong & Pearce, 2013).

**Initial EFA results.** The KMO measure verified the sampling adequacy for the analysis (Table 33),  $KMO = .975$ , which is above .60. Bartlett’s test of sphericity,  $\chi^2 (595) = 16,873.117$ ,  $p < .000$ , indicated that correlations among items were sufficiently large for EFA. Three factors had eigenvalues greater than 1, as the scree plot clearly illustrates in Figure 17.

**Table 33 KMO and Bartlett's Test (SPSS output – Initial EFA Results)**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.975
Bartlett's Test of Sphericity	Approx. Chi-Square	16873.117
	df	595
	Sig.	.000

**Figure 17 Scree Test Criterion (SPSS Output – Initial EFA Results)**

The initial 35-item structure explained the 60.593% of variance in the pattern of relationships among the items shown in Table 34. The percentages explained by each factor were 52.251% (Factor 1), 4.983% (Factor 2), and 3.359% (Factor 3).

**Table 34 Total Variance Explained (SPSS Output – Initial EFA Results)**

Comp onent	Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	18.288	52.251	52.251	18.288	52.251	52.251	15.543
2	1.744	4.983	57.234	1.744	4.983	57.234	14.331
3	1.176	3.359	60.593	1.176	3.359	60.593	12.741
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Based on the results of the initial EFA (Table 35), seven items (Items 2, 5, 6, 7, 10, 12, and 29) were identified as problematic and therefore removed from the item pool. Among the seven items, six items were loaded on two factors in the preliminary three-factor structure, and one item had no loadings on it. The first item was “Leaders value teachers’ ideas” (Item 2), in which the factor loading on Factor 1 was .668 and the cross-loading on Factor 3 was .478. The second item was “Teachers and parents have common expectations for student performance” (Item 6), in which the factor loading on Factor 2 was .604 and the cross-loading on Factor 3 was .458. The third item was “Teachers are willing to help out whenever there is a problem” (Item 10), in which the factor loading on Factor 2 was .536 and the cross-loading on Factor 3 was .459. The fourth item was “Teachers support the mission of the school” (Item 5), in which the factor loading on Factor 3 was .515 and the cross-loading on Factor 2 was .405. The fifth item was “The school mission provides a clear sense of direction for teachers” (Item 12), in which the factor loading on Factor 3 was .509 and the cross-loading on Factor 1 was .509. The sixth item was “Leaders in the school trust the professional judgments of teachers” (Item 7), in which the factor loading on Factor 3 was .451 and the cross-loading factor on Factor 1 was .415. The item with no loadings on it was “Teachers work together to develop and evaluate programs and projects” (Item 29).



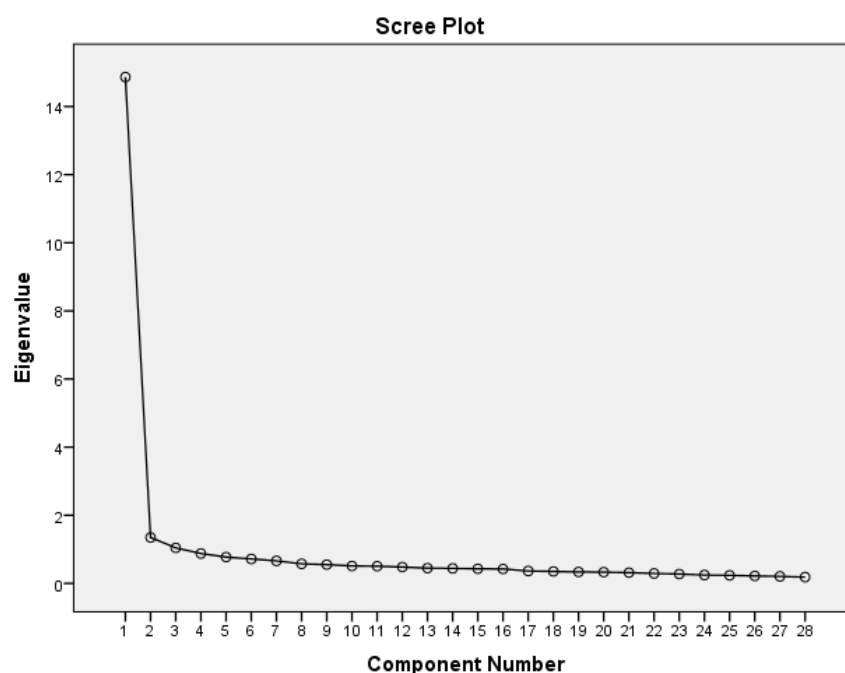
**Table 35 Pattern Matrix (SPSS out put – Initial EFA Results)**

Pattern Matrix <sup>a</sup>			
	Component		
	1	2	3
2Leaders value teachers' ideas	.668		.478
29Teachers work together to develop and evaluagte programs and projects.			
6Teachers and parents have common expectations for student performance.		.604	.458
10Teachers are willing to help out whenever there is a problem.		.536	.459
5Teahcers support the mission of the school.		.405	.515
12The school missio nprovides a clear sense of direction for teachers.	.509		.509
7Leaders in the school trust the professional judgments of teachers.	.415		.451
Extraction Method: Principal Component Analysis.			
Rotation Method: Promax with Kaiser Normalization.			
a. Rotation converged in 21 iterations.			

**Results of EFA #2.** The KMO measure verified the sampling adequacy for the analysis (Table 36), KMO = .972, which is above .60. Bartlett's test of sphericity,  $\chi^2 (378) = 12,886.281$ ,  $p < .000$ , indicated that correlations among items were sufficiently large for EFA. Three factors had eigenvalues greater than 1, as the scree plot clearly illustrates in Figure 18.

**Table 36 KMO and Bartlett's Test (SPSS Output – Results of EFA#2)**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.972
Bartlett's Test of Sphericity	Approx. Chi-Square	12886.281
	df	378
	Sig.	.000



**Figure 18 Scree Test Criterion (SPSS Output – Results of EFA#2)**

The 28-item structure explained 61.626% of the variance in the pattern of relationships among the items shown in Table 37. The percentages explained by each factor were 53.086% (Factor 1), 4.817% (Factor 2), and 3.722% (Factor 3).

**Table 37 Total Variance Explained (SPSS Output – Results of EFA#2)**

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	14.864	53.086	53.086	14.864	53.086	53.086	13.142
2	1.349	4.817	57.904	1.349	4.817	57.904	12.690
3	1.042	3.722	61.626	1.042	3.722	61.626	9.799
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Based on the results of the second EFA (Table 38), four items (Items 11, 16, 17, and 4) were identified as problematic and therefore removed from the item pool. Among the four items, two

items were loaded on two factors in the preliminary three-factor structure, and two items had no loadings on it. The first item was “Teachers trust each other” (Item 4), in which the factor loading on Factor 3 was .488 and the cross-loading on Factor 3 was .423. The second item was “Professional development is valued by the faculty” (Item 16), in which the factor loading on Factor 2 was .482 and the cross-loading on Factor 1 was .442. The two items with no loadings on them were “Leaders take time to praise teachers who perform well” (Factor 11) and “Teachers’ ideas are valued by other teachers” (Factor 17).

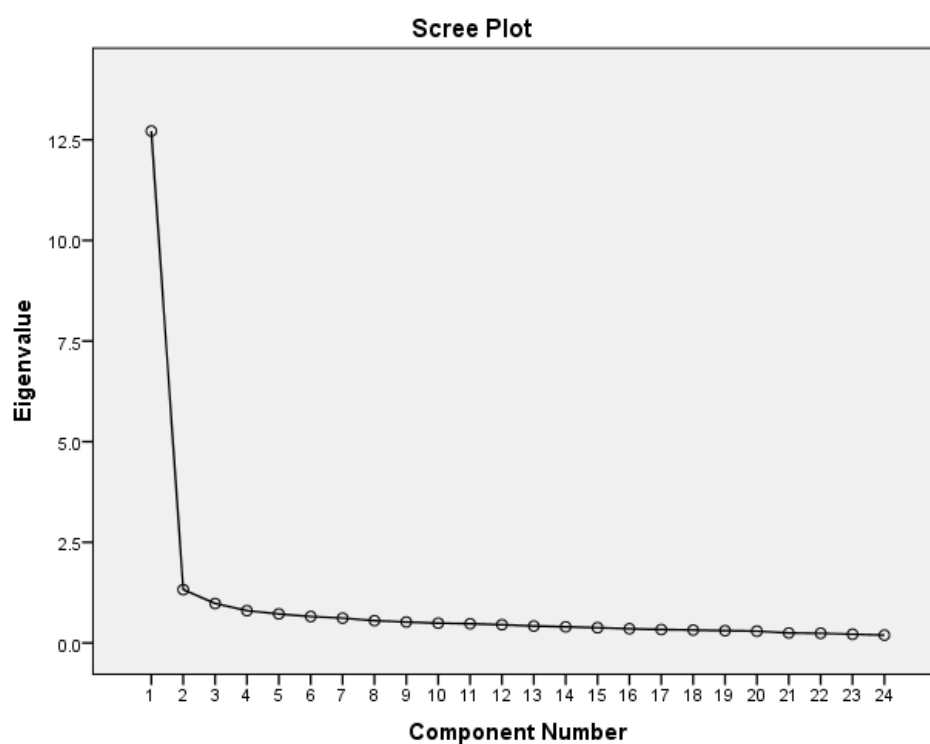
**Table 38 Pattern Matrix (SPSS Output – Results of EFA#2)**

Pattern Matrix <sup>a</sup>			
	Component		
	1	2	3
11Leaders take time to praise teachers who perform well.			
16Professional development is valued by the faculty.	.442	.482	
17Teachers' ideas are valued by other teachers.			
4Teachers trust each other.		.423	.488
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.			
a. Rotation converged in 7 iterations.			

**Results of EFA #3.** The KMO measure verified the sampling adequacy for the analysis (Table 39), KMO = .969, which is above .60. Bartlett’s test of sphericity,  $\chi^2 (276) = 10,606.647$ ,  $p < .000$ , indicated that correlations among items were sufficiently large for EFA. Two factors had eigenvalues greater than 1, as the scree plot clearly illustrates in Figure 19.

**Table 39 KMO and Bartlett's Test (SPSS Output – Results of EFA#3)**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.969
Bartlett's Test of Sphericity	Approx. Chi-Square	10606.647
	df	276
	Sig.	.000

**Figure 19 Scree Test Criterion (SPSS Output – Results of EFA#3)**

The 24-item structure explained 58.501% of the variance in the pattern of relationships among the items shown in Table 40. The percentages explained by each factor were 52.984% (Factor 1) and 5.518% (Factor 2).

**Table 40 Total Variance Explained (SPSS Output – Results of EFA#3)**

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.716	52.984	52.984	12.716	52.984	52.984	11.521
2	1.324	5.518	58.501	1.324	5.518	58.501	10.890
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Based on the results of the third EFA (Table 41), one item (Item 1) was identified as problematic and therefore removed from the item pool. The item “Teachers utilize professional networks to obtain information and resources for classroom instruction” (Item 1) had no loadings on it.

**Table 41 Pattern Matrix (SPSS Output –Results of EFA#3)**

Pattern Matrix <sup>a</sup>		
	Component	
	1	2
1 Teachers utilize professional networks to obtain information and resources for classroom instruction.		
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

**Results of final EFA.** The final two-factor structure in this study is composed of 23 items after deleting 12 items that were cross-loaded on two factors or with no loadings on it. Table 42 shows 13 items (Items 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, and 34) for Factor 1 and 10

items (Items 13, 15, 19, 21, 23, 24, 25, 30, 31, and 35) for Factor 2.

**Table 42 Pattern Matrix (SPSS Output – Final Results of EFA)**

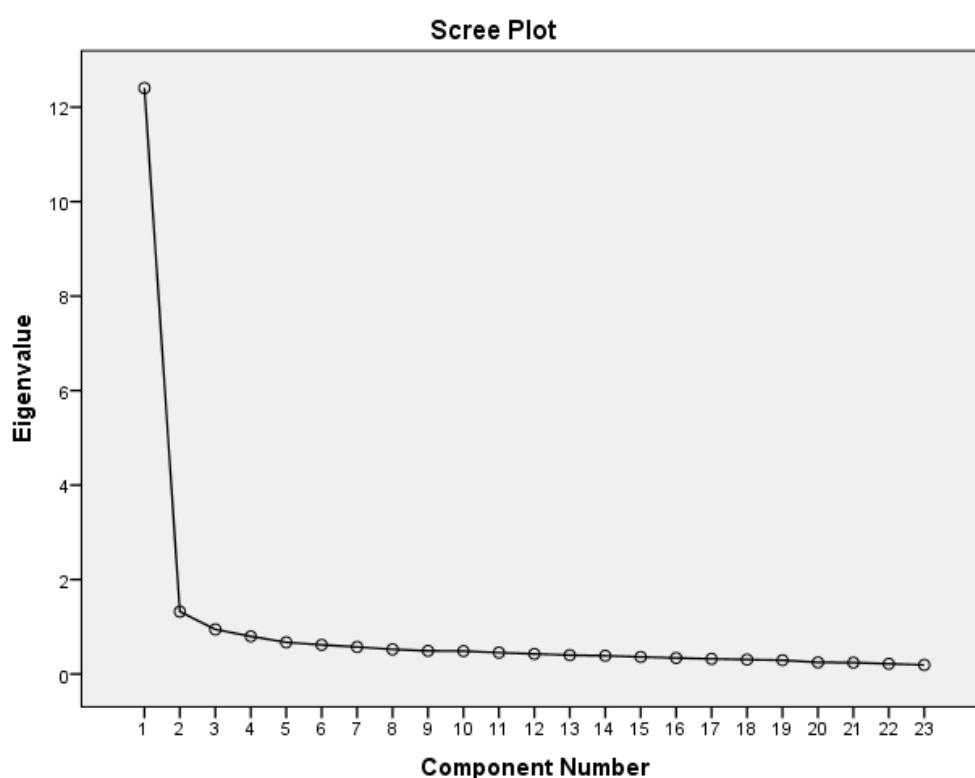
Pattern Matrix <sup>a</sup>					
	Component			Component	
	1	2		1	2
22 Teacher involvement in policy or decision-making is taken seriously.	1.006		21 Teachers and parents communicate frequently about student performance.		.911
14 Teachers are involved in the decision-making process.	.914		25 Teachers work cooperatively in groups.		.851
32 Administrators protect instruction and planning time.	.898		35 Students generally accept responsibility for their schooling, for example by being mentally engaged in class and completing homework assignments.		.809
27 The school mission statement reflects the values of the community.	.819		15 Teachers take time to observe each other teaching.		.767
26 Teachers are rewarded for experimenting with new ideas and techniques.	.749		30 The faculty values school improvement.		.691
28 Leaders support risk taking and innovation in teaching.	.702		13 Parents trust teachers' professional judgments.		.687
33 Disagreements over instructional practice are voiced openly and discussed.	.699		23 Teachers are generally aware of what other teachers are teaching.		.636
20 Teachers are kept informed on current issues in the school.	.676		24 Teachers maintain a current knowledge base about the learning process.		.509
34 Teachers are encouraged to share ideas.	.563		31 Teaching performance reflects the mission of the school.		.486
3 Teachers have opportunities for dialogue and planning across grades and subjects.	.502		19 Teachers understand the mission of the school.		.468
8 Teachers spend considerable time planning together.	.492				
18 Leaders in the school facilitate teachers working together.	.451				
9 Teachers regularly seek ideas from seminars, colleagues, and conferences.	.409				
Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 3 iterations.					

The KMO measure verified the sampling adequacy for the analysis (Table 43), KMO = .968, which is above .60. Bartlett's test of sphericity,  $\chi^2(253) = 10,371.186$ ,  $p < .000$ , indicated that correlations among items were sufficiently large for EFA. Two factors had eigenvalues greater

than 1, as the scree plot clearly illustrates in Figure 20.

**Table 43 KMO and Bartlett's Test (SPSS Output – Final Results of EFA)**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett's Test of Sphericity	Approx. Chi-Square	10371.186
	df	253
	Sig.	.000



**Figure 20 Scree Test Criterion (SPSS Output – Final Results of EFA)**

The 23-item structure explained 59.672% of the variance in the pattern of relationships among the items shown in Table 44. The percentages explained by each factor were 53.932% (Factor 1)

and 5.741% (Factor 2).

**Table 44 Total Variance Explained (SPSS Output – Final Results of EFA)**

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.404	53.932	53.932	12.404	53.932	53.932	11.276
2	1.320	5.741	59.672	1.320	5.741	59.672	10.582
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

The two factors in this study were highly correlated to each other as well, as shown in Table 45.

The correlation between Factor 1 and Factor 2 was .737.

**Table 45 Component Correlation Matrix**

Component Correlation Matrix		
Component	1	2
1	1.000	.737
2	.737	1.000
Extraction Method: Principal Component Analysis.		
Rotation Method: Promax with Kaiser Normalization.		

**Item analysis for reliability.** To test the reliability of each of the two factors, an item analysis was conducted. Normally, Cronbach's alpha reliability coefficient ranges from 0 to 1 (Gliem & Gliem, 2003). George and Mallery (2003) provide the following conditions as the rules of thumb, “ $\alpha > .9$  – Excellent,  $\alpha > .8$  – Good,  $\alpha > .7$  – Acceptable,  $\alpha > .6$  – Questionable,  $\alpha > .5$  – Poor, and  $\alpha < .5$  – Unacceptable” (p.231). The Cronbach's  $\alpha$  for Factor 1 was .940 and for Factor 2 was 0.918 (Table 46). Therefore, both factors on this scale had excellent internal reliability.

**Table 46 Cronbach's  $\alpha$  for Factor 1 and Factor 2**

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of items
Factor 1	.940	.942	13
Factor 2	.918	.919	10

**Summary.** Both the validity and reliability of the instrument were examined in this study



through EFA and item analysis. The initial SCS survey instrument contained 35 items. However, based on the result of EFA, 23 items remained. A two-factor structure was confirmed for the SCS instrument, and it explained 59.672% of the variance in the pattern of relationships among the items. The reliability of both factors was excellently high with Cronbach's alphas greater than .918. Therefore, the translated version of the SCS questionnaire is determined as valid and reliable to measure the school culture of 23 primary schools in K district by the remaining 23 items of the two-factor structure — Collaborative Leadership (CL) including item 3, 8, 9, 14, 18, 20, 22, 26, 27, 28, 32, 33, 34 and Collaborative Partnership (CP) including item 13, 15, 19, 21, 23, 24, 25, 30, 31, 35 (more details of how to named and defined the two factors refer to sub-subsection 3.6.3).

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