New Attempts for School Improvement and Partnerships in Hong Kong: Business-University-School Partnerships for School Improvement

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Abstract

This paper presents findings from a qualitative study of business-university-school (B-U-S) partnerships for school improvement in Hong Kong, and Project W is selected as the case project, from which the data are generated. The study aims to explore the underlying constructs of the initial stage of B-U-S partnerships from five domains: (1) rationales -- Oals and initial attitudes; (2) operations -- Resources and organizations; (3) roles -- Each party's roles; (4) interactions -- Communications among three parties; (5) expectations -- Expectations and obstacles.

Keywords: school improvement, partnerships, business-university-school partnerships

1 Introduction

As in many other cities, education reform is in full swing in the last two decades, Hong Kong is no exception. All kinds of reform initiatives have been implemented since the year of 2000. Attempts to improve school performance and build up teachers capacity through partnerships among universities, schools, governments and other institutions are emerging. Stated by Hopkins and Reynolds (2001), school improvement has gone through three phases, and Muijs (2010) proposed that practice of school improvement has already moved to a fourth phase: The collaboration. Partnership in education is not a new-born thing. Since the mid-1980s, the upsurge in partnerships forming among schools, colleges, businesses and communities could be characterized as nothing short of an "educational movement" (Wallace, 1993). Initial preparation, as well as lifelong learning of the workforce brings business and education into partnership; likewise, the articulation of school-university programs as well as preservice and inservice teacher education joins school and university (Borthwick, 1995). In recent years, studies on partnerships in education remains a hot topic (Blank, Jacobson, & Melaville, 2012; Dumlao & Janke, 2012; Epstein, 2010, 2011; Faulconer, 2010; Gestwicki, 2013; Sanders, 2006, 2008; Sheldon, 2007; Willems & Gonzalez-DeHass, 2012).

In the academic literature, fruitful studies have been done to analyze U-S (Baker et al., 2011; Clark, 1988; Su, 1990) and B-S partnerships (Johnston, 2009; O'Connell, 1985; Zacchei, Mirman, Haley, Markman, & Murray, 1986), including the partnership categories, the conditions and obstacles for success and so on. However, the studies about B-U-S partnerships are still limited.

This study is a very fascinating and challenging attempt for school improvement through business-university-school (B-U-S) collaboration. Named Project W (2011-2017), the collaboration is initiated by a commercial corporation C in Hong Kong, joint-hand with Project Q. It is a holistic, interactive and organic school improvement project launched by University U. Project W, a 6-year program, started in mid-2011, is a holistic school improvement program targeting 10 secondary schools in Hong Kong, and most students in these schools are classified as Band III[1] students, with low socioeconomic status and academic achievements. Corporation C donated $150,000,000 to this project in supporting development plan of individual school (e.g. teaching and learning, student growth, extra-curricular activity, life-goal planning, teacher development) as well as in sponsoring Project Q's professional school-based support for the 10 schools. Under this pioneering partnership program, participant schools are supported with considerable inputs from various sources (financial, social and professional school-based support). It connects corporate commitment in social responsibility with the professionalism of the university in facilitating students' whole person development and school improvement. The experiences conceptualized in the project are invaluable and insightful for potential development of B-U-S collaboration. The purpose of this study is to identify the underlying constructs of the initial stage of B-U-S partnership. The following research questions are used to guide this study:

- Why do the three parties involve themselves in the B-U-S project?

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[1] In Hong Kong secondary students are categorized according to the academic achievement in the primary school as Band I, Band II or Band III, 33.3% each. Schools accept most Band III students are termed as Band III schools.

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• How does the project operate?
• How do members define their roles and the roles of other members in the process?
• How do the three parties interact with each other?
• What are the members' expectations for the project?

2   Research Context and Framework

A partnership is a mutually supportive arrangement between individual volunteers, businesses, government agencies, and community organizations and a school or school district often in the form of a written contract in which partners commit themselves to specific objectives and activities to benefit students (National Association of Partnerships in Education, 1991). In Hong Kong, since the late 1990s, the local government and the Education Bureau have played important roles in bolstering the partnerships in education. In October 1997, the government established the Quality Education Fund (QEF) to finance projects for the promotion of quality education in Hong Kong. Formally established in 1998 with an allocation of $5 billion, the QEF provides an effective channel for worthwhile projects from the school education sector to be funded. The QEF mainly caters for worthwhile non-profit initiatives within the ambit of basic education, i.e. pre-primary, primary, secondary and special education. With the support of QEF, local universities, business sectors and non-profit organizations have developed many projects to collaborate with schools. In July 2004, the Education Bureau, which was called Education and Manpower Bureau (EMB) at that time, set up the Education Development Fund (EDF) with a grant of $550 million approved by the Finance Committee of the Legislative Council. The purpose of the EDF is to provide schools with professional support and to enlarge their capacity to take forward education reform measures through a variety of school-based professional support (SBPS) programs. University-School (U-S) support programs are important parts of the SBPS programs. For the Business-School (B-S) collaboration, the School-Company-Parent (SCP) program (formerly named as School-Company Partnership) was created by the Young Entrepreneurs Development Council in 2003. Since 2007, the SCP program has been funded by The Hong Kong Jockey Club Charities Trust. Business sectors, secondary schools and parents collaborated in the SCP program and aimed to foster the "Entrepreneurial Spirit" in the young people. Under the auspices of the above funds, U-S and B-S partnerships have developed rapidly. For example, starting from nine companies and schools in the first year of SCP program, over 570 companies and schools have formed "School-Company Partnerships," benefiting over 18,000 students. However, B-U-S partnership is still a new thing, and there is no ready-made experience and pattern in Hong Kong.

Through the literature review, we note that the researches on the development of S-U-B partnerships are also limited. The most detailed description and analysis of B-U-S partnerships is in a series of studies conducted by Borthwick (1994, 1995), Borthwick, Padak, Shaklee, and Peck (1992), Borthwick, Stirling, Nauman, and Cook (2003). Borthwick pursued the development of B-U-S partnerships through his work in the Cooperative Alliance for Gifted Education (CAGE) project, which utilized three partners in Ohio-Kent State University, the Cleveland Public Schools, and International Business Machines (IBM) -- To enhance educational programming for the minority and/or educationally disadvantaged students in both regular and gifted education. Borthwick (1995) sought information about members' expectations for, evaluation of, roles in, and commitment to the CAGE project. Content analysis revealed five domains which encompassed the data: (1) focus -- Goals, context, outcomes; (2) members -- General characteristics, commitment, roles and responsibilities; (3) needs and resources -- Funding, other material resources, connections/sharing/exchanges; (4) interactions -- Interactions, decision-making/action planning; group dynamics, inquiry into partnership process; and (5) stages.

Several other studies on B-U-S partnerships focused on science or mathematic learning. Beyerbach, Weber, Swift, and Gooding (1996) analyzed The Kids at Work project, which was initiated by Project SMART (Science/Mathematics Applied Resources for Teaching) to improve elementary math and science teaching. The Kids at Work involved elementary teachers, business employees, university faculty and parents in designing and implementing community field trips and related classroom activities which helped students understand how science and mathematics concepts were actually used in the real world of work. Henderson and St. John (1997) examined the accomplishments of a collaborative project, entitled "Thematic Mathematics in the Middle School," which was set to enhance student learning and motivation in mathematics in a middle school serving a changing population of students, the majority of whom were Latino. The partnership joined together the mathematics teachers and administrators of the school, university mathematicians and educational researchers, and the management and workers from a research-and-development-oriented electronics firm. The partners in the project believed that a thematic approach to mathematics instruction might address a number of hypothesized causes of low achievement. Evaluation results of these two projects were positive.

The B-U-S studies listed above do provide lots of insights for making B-U-S analysis, but as Project W is a

more holistic approach for school improvement (including not just the micro level of enhancing students' learning experiences and motivation, but also the macro level of building a favorable learning environment), we should develop a more adaptable content analysis for Project W based on the literature review. As the purpose of this study is to identify the underlying constructs of the initial stage of B-U-S partnership, we adapted the framework of Borthwick (1994) as Table 1. We added initial attitudes into the framework, as in our pilot study we found that this element would affect the later partnerships.

3   Methodology

This study employed a case study approach. In order to identify the underlying constructs of the initial stage of B-U-S partnership, we chose W as the case project for an in-depth inquiry. Our application of this case study approach was not meant to critique but to understand and provide a thick, rich description of B-U-S partnership experiences and varied perspectives of different parties. We collected data from multiple sources for triangulation of information, including interviews, documents, and observations of several activities.

Project W used "adopt-a-school" approach: The corporation C assigned ten different Business Units (BUs), and each BU took charge of one school and U assigned a team of School Development Officers (SDOs) to provide school-based support for each school. In such

circumstances, we used 40-to-60-minute semi-structured interviews to interview 17 participants from all the three parties, focusing on participants' description of the development and implementation of the project W, roles of each party, activities developed, expectations for the project, and project benefits, barriers and suggestions for the project's future development. The interviewees were listed in Table 2. The interviews were all tape recorded and transcribed for analysis.

Besides the individual interview, we held two group interviews to learn more about core group members' views about the project. One group interview invited core group members from 6 schools ($N = 18$), while the other invited members from 4 schools ($N = 8$).

For the purpose of triangulation, we conducted document analysis (i.e., 2011-2012 year plans about project W and stocktaking reports of ten schools and activities records) and nonparticipatory observations (i.e., committee meetings, S-U meetings, S-B meetings, exposure visits conducted by BUs and some professional support activities conducted by U). All the interviews and observations occurred over the first year of Project W from August 2011 to July 2012. The data analysis was conducted using NVivo 8, and to ensure reliability, the codes and themes required consensus with two additional coders. The data codes are listed in Table 2. Based on the data codes list, each record we used in this paper is given a code.

Table 1 Research Framework for the Initial Stage of B-U-S Partnerships

The initial stage of B-U-S partnership	Rationale	Goals
		Initial attitudes
	Operations	Resources
		Organizations
	Roles	Each party's roles in the project
	Interactions	Communications among three parties
	Expectations	Expectations/How to evaluate the project
		Obstacles

Table 2 The Code List

Data source code	Party code	Interviewee code
Individual interview (I) Group interview (GI) Document (D)	School (S)	Three core group members of one school (L\X\S); Group interview of core group members from four schools (CP4); Group interview of core group members from six schools (CP6)
	University (U)	Seven SDOs (A\B\C\D\E\F\G)
	Corporation (C)	The responsible leader of the project (Y); The project coordinator (N); Group interview of three members from BU1 (BU1); Group interview of two members from BU2 (BU2)

Example: We have different priorities, but we do have a common goal is that we want the best for the kids. (GI-C-BU2)

In the above paragraph, the code *GI-C-BU2* means a quotation from a group interview record of the members from BU2 of Corporation C.

4　Findings

4.1　Rationales

Based on the data collected, the rationales for the project could be analyzed from the following aspects: Goals and initial attitudes.

4.1.1　Goals

In the studies on partnerships, shared goals, agreed goals or common goals are listed among the important elements of successful partnerships (Blank et al., 2012; Borthwick, 1994; Butterfoss, Goodman, & Wandersman, 1993; El Ansari, 2004). Common goals help to sustain partnerships in the long run, enhance community school efficacy, and encourage each stakeholder to clearly define its role in meeting specific goals (Blank et al., 2012). In our study, data analysis reflects that the three parties have different priorities, but they have a common goal for the project: Doing some good to help these students and schools. This belief has been mentioned by different parties.

> Business: We have different priorities, but we do have a common goal is that we want the best for the kids. (GI-C-BU2)
> University: The business doesn't expect the students get higher academic scores because of the project, while they just want to see the school could change for the better. This belief really impresses me. Our team (Q project) also has the similar goal. (I-U-A)
> School: I hope that my students could change for the better, and my school could show a marked improvement. This is my dream… (I-S-L)

4.1.2　Initial Attitudes

Sherif, Sherif, and Nebergall (1965) defined attitudes as "the stands the individual upholds and cherishes about objects, issues, persons, groups, or institutions" (p. 4). Initial attitude appears to be the most important determinant of attitudes after information provision (Frewer, Howard, & Shepherd, 1998). Initial attitudes of different parties are explored in this study as part of the rationales for project W.

Initial attitudes of the business sector. The Cooperation C has always been giving time to charity to demonstrate its corporate society responsibility. In recent years their attitude has changed from passively donation to actively seeking something of social value. In recent years, they initiated many projects to help the youth. Project W is one of those projects aiming at helping students in band III schools. They have done some research on the target group and found that the problems in band III schools were complicated, which could not be solved only by providing resources but the support for teaching and learning were needed. Given this, Q as an experienced school improvement project was included in.

Initial attitudes of the university. From the data we gathered from interviews with SDOs, we found that most SDOs viewed project W as a positive stimulus to schools and felt a strong sense of responsibility to improve schools. However, Some SDOs mentioned that in the beginning they doubt that the business would pay more attention to the profits and expect quick results. But when they began to collaborate with the business, the passion and the attribute shown by the initiators of the business cooperation assured that the purpose of the business was mainly on helping the schools and the students.

> At first I'm suspicious of this project. ......The business always has some purposes to consider, especially consider the profits. But after a month, I changed my thought. I think that they have simple purpose and just want to solve some problems in schools. They do the project with heart. Although very busy, they are always ready to offer help. (I-U-F)

Initial attitudes of schools. The initial attitudes of business and university were generally positive, but those of schools were different, which could be divided into three categories:

(a) Welcoming the B-U-S partnership and participating actively in various activities. These schools included two types. One type was previous participant schools of project Q, which have built mutual trust with Q. As they trusted the team of Q, they also trusted this project.

> We have collaborated with Q for a long time, so we are familiar with each other. So when they called me, I would not be wary of this project. ......Although we had to decide (whether to join in the project) in a limited time, we processed it quickly. When I talked to the school board about this project, we agreed on the idea and decided to join in it immediately. (GI-S-CP4)

The other type was totally new school. But the principal and the school board viewed this project as a meaningful thing to school, thus they wanted to have a try.

I'm a simple person, and I just think that we will have more money and it (Project W) could help my students. I telephoned our school supervisor and told him the whole thing, and then he said that "it's ok, we can join it." Then it starts. (GI-S-CP4)

(b) Being wary of the partnership and worrying about the intervention by the business sector. In the beginning, this kind of schools expressed reservations about the collaboration with the business.

When we reported it (Project W) to the school board, they are very panic about this, as there had been no such collaboration before in Hong Kong. They doubted that if there would be some hidden purposes that they could not know. For example, would the business utilize our school to do some promotion? Would the business intervene in our school affairs? ......However, although we were wary of the partnership, we could feel that they had a sincere purpose and could provide a lot of money to help our students. At that time, there were conflicting attitudes toward this project in our school. We were on the alert to decide to join in the project. (GI-S-CP4)

(c) Welcoming the financial support provided by the business sector but being reluctant to receive the professional support from the university. This kind of schools misunderstood the project because of the late explanation of Q's roles. In the beginning, some schools viewed Q just as the external committee member and did not know Q would provide professional support. Therefore, these schools expected the resources from the business sector and were not ready to make great efforts to improve teaching and learning through collaboration with Q.

4.2 Operations

Operations of a project, called as program characteristics in some studies, were also the critical factors of partnerships. In effective partnerships, the program should be "well-planned, viable and fit with available resources and organizational size" (Department of Education, Employment and Workplace Relations, 2010). In this section, the operations of the partnership of Project W were analyzed in the aspects of resources and organizations.

4.2.1 Resources

The resources for schools included human, financial, physical and professional support from the other parties. As human resources and professional support will be discussed in the later section, we now focus on the financial resources in this part. In the first year, the resources were allocated in deficiency view. The assumption was that these ten schools entered the program with deficiencies of different kinds, such as the deficiencies of equipment. However, from the data which were collected from the school plans of the second year, we saw the approach direction has changed a little, which meant the focus has been changed from the deficiency to development. In the ten school year plans of 2011-2012, we found that there were four schools listing improving hardware facilities as the top priority program and six schools list hiring more staff (e.g. teachers, teaching assistants and social workers, etc.); while in the year plans of 2012-2013, seven schools listed hiring more staff and three schools listed students cultivating (e.g. art and sport education, etc.). From Table 3, we could see that improving hardware facilities were not the focus in the new plans and the direction pointed to more concerns about teaching and learning and students development.

Besides the school-based resources, there was a resource pool for all schools.

This project will allocate HK$2,500,000 to each project school each year, for a consecutive of six years, of which a total of HK$1,500,000 will be placed in the Resource for collective use. We also fund Q to provide professional support to each school. The idea of Resources Pool is stemmed from the concept of group purchase in business, and we will use this part of money to plan some joint school activities. (I-C-Y)

4.2.2 Organizations

Several delegations from different parties constituted the advisory committee to take charge of the whole project. Under the committee, each party had its own organization to run the program. In each school, there was a core group consisting of principal and middle managers from different subjects; in the Central Office (CO) of the project in corporation C, several people were in charge of the detailed operation work; in each of the ten BUs, a group of volunteers were recruited for the program, whose compulsory services were also calculated as their work load; and in the university U, a team of SDOs of project Q was formed to provide the professional support. Figure 1 portrayed the organization structure of Project W.

Table 3 Proportion of Each Item in the Yearly Budget Plans of Ten Schools

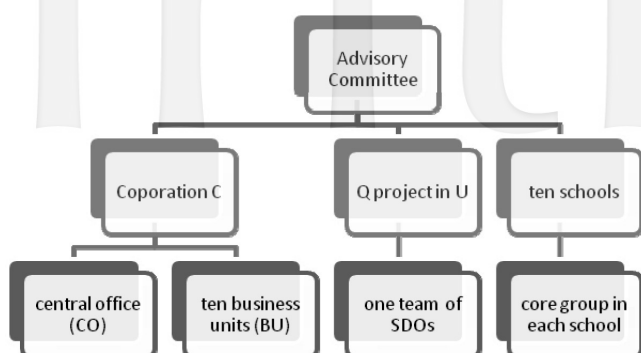| Year	Curriculum and Textbook	Hiring More Staff	Student Development	Career Planning	Student Scholarship	Hardware Facilities	Others
2011-2012	8.08%	32.24%	20.94%	2.96%	5.14%	25.18%	5.47%
2012-2013	8.34%	37.32%	26.47%	3.05%	4.56%	17.86%	3.04%

Figure 1 Organization Structure of Project W

4.3 Roles

In order to smooth the functioning of the partnership, it was necessary to clarify the roles and responsibilities of each party (Borthwick, 1994; Grobe, 1990; O'Connell, 1985; Padak, Shaklee, Peck, Barton, & Johnson, 1994; Wangemann, 1988). We collected from interviewees the data about roles, and they expressed their views about roles of themselves and other parties. We summarized their roles in Table 4.

4.3.1 Roles of the Business Sector

For the business sector, the roles were divided into two parts: CO and ten BUs.

Roles of CO. The main roles of CO can be classified as: Distributor of the funding, manager and monitor of the whole process, developer of the resource pool.

(a) Distributor of the resources. CO was responsible for distributing the resources to ten schools and Q. Meanwhile, CO paired the ten BUs with ten schools to provide counterpart assistance.

(b) Manager and monitor of the whole process. CO has

Table 4 The Roles of Each Party in Project W

Parties	Roles
CO	• Distributor of the funding • Manager and monitor of the whole process • Developer of the resource pool
BU	• Pairing partner of schools • Message conveyer between CO and schools • Implementer of company visit
University	• Expert for schools • Consultant for schools • Interpreter for the business sector • Recorder of the project
Schools	• Beneficiary. • Proposer of the school-based budget plan • Implementer of the plan

done a lot of management work to organize meetings, arrange the company visits and take on the financial work. Meanwhile, CO set up principles for schools to make their budget plans and monitor the process.

(c) Developer of the resource pool. The resource pool was the idea of CO, and they have developed many activities for the students in the first year, such as "Overseas Experiential/Exchange Trip," "Job shadowing in summer" and so on. However, as the capacity was limited, not all of the students had the chance to attend these activities. CO has also arranged many company visit activities for students to broaden their views and help them develop the career plans.

Roles of BU. The roles of BUs included partner of schools, message conveyer between CO and schools, and implementer of company visit.

(a) Pair partner of schools. Each BU was paired up with one school. BUs provided various supports to their pair schools and helped schools to make the yearly budget plans. The various support included raising the funding for partner schools, communicating with other BUs to get resources needed by pair schools, providing unused supplies to schools and practicing oral English with students, and so on.

(b) Message conveyer between CO and schools. Another important role played by BUs was message conveyer between CO and schools. CO regularly organized BUs to discuss policies about the project and BUs conveyed the meeting content to their pair schools, such as guidelines or principles about the budget planning. Meanwhile, BUs reported the project progress to CO.

(c) Implementer of company visit and other career education related works. In project W, CO arranged student visits to BUs. BUs developed the visit program and prepared resources and manpower to implement the visit activities. In most of the visit activities, BUs would arrange some colleagues to share their working experiences and teach students interview techniques.

4.3.2 Roles of the University

The team of SDOs of project Q in university U served a variety of roles in the partnerships, involving expert, consultant, interpreter, intermediary to promote the mutual understanding between schools and business sector, and recorder of the project.

Expert for schools. The most important role of SDOs was providing school-based professional support. SDOs planned the support aspects according to two concerns. First, the needs proposed by schools. For example, if teachers felt that they needed some professional support to improve the mathematics teaching, then project Q would allocate some mathematics SDOs to help them. Second, the support plans suggested by content analysis and SDOs'

professional judgments. Before entering one school, SDOs would try to do stocktaking about the whole school through observation, interviews and questionnaires. Then based on the stocktaking report and discussion with the principal and middle managers, SDOs would judge what areas the school should improve.

Consultant for schools. Besides providing professional support for some specific subjects, SDOs would also give advices on schools' other issues, such as developing plan, administration, facilities and so on. Moreover, SDOs at the same time supported schools from other subprojects of Project Q, so they could organize teaching experience sharing of different schools and school visits activities, if necessary, to enhance exchanges of experiences among schools.

> My role is a consultant. I give advices on every aspect related with Project W, such as facilities, teaching and learning, administration and planning. I hope they could avoid detours. If something has been tried in other schools, I will remind them the possible problems; if they encountered new problems, I could give some suggestions and guides. (I-U-F)

Interpreter for the business sector. CO and BUs had the enthusiasm to support schools, but they had limited knowledge and understanding of the education context. Therefore, SDOs would interpret some education phenomenon for them and give some advices as to how to support the schools, such as the company visit activities.

Intermediary between the business sector and schools. Related with the above roles, the team of Q would adjust business' unreasonable expectations on schools, explain schools' consideration about the budget to the business and inform the business of schools' difficulties and so on.

> I think I'm taking on an interesting post. ......I will explain to the BU what the school would like to do, the reason, the meaning of the budget plan. (I-U-G)

Recorder of the project. Project Q recorded the improvement process of each school to provide some evidence about the project effectiveness, collected data for empirical research, and accumulated experience for future work.

4.3.3 Roles of Schools

Roles of schools were relatively simple, including beneficiary, proposer of the school-based budget plan and implementer of the plan.

Beneficiary. The initial purpose of this project was to help the students in these ten disadvantaged schools. Therefore, schools were the main beneficiary in this project,

as they could get the resources and support from both the business and the university.

Proposer and implementer of the school-based budget plan. In this project, schools had to propose their own budget plans and they could also discuss the plan with their pair BUs and SDOs to ensure the plan could get permission from the advisory committee. When permitted, they would cooperate with external support to implement these plans, through coordinating the internal staff and resources.

> When join in the project, we know that we would get a lot of money. But it's a question about how to use the money….. First, we used HK$500,000 of the HK$1,500,000, which is a third of the total amount, in teacher and learning and students activities. Second, we need to employ one person to do the coordination which can reduce our administration workload. Our budget for this job's annual salary was HK$250,000, which was equal to a fresh teacher's starting annual salary (we didn't employ a new teacher). We selected three existing teachers to do this work, and cut down one class for each teacher to reduce their teaching workload. Third, we used HK$500,000 to the colleagues and students. Teachers and students could hand in their own proposals, which should be limited from HK$50,000 to HK$80,000. So we can support five or six proposals. (GI-S-CP4)

4.4 Interactions

In this study, interaction meant the communication between or among the different parties. Prepartnership conversations enabled participants to match their expectations about roles and commitments, program content, and external funding. (Borthwick, 1994, p. 85). When negotiated successfully, differences among different parties could be complementary and enhanced partnerships; when handled poorly, differences could lead to negative consequences like hurt feelings, jeopardized outcomes, or wariness about future partnerships (Dumlao & Janke, 2012). Therefore, encouraging open dialogue among multiple partners was an important strategy for building and continuing partnerships (Blank et al., 2012). In the initial stage of Project W, most of the interactions involved two parties, such as S-U, CO-U, BU-U, CO-S, BU-S or CO-BU. The interactions involving all the three parties only happened in individual cases, such as when the schools proposed the yearly budget plans. We summarized the interaction parties and their inter action content in Table 5.

4.4.1 S-U

In the beginning, the interactions between schools and SDOs were largely around doing stocktaking and building trust, especially for those schools which were

Table 5 Interaction Parties and Interaction Content

Interaction parties	Interaction content
S-U	SDOs do the stocktaking to review the whole schools. SDOs communicate with principals and related teachers about the specific aspects to provide professional support. SDOs communicate with teachers about how to prepare the company visits.
CO-U	Senior managers in CO and SDOs discuss and share the progress of each project school.
BU-U	BUs and SDOs could know more about the pair schools from each other, and then they could develop and adjust the supporting points in schools.
CO-S	CO sends emails about the small programs in resource pool to schools and receives schools' replies. CO organizes formal meetings to invite advisory committee and the core group of ten schools to talk about schools' yearly plans.
BU-S	BUs are invited by schools to attend some school meetings and activities, including administrative, academic and ceremonial activities. BUs also invite teachers and students to participate in their activities.
CO-BU	CO organizes the related colleagues in ten BUs to attend regular meetings to share their experiences of the project. CO posts the ideas or principles from the advisory committee to BUs.
B-U-S	The schools' yearly budget plans are proposed by each school to follow the directions made by CO, but in the making process, schools should consult with SDOs and BUs. CO and BUs participate in several school-based professional support activities provided by SDOs.

not familiar with Q. When taking stock of schools, SDOs could interview different parties in one school to get as full a picture as possible, including the principal, middle managers, teachers from different subjects and the representatives of students. As interview covered only a few teachers, some SDOs thought that class observation might be a good chance for them to communicate with most teachers since they could give face-to-face feedback to teachers.

Class observation is a good turning point, because I could have face-to-face interactions with individual teachers and take the project directly to them. As in the beginning, we just communicated with the principal about the budget, did questioners, and interviewed some people. For most of the teachers, the distance between us is far. When we observed their classes, they were nervous in the beginning. But after the observation we could give feedback to them individually and then they found that we could have so much professional interactions with them This made the teachers feel much better. So afterwards, when we prepared the professional day for them, they welcomed our participation. (I-U-G)

After the stocktaking, SDOs communicated with principals and related teachers about the specific aspects to support. When support aspects were set down, SDOs could

do the specific collaboration and the interactions remained in the collaboration process when needed. Besides the professional support, in the first year, SDOs have spent a lot of time communicating with teachers about how to prepare for the company visits. Most of the above interactions were irregular, but Q also have held several formal regular meetings and invited the core group of ten schools to receive their feedbacks. These meetings also provided chances for ten schools to share their experiences.

4.4.2 CO-U

Most of the interactions between CO and U were through formal meetings. In these meetings, senior managers in CO and SDOs from project Q discussed and shared the progress of each project school. In some cases, the representatives of each BU also joined in the meetings. Through these meetings, CO could grasp the overall progress and adjusted some directions of the project accordingly.

4.4.3 BU-U

Compared with CO, BUs and SDOs had more interactions with the pair schools. Telephones, emails, informal meetings were the most common interaction channels. Through these interactions, BUs and SDOs could know more about the pair schools from each other, and then they could develop and adjust the supporting points for schools. Some BUs also held regular meetings, for example, once every three months, with SDOs to discuss their pair schools.

The colleagues of BU1 are very positive and warmhearted and they often telephone me. If they knew something special about the school, they will tell me. Also I will tell them what's happening in the school. …...They want to learn more about the school. We have had many long-time telephones. ……The colleagues of BU2 are very interesting, they often invite us to attend their activities. …….I think it's right. Face-to-face meeting is necessary for interpersonal interactions. You cannot communicate with others only through emails and telephones. (I-U-G)

4.4.4 CO-S

The interactions between CO and S were mainly around the resource pool and budget plans. The common interactions channels of their interactions were emails and formal meetings. CO was responsible for sending emails about the small programs in resource pool to schools and receiving schools' replies of their willingness to join in the programs. But there seemed to be some problems with the interactions through emails, as some schools could not reply them in time. CO was also responsible for organizing advisory committee to review schools' yearly plans. They held formal meetings, and core groups of ten schools should report their new plans for the next academic year and reviewed the effects of their last years' progresses. At the end of the first year, through emails CO posted some principles for schools to write the new yearly plans.

4.4.5 BU-S

As CO has not regulated the frequency and channels of interactions between BUs and their pair schools, there were different ways for their interactions. In general, the interactions between BUs and their pair schools were frequent and diverse.

BUs were invited by schools to attend some school meetings and activities, including administrative, academic and ceremonial activities.

Our pair BU is very helpful. He (the leader of the school's pair BU) visit our school frequently, and at least once every month. He has attended many activities. For example, last week we did the lesson study report, and he sit in the meeting from 1 pm to 7: 30 pm. He is very warmhearted. ......Sometimes after he sit in the school board meeting, he would give a brief talk about the meeting to his colleagues and ask them to follow. Because of his attitude and leadership, his colleagues do not dare snub the project. So our interactions are good. (GI-S-CP6)

BUs also invited teachers and students to participate in their activities, such as the annual staff party. Some BUs and their pair schools held some interaction programs, such as sport match; and some BU held regularly luncheons with the principal.

We will have lunch together once every three month. We will communicate with each other about the project. I also send an email about the school information to them every month. The interactions between us are very good. (GI-S-CP4)

4.4.6 CO-BU

The interactions between CO and ten BUs were mainly through internal sharing meetings. CO would organize the related colleagues in ten BUs to attend regular meetings to share their experiences of the project. CO would also post the ideas or principles to BUs, which came from the advisory committee of the project.

We (CO) are responsible some central planning work. For example, for the 2012-2013 school plans, we would organize ten BUs to communicate with schools and prepare the meeting. We will give BUs some overall directions and guidelines. Because we have an advantage, we know what have happened in ten schools. We encourage our BUs to share their experiences and learn from each other. We don't set a standard model for them and encourage them to bring out the sparkle ideas. We value their uniqueness. (I-C-N)

4.4.7 B-U-S

The interactions involving all the parties mainly focused on the schools' yearly budget plans. The plans were proposed by each school, but in the formation process, schools should follow the directions guided by CO and consult with SDOs and BUs. Sometimes, businesses also participated in several professional support activities, such as stocktaking report and class observations.

In the beginning, they (businesses) really liked to directly contact with schools, but afterwards they felt that it was just a passion and they could do limited things. So now we have begun to work together. For instance, when they observe the classes, they don't know what they should observe and what they could do after the observation. Then we would tell them the problems we have observed........ We also explain the problems in schools through stocktaking report. "This is a personal problem, this is an administrative problem and this is a teaching and learning problem......" (I-U-A)

4.5 Expectations

Business, university and school partners come to their joint endeavors "from different worlds" (Dumlao & Janke, 2012). Public schools were Not-for-Profit (NFP) organizations, and NFP organizations believed that "the business sector often does not clearly understand a number of common characteristics of the Not-for-Profit sector. This creates challenges when establishing and maintaining a relationship with a NFP organization" (Center for Corporate Public Affairs, 2008). As mentioned previously, the three parties had common goals for the project. However, their expectations for the effects were different. For example, business sectors would like to see some quantitative results, for instance, the change of students' academic results, while schools thought that most of the programs' effects cannot be quantified, such as the change of students' attitudes and teachers' professional development. In such case, SDOs had to play the intermediary role to balance their expectations. In this section we report outcomes of data analysis related to the expectations of different parties and the potential obstacles in Project W.

4.5.1 The Expectations of Different Parties

The expectations of the business sector. The data analysis showed that the business sector emphasized effectiveness. Colleagues of the business have adjusted their expectations on students' academic achievement through U's interpretation and the contacts with schools, but they still preferred setting up some indicators to describe and record the effectiveness of this project.

> CO: Actually I know that Q is collecting some data base, and then we could track the data. We know that it's difficulty to use key performance indicator (KPI) in schools. For example, you could not say "in this year there are 5% of the students could enter the colleges, and after six years there should be at least 15% of the students could enter" ……But we could track students. For example, we measure their interests in study. In the first year, these students in form 1 were not interested in study, and their scores in this item were 2.5; however, their scores are continuously increasing in the six years. I think it's OK. (I-C-Y)

The above data have shown the concern of the business sector which focused on the effectiveness of students, while some BUs thought that this project should pay more attention to the effectiveness of teachers.

> So it's unrealistic for me to say "okay, by 6 years, we are going to be in Band 2, that's not going to happen, because the location will always be the same, the student makeup will always be the same." It's how we

actually, my kind of idea is, need to really target on the teachers. Because no matter how much we throw at the students, if the teachers are not supportive, if the teachers are not trained properly, their capacity is not enough, the students, end of the day, no matter how many tools, how many equipment we are going to give them, they are going to be able to achieve what we hope they could achieve. So this is my kind of thought. (GI-C-BU2)

The expectations of the university. For the team of SDOs of project Q, they had more rational expectations on the project. They knew that there were many factors affecting schools at the same time, so it was hard to decide whether some changes could be attributed to this project. However, they had some basic expectations.

(a) Expect this project to become a model and play the demonstration function. SDOs expected that schools could make better use of the resources and different parties could learn from each other. Some SDOs hoped that through the efforts, this project could be a model and lead to more B-U-S projects.

If this project could be well done, it could affect other businesses, as it is the first successful example in Hong Kong. There are many people want to donate, but they can't find the right way. We could be a model to provide some experience if success. (I-U-A)

(b) Expect students to develop in various aspects. SDOs hoped that through this project students could develop in various aspects, not just the academically. What's more, they expected these students could get more career chances in Corporation C.

If some student's academic scores is very low, but he/she has high social abilities, then he/she could do some summer job in the hotel. His/her English could be improved when doing the job. It would be better if he/she could continue to work in the hotel when graduate. (I-U-A)

(c) Expect teachers to gain more professional development. Teachers were vital to school improvement. Some SDOs expected that through this project, teachers' teaching capacity and attitudes could be enhanced or improved.

Of course I hope that teachers' professional knowledge could be enriched and they could have more free time and space to discuss the teaching skills and learn more about their students. Now the students have more chances to visit, their performance might be enhanced, and the teachers could get more feeling of success, and then the teachers would get more impetus to develop. ……I hope that through their efforts, the school could be a learning community and develop a sharing culture. (I-U-C)

The expectations of the schools. Most schools resisted against quantitative evaluation, due to their beliefs that it was difficult in education to achieve immediate tangible effects.

> I don't like the evaluation. It's difficult for me to imagine we should review our project every year. Yes, I could report how many activities we have held and the feedback from students. However, we could not get students' real thought. Actually, if you asked me to hand in the report in June, I have to deal perfunctorily with it. I think they (the business) should think more about the effects. (GI-S-CP4)

However, some principals thought it was acceptable if the business sector demanded effectiveness.

> It's very normal for them to (the business) have the expectation. They give HK$12,000,000 to my school, so they must want to see some effects. Their expectation is acceptable. …...My belief is trying my best to do and setting a goal. (I-S-L)

4.5.2 Potential Obstacles

This project has launched for one year and some problems have emerged. In this paper, we tried to recognize the potential obstacles to this project in order to help it run more smoothly in the future. The potential obstacles mainly included four aspects: Expectation discrepancy, deficiency in management, communication gap, and role ambiguity.

Expectation discrepancy. The most notable problem mentioned by interviewees was the expectation between business sector and schools, as it would directly affect how this project was evaluated. Business sector valued the cost and effectiveness, while schools valued long-term efforts. Because of the different values, they had different expectations for the project. SDOs played an intermediary role to balance their expectations, but they still needed more time to come to a mutual agreement.

> I think the biggest difficulty is……Company C has spent so much money in these schools and will last for six years, so they must have some expectations. They must hope that they could see obvious change after six years. But it would take a long time to achieve school improvement, and it acquires various conditions. The HK$1,500,000 is not a big deal for one school, and we are just helping schools, so we cannot ensure that they could get big return. (I-U-B)

Deficiencies in management. Project W was additional works for all of the three parties, and it's difficult for them to recruit some full-time staff for the project. This problem was much more severe in schools, as most teachers had a lot of daily teaching work to do. The deficiencies in management were primarily concentrated in two aspects: Financial work and resource pool.

(a) Financial work. Business sector and schools had different ways to deal with the financial work. For example, for the budget planning, business sector asked for detailed budgets, while schools were accustomed to rough estimates. For the reimbursement, business sector required clear and detailed forms and supporting documents, while schools were not ready for the administrative procedures. Therefore, in the beginning, some SDOs had to be an intermediary to help them to coordinate with the financial work.

(b) Resource pool. As mentioned before, school teachers had a lot of daily teaching work to do and schools' calendars would be set down before a new school year began. However, some programs supported by the resource pool were developed in an ad hoc manner, so schools couldn't allocate enough time and teachers for these programs. These deficiencies in administration have produced negative influence on the effects of these programs. As schools could not arrange some full-time staff for the management of the activities supported by the resource pool, the effect of each activity could not be guaranteed.

The quality of teachers' support is varying. We could see that some teachers were happy during the visit, like students, but they didn't play the role of leading; while some teachers did very well, and they knew how to lead students and how to attract their attention. We have given the feedback to schools and SDOs, now they are improving. ……There are many small programs in the resource pool, as the natures of programs are different, the leading teachers are varying. Some teachers have lead many times, so they are familiar with the arrangement. However, if some teachers have not led before, their support may not be well. (I-C-N)

Communication gap. Because of the deficiency in management, there were some communication gaps among three parties, such as too many emails, delayed information and so on. The communication gap could cause unnecessary misunderstanding. For example, some colleagues of businesses complained that teachers could not reply their email promptly; while teachers explain that they have too many teaching duties for them to check the mailbox frequently. Some communication gaps were caused by the duty ambiguity. There were no clear regulations of the information delivery. The breakdown in interactions made schools get delayed information and had much less time to prepare for the decision.

I think we have an obvious communication gap among our three parties. I haven't got the information about the submitting date of the plan until yesterday (Wednesday). Next Tuesday we should submit the plan and we should present the plan on 27th. What's the problem? Today our pair BU told me that in the past the interactions work was done by CO, but they did not know the work had been transferred to them, and they did not know how to do it. So now we have to work overtime to finish the plan. (GI-S-CP6)

Role ambiguity. As analyzed, the initial attitudes of schools could be divided into three categories, and the third category was welcoming the financial support afforded by the business but being reluctant to receive the professional support from the university. In the third category of schools, SDOs' expert role has been wakened. Schools' development priority may explain the issue, but the role ambiguity and the incoordinations between the university and the business sector was another important reason. They all wanted to help schools, but they had different approaches and these different approaches have not been negotiated in advance between the two parties, which put schools into predicaments.

Now there are three parties in the project. ...... Businesses do not just give a donation; they will get involved in schools' development. For example, they will invite some staff to teach English in schools and arrange many visits. These are good things. But there is no coordination among the support. For instance, in the past when you were ill, you would see only one doctor and the doctor would prescribe some medication for you. But now you have two doctors and both of them would prescribe the medication for you. However, they have few chances of interactions. Although we have done the stock take and judge the improvement aspects in schools, if the business sector offered other things, schools would not reject and postpone our suggestions. (I-U-D)

5 Discussion and Conclusion

B-U-S partnerships for comprehensive school improvement are new attempts in Hong Kong. In this paper we tried to describe and analyze the underlying constructs of the initial stage of this kind of partnerships, through five domains: (1) rationales -- Goals and initial attitudes; (2) operations -- Resources and organizations; (3) roles -- Each party's roles; (4) interactions -- Communications among three parties; (5) expectations -- Expectations and obstacles. From the research findings, we could also conclude some key points in the B-U-S partnerships.

Different partners' initial attitudes towards the B-U-S partnerships should be taken into account as part of the project development. As far as the rationales are concerned, we analyze the goals and initial attitudes of different parties. In general, the initial attitudes of businesses and the university are positive, but schools' initial attitudes are different. The initial attitudes of some schools are negative, such as worrying about the intervention by the business sector and being reluctant to receive the professional support from the university. Frewer et al. (1998) pointed out that people with negative initial attitudes receiving persuasive information from a distrusted source might become more negative, whilst those with positive attitudes receiving information from a trusted source might become more positive. Therefore, when entering these schools with negative initial attitudes, it's necessary for the business sector and university experts to spend more time building trust with schools.

Resources should be allocated more on teacher leadership building. In our study, we find that in the first year, the resources were mainly allocated in hiring more staff and improving hardware facilities. Although in the plans of the second year, we could see the focus has been changed from deficiency to development, the resources in teacher development were still limited. Teachers are the main driving force of the school improvement project, and are also expected to play a major role in sustaining the achievements of school improvement when the project ends. Therefore, B-U-S project should allocate more resources in improving teachers' capacity to facilitate school improvement and make the achievements more sustainable. Teachers' capacity, especially teachers' leadership capacity is now considered a key element in improving the teaching profession and enhancing school improvement and renewal (Mujis & Harris, 2006; Stone, Horejs, & Lomas, 1997). The leadership every teacher should have involve three interrelated elements: Managing change through collaboration, experimenting with practice and gathering and using evidence (Frost & Durrant, 2003). Given this, different partners of B-U-S project should pay more attention to teachers' leadership capacities when planning schools' yearly budgets.

Clarity of roles and responsibilities are important to maintain the B-U-S partnerships. For the organizations of Project W, there is clear organization structure (see Figure 1).Under the structure, we explore the roles of CO, BUs, SDOs and schools. In general, each partner has its own roles and responsibilities, but role ambiguities still exit in the project. It remains a difficult problem for schools if the SDOs and BUs could not reach a consensus on school development. In such a case, the creation of a position as boundary spanners-individuals who have the skill to

build and manage interpersonal relationships is introduced as a strategy to solve the problem (Sandholtz & Finan, 1998; William, 2002). Boundary spanners are expected to move freely between partners, interpret the language, understand the reward systems, and translate the ideas of those in one culture to those in another (Clark, 1988, p. 61). In this study, university experts have played the role of boundary spanners to a certain degree, for example, they interpret educational issues for the business sector and act as intermediaries between the business sector and schools. However, B-U-S partnership is a complex and long-term process, thus it is necessary to create formal boundary-spanning positions to make the roles of each party more clearly, especially in the initial stage.

Interactions among three parties are necessary for B-U-S partnerships to help improve dialectical thinking and related conversations. For the interactions among different parties in Project W, we find that in the initial stage, most of the interactions always involve two parties, such as S-U, C-U, BU-U, CO-S, BU-S, and CO-BU. The communication involving all the parties is only needed in individual cases, such as the yearly budget plan of each school. The three parties have different ideas on the explorations, for example, the business sector prefers to use indicators to specify the effectiveness of students' outcome and teachers' teaching, while schools don't welcome the quantitative evaluation. We also find communication gap among three parties which results in the information delay. In such circumstances, the interactions among different parties should be encouraged, as dialogue offers different insights into how to "do" conflict collaboratively (Baxter, 2004). Thinking about alternative ways to construct meaning in a partnership, holding learning conversations, and choosing praxical responses are important tasks for all community-campus partners (Dumlao & Janke, 2012).

Regular reporting is an efficient way to narrow the cultural gap. In all partnerships, participants must address tensions from the differing norms, assumptions, cultures, and expectations that each brings (Dumlao & Janke, 2012). NFP organizations experience problems with their corporate partners around accountability, the measurement of the effectiveness of programs, and mutual performance obligations (Center for Corporate Public Affairs, 2008). In our study, we find the similar problems, and most of the problems stem from the varied work cultures, especially the difference between business sector and schools. The business sector expects more sophisticated reports and accountability from schools, but schools could not get used to these expectations. Brown (1999) proposed that "negotiating (corporate/school) partnerships can be difficult. Sometimes a neutral third party is helpful in facilitating the communication between education and corporate communities." As university experts understand

schools' culture, they could help to narrow the cultural gap between the business sector and schools through developing reasonable report framework for schools, which involve annual reports of progress, strategies, financial and operational performance and so on. Then schools could prepare their respective reports based on the framework and present the reports to the advisory committee on the regular meetings. The regular reports will go a considerable way to meeting demands from the business sector for transparency of information and assist the community, including existing and potential business partners, in understanding NFPs better (Center for Corporate Public Affairs, 2008).

Through explorations of the above five domains, we get a preliminary description of the B-U-S partnerships in the initial stage. Our research proves that common goals, sound organizations, proper distribution of resources, clear roles, effective interactions, and reasonable expectations are important for the B-U-S partnerships. These characteristics could also be found in the partnership literatures (e.g. Borthwick, 1994; Clark, 1988; Su, 1990). Muijs (2010) proposed that practice of school improvement has already moved to a fourth phase based on collaboration. Project W has just passed the first year, and it still will last for five years. Borthwick (1994, p. 235) pointed out that the partnership would move through stages of development, stabilization, and institutionalization. We expect to do a longitudinal study to trace the development of Project W and this would be an important line of research about B-U-S partnerships that could enrich the practice and research for school improvement in the fourth phase.

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