EÖTVÖS LÓRÁND UNIVERSITY FACULTY OF EDUCATION AND PSYCHOLOGY

Doctoral Dissertation Summary



Khin Khin Thant Sin School-university Partnership in Teacher Education in Myanmar

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ABBREVIATIONS

ASEAN Association of Southeast Asian Nations

CDT Curriculum Development Team

CPD Continuous Professional Development

DEO District Education Officer

EDiTE European Doctorate in Teacher Education

ITE Initial Teacher Education

MT Mentor Teacher

SchT School Teacher

ST Student Teacher

SUP School-university Partnership

TEO Township Education Officer

UT University Teacher

1. INTRODUCTION

The university and the school district are each other's own best resources. Between them, school districts and universities cover virtually the whole range of human learning. That we are interconnected is undeniable. The challenge before us is to realize and build upon the extent, the possibilities, and the necessity of our connection and dependence. (Hathaway, 1985, p.4)

The reciprocal interdependence between schools and universities itself sets a vital ground for the school-university partnerships (SUPs). In an easy to understand technical-like statement, Thompson (1967) states that 'each organization's outputs become the inputs to the other'. Both organizations need each other to survive in the demanding education systems of the 21st century. This interdependence and the need for survival between schools and universities is obvious in teacher education. For instance, in initial teacher education, the schools need well-qualified teachers while teacher education universities prepare these teachers for the schools. Vice versa, schools support universities in training student teachers to practice teaching (Krichevsky, 2020).

The mutuality between schools and universities can be seen far beyond teacher education. Crucial roles that SUP play in other areas cannot be denied. Several outstanding examples have already shown the need for partnerships between schools and universities for school improvement projects, university improvement and educational innovations (Armstrong, 2015; McLaughlin, 2006). And research evidence has also shown the major roles of SUPs in facilitating curriculum development and reform (Baldry & Foster, 2019; Arani et al., 2007). Besides SUPs are seen as change catalysts in facilitating educational reform and innovation (Clark, 1988; Barnett et al., 1999, Hargreaves, 1999).

1.1. Problem Statement

Myanmar is the largest country in mainland Southeast Asia, and it is strategically located between the economic hubs of China, India and Association of Southeast Asian Nations (ASEAN) countries (Ministry of Education, 2016). Myanmar was one of the richest countries in Asia (Hays, 2014; Ulla, 2018) during 1950s. However, after the military coup in 1962, the country's education system went on a long-term decline, and the country was isolated from all the international communities and impoverished. As a result of more than 50 years of military dictatorship, Myanmar has become one of the poorest nations in the world. Its educational system was in extremely poor condition reaching the bottom of the ASEAN countries' league table for educational enrolment, achievement and investment (Borg et al., 2018; Haydena et al., 2013; Ulla, 2018).

Teacher preparation and qualification have been under criticism for lack of creative teaching and not being able to prepare school children for the 21st century (Borg et al., 2018; Hardman et al., 2014; Hardman, 2013; Haydena et al., 2013; Lall, 2020; Ulla, 2018). The need to upgrade and promote teachers' qualifications and competencies has been a significant issue in the country. Although SUPs were established in initial teacher education (ITE) several decades ago, they have been neglected in the country. Moreover, there is a large gap between knowledge production and its application. Schools and universities rarely collaborate for research development to investigate the difficulties teachers face in daily practices and to

encourage teachers as reflective practitioners. Besides, the collaboration for continuous professional development and school improvement are usually university-led and few intensive cooperation had occurred.

Therefore, keeping in mind these issues, this study intends to explore the roles of SUPs, an under-researched area, and how they can enhance teacher learning and professional development in the country. With the awareness that partnerships are change catalysts, this study also explores how SUPs can facilitate educational reform in the country as the country initiated its reform processes since 2010¹. In fact, school-university cooperation has already taken its role and has contributed through its multi-functions to the country's educational reform processes, especially in national curriculum reform and implementation.

1.2. Research aims and research questions

The overall purpose of this study is to better understand the nature of SUPs and how they can support teacher learning and professional development through its multifunctionality. To fulfil the above purposes, the following research questions with their sub-questions have been developed:

- (i) What are the current practices of SUPs in Myanmar?
- (ii) What are the conditions considered in determining the success and quality of SUP?
 - a. What is participants' perception in determining SUP's essential goals?
 - b. What is participants' perception in determining the most influencing actors in SUP?
 - c. What is participants' perception in determining the key factors to be considered in establishing successful SUP?
- (iii) What are the challenges of collaboration between schools and universities?
- (iv) In what ways are SUPs supporting and stimulating teacher learning?

2. THEORETICAL FRAMEWORK

In order to map the relevant framework, the literature of several research areas related with SUPs has been explored: the partnerships in general definition, innovation perspectives of partnerships, the origins of SUPs, and the different roles of SUPs regarding teacher learning and educational development. Besides, participation in European Doctorate in Teacher Education (EDiTE) SUP project (Baráth et.al., 2020) in 2018-2019 provided the opportunities to conduct several interviews with international participants and observations to different international and Hungarian schools. Following the above activities, theoretical framework has been developed based on two topics: (i) the multi-functionality of SUPs and, (ii) the partnership theory (which is the general principles of partnerships such as models or typologies, the advantages of partnership, key success factors to establish successful partnerships and the potential limitations and impeding factors).

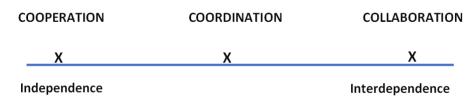
¹ Although the country transitioned from military rule to civilian democracy in 2010, it has been tragic since the military coup happened again in February 2021. As this study started in 2018, it was the time that the country paid special attention to education and its reforms. The pilot studies and the interview data collection of the main study happened before and at the beginning of the military coup. Therefore, most data collected explicitly mentioned the country's several educational reforms. Hence, this study's information and data are still relevant in the country.

In this study, I explore different functions of SUPs which appeared in Myanmar context. To explore the different functions (goals) of SUPs in the Myanmar, I use the multi-functionality of SUPs approach by Halász and Thant Sin. Based on a broader literature analysis related with SUPs and development and on the analysis of the data I collected, we have published the article entitled 'Using school-university partnerships as a development tool in low-income countries: the case of Myanmar' (Halász & Thant Sin, in press). In this article, seven functional areas of SUPs have been identified: (i) teacher learning and professional development, (ii) education research and research development, (iii) school improvement, (iv) university improvement, (v) curriculum design and reform implementation, (vi) generating and spreading educational innovations, and (vii) enhancing participation and social dialogue. In fact, only five identified areas of SUPs have been involved in my data collection since the last two functional areas of SUPs have been discovered only after the collection and during the analysis of the data.

To identity the different levels of linkage and interdependency among partners in each function of SUPs, partnership typologies of Tushnet (1993) and Barnett et al. (1999) have been applied. Tushnet (1993) proposed three different types of partnerships based on their linkage: (a) primary partner/limited partnerships, (b) coalition partnerships, and (c) collaborative partnerships. A primary partner/limited partnership is a partnership in which a managing partner gives services to other partners and their staff. Coalition partnership is defined as the case when each partner decides what to do within their partnership framework and has a division of labour among organizations. In collaborative partnership, decision making becomes a shared process among partners and each partner can participate in all decisions. Regarding the level of interdependence, Barnett and his colleagues also constructed a 'conceptual framework of the types of partnerships' (Barnett et al., 1999). In this framework, there are five different types of partnerships extending from the simple to the complex level and ranging from the less intensive to the more complex and multifaceted. The simplest form is 'independent agencies', where organizations work on their schedules, timeline and resources. In the most complex form of partnership, the 'spin-off model', partners create a new organization when they see and realize past success and new goals emerge throughout their collaboration (Barnett et al., 1999).

Besides the above, 'continuum of partnership levels' by Intriligator (1992) play a critical role in this dissertation. Intriligator (1992) placed the concepts of cooperation, coordination and collaboration in a continuum to understand the different levels of partnerships (see *Figure 1*).

Figure 1: Continuum of Partnership Levels



Source: Intriligator (1992)

Partnerships appeared at various levels according to their specific contexts, such as ITE, research development or curriculum development and implementation. Intriligator's

continuum of partnership is kept in mind throughout the dissertation because of this complexity and nature of partnerships. A partnership should be seen as a process like any innovation, and they are constantly changing as participants develop mutual trust and understand the content (Grobe, 1990). Therefore, to understand the emerging partnerships in different functional areas, this continuum of partnership levels has been reflected in conceptualizing, analysing, and interpreting the different functions of SUPs in Myanmar.

3. LEARNING FROM HUNGARY: TWO SCHOOL CASES

In this study, I also included two Hungarian school cases. There are several reasons why the Hungarian case have been included. First, the Hungarian case was brought in because of its uniqueness. During my studies in Hungary, I discovered that the history and transformation of Hungary's education and teacher education system is one of the most interesting cases to study and explore. Another reason is because of the complex nature of SUP itself. Hungary has extraordinary SUP cases regarding teacher education and bottom-up school innovation. Through the Hungarian case, the complex nature of SUP can be understood, especially the stakeholders' experiences and attitudes while implementing and performing the SUPs. Furthermore, the connection between SUP and educational innovations can be seen clearly in the Hungarian case. Although one of the functional areas of SUP is generating innovation, an explicit example is needed to imagine how SUP can promote and sustain educational innovation. In my opinion, Hungary will provide a vivid picture of SUP in promoting and sustaining educational innovations. Developing countries like Myanmar can learn from Hungary: how SUP is established and becomes a major tool for teacher learning and educational innovation.

I have been exploring the Hungarian case since the beginning of my studies in Hungary in 2018. Finally, I made a systematic data collection (school level case studies) when I had collected Myanmar data and while analysing those data. Therefore, Hungarian case has provided valuable input to prepare the analysis and interpret Myanmar SUP cases. I chose two Hungarian schools which represent outstanding SUPs cases in the country: Hejőkeresztúr school and Csaba Kesjár Primary School. The choice had been made through discussion with supervisor as well as my personal experiences from the EDiTE SUP project. In Hejőkeresztúr, data from the personal experiences of the school principal who initiated the innovation and desk research of the school: including the principal's published articles and exchange emails with a schoolteacher, school website have been used. For the second school, three interviews were conducted with two schoolteachers and one old student who is now in senior high school. In addition, the schoolteachers' master's thesis and school website have been included as desk research.

From the two Hungarian school cases, several functional areas of SUP can be observed: SUP for school improvement, SUP for teacher learning and professional development, SUP for generating and spreading innovation and SUP for university improvement. In the case of Hejőkeresztúr school, SUP has played a significant role in nationwide spreading of innovative pedagogy method called Komplex Instrukciós Program (KIP). In Csaba Kesjár Primary School, SUP is obvious in supporting teacher learning and professional development. In this case, one can observe how outstanding schoolteachers and schools can become the major trainers of prospective teachers. Besides, the intensive collaboration between schoolteachers

and university teachers is remarkable. Another important factor that can be seen in both schools is that both organizations understand the limitation of their access to academic communities and spreading knowledge nationwide. Schools and universities, in these cases, collaborate to spread innovation and to promote teacher learning. This kind of partnerships can be observed typically in highly developed education systems and is recognized as 'an advanced level school-university partnership'. These two Hungarian school cases suggest that SUPs are sustainable and successful when initiated through bottom-up motivation. Vice versa, educational innovations are sustainable through SUPs. Moreover, these SUP cases showed that stakeholders' attitudes and perceptions are extremely important in establishing and implementing successful SUPs. Although Hungary is not a highly advanced nation in education, advanced SUPs have already been implemented in the country. The example of Hungary can be a lesson and a hope for developing countries like Myanmar to establish successful SUPs.

4. RESEARCH METHODOLOGY

A qualitatively driven mixed-method design (QUAL quan) is applied in this study. Regarding the research problem 'SUP in Teacher Education in Myanmar', this research design will encourage a deeper comprehension of the complex phenomenon (Creswell & Clark, 2017.; Mills & Gay, 2016). Besides, the SUP in Myanmar is not yet well-developed, making the research problem less tangible. This design also aims to overcome these obstacles. Given the study's complex nature and the above reasons, a qualitatively driven mixed method design is chosen to apply in this study.

4.1. Instruments

Semi-structured interview questions were developed based on literature reviews, research questions, and initial responses to a pilot study (observation, interviews, focus group interviews). The survey questionnaires were developed based on the analysis of interview findings and the literature reviews. Due to the lack of well-developed instruments in SUP research, I developed questionnaires under my supervisor's guidance. My experiences in participating in the EDiTE SUP project also played an important role in developing the interview and the survey questions. In addition, the quality of the content, structure and relevance were ensured through expert reviews; one university professor from Myanmar reviewed the questionnaires and gave feedback before sending them out to participants. In addition, a 'think aloud' procedure was conducted with two schoolteachers who have similar backgrounds as the target participants (Dillman, 2000).

4.2. Participants

In order to gain diverse and credible perspectives, the purposeful sampling method was used in the qualitative part (Creswell, 2013). A total of 35 participants from four categories participated in the interviews (see *Table 1*).

Table 1:Participants of semi-structured interviews

Category	Representing institutions	Number of participants
Student teachers (STs)	University of Education	9
Mentor teachers (MTs) or School teachers	Basic Education Schools	10
(SchTs)	Dasic Education Schools	10
University teachers (UTs)	University of Education	8
Curriculum Development Teams (CDTs)	Schools and universities	8
Total		35

Source: Author

Note: For curriculum development teams (CDTs), I have three groups: (i) CDT developers, (ii) CDT trainers, (iii) CDT trainees. Please see **Explanation of CDTs** in appendix for more explanation.

In quantitative part, 174 student teachers and 173 schoolteachers participated in surveys. Due to the nature of the study content, the sample for student teachers (STs) was restricted to those with 'practice teaching' experiences at basic education schools. For the selection of schoolteachers, there were no restrictions.

4.3. Data collection and procedures

All interviews were done through online phone calls via a social media application. Each interview took from 30-90 minutes. The interview questions were sent out to participants three days before the interviews started. When relevant content emerged, I asked additional questions to explore better the context. Survey questionnaires were distributed through sharing Qualtrics survey link. The questionnaires were left open for three weeks to ensure that all participants have enough time to answer the questions. (See *Figure 2*)

4.4. Data analysis

Interviews were recorded and transcribed. All transcripts were coded manually with the help of Microsoft Word. The analysis of the data was conducted through reflecting and repeating stages. For the quantitative part, the collected data were systematically analysed through Statistical Package for the Social Sciences (SPSS) software version 27. Descriptive statistics were conducted to explore the data. Furthermore, to find out teachers' learning and professional development between the groups, one-way ANOVA and t-Test were applied. Pearson correlation was performed to investigate the correlation between teachers' learning and their roles and communication level.

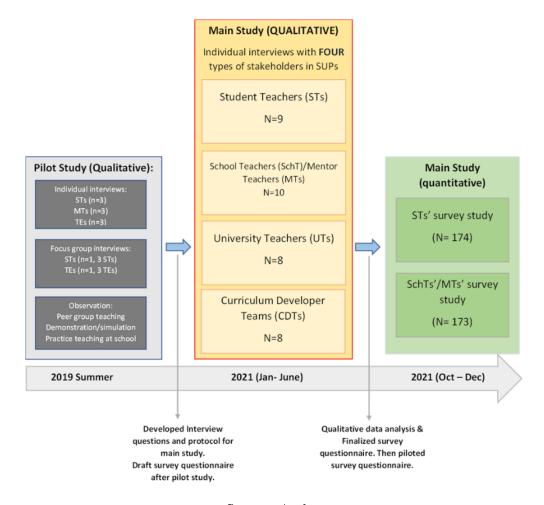


Figure 2: A qualitatively driven mixed-method design: timeline and procedures

Source: Author

4.5. Limitation and ethical considerations

This study is a qualitatively driven mixed-method design in which the development of quantitative survey instruments, piloting survey questions, and quantitative data collection happened after the analysis of interview responses. However, due to unexpected and unplanned contact with participants, one exception is that two interviews (one university teacher and one schoolteacher) occurred after the survey questionnaire was piloted. Due to Covid-19 situations and the political situations in the country, it was not easy to reach the participants. I faced very difficult situations reaching participants because of the violent conflicts where society is divided into two groups; therefore, not everyone I contacted was willing to share information. I needed to be aware of this and follow ethical considerations during my data collection. Due to these difficulties, the quantitative data collection for the university teachers and CDTs could not be conducted.

5. RESULTS AND DISCUSSION: UNDERSTANDING SUPS THROUGH EXPLORING STAKEHOLDERS' EXPERIENCES AND PERCEPTION

5.1. Current practices of SUP: fitting SUP to the partnership typologies

Different scholars defined partnerships distinguishing them from other relationships based on the level of participants' involvement and the goal and impact of partnership (Grobe, 1990; Intriligator, 1992, Tushnet, 1993; Barnett, et.al.,1999). These definitions of partnerships suggest a partnership image developing from lower to higher levels. In Myanmar, according to the results, lower level of partnerships was established in teacher education as well as in other functional areas. However, there are outstanding cases where mutual trust and understanding had been built among partners despite these poor level partnerships. First of all, I will present 'current SUP practices in Myanmar' by placing them under the pre-defined typologies of different scholars; according to their (i) linkage or relation among partners and (ii) level of interdependency. Further, I will highlight how fruitful learning can happen within these assumed lower-level partnerships.

5.1.1. Linkage or interdependency

Regarding the linkage among partners, Tushnet (1993) classified three types of partnerships. Based on these dimensions, current practices of SUPs revealed by this study can be grouped in each category. According to the results, the most obvious SUPs practices in the country are ITE, continuous professional development (CPD) and curriculum development and implementation. Although other areas such as research development and school/university improvement appeared in some cases, they were not seen as regular practices.

According to Tushnet's classification of partnerships, current practices of SUP in ITE fall under 'primary/limited partnership'. As stated earlier, primary partner/limited partnership is the partnership in which a managing partner gives services, training and materials or resources to other partners and its staff (Tushnet, 1993). Interview respondents mentioned SUP in ITE as sending STs to schools for accomplishing their two weeks of practice teaching. Few communications happened between UTs and MTs to support STs in teaching and learning. Quantitative results also illustrated that UTs and MTs rarely communicated with each other. In this SUP practice, the schools are providers of spaces which help the universities in promoting their ITE. This situation is similar to other functional area of SUPs such as 'research development' in which UTs or post-graduate students came to schools for data collection. This SUP is a one-sided relationship since one partner contacted the others in need of services or resources.

Likewise, SUP in CPD area also falls under the category of primary partner/limited partnership. The reason is also because of a one-sided partnership in which universities provide trainings for promoting teachers' qualifications. Unlike ITE SUPs, in this case, universities are service providers, and the schools play as receivers of knowledge. Although there were some cases where dialogue and discussion among partners emerged occasionally, the overall concept and purpose of this training was 'university teachers trains schoolteachers' structure. In the case of curriculum development and implementation, fruitful collaboration and learning happened. The most intensive communication occurred among CDTs developers (where university teachers and schoolteachers worked together) for developing a new curriculum.

Especially in moral and civics subject, the Tushnet's collaborative partnership could be observed. CDT developers (both UTs and SchTs) built mutual trust and understanding which led them mutual learning and professional development.

In another categorization, partnerships can be differentiated regarding to the degree of interdependence. In this study, the conceptual framework by Barnett and his colleagues is also applied to compare the types of partnership based on their interdependency. According to their conceptual framework, the current SUPs in Myanmar, particularly in ITE, continuous professional development, represents the vendor model. Technically, this vendor model can be compared to Tushnet's primary/limited partnership as they both claimed that this type of partnership is a one-way partnership where one partner requires a specialized resource which is best satisfied by contracting with another partner for that service (Barnett et al., 1999). Speaking of curriculum development and implementation, the symbiotic model of Barnett and his colleagues (1999) should also be compared. Unlike in the case of ITE, in curriculum development and implementation SUPs, both organizations agreed on common goals and objectives of developing and implementing new curriculum. Moreover, more intensive communications had emerged as the partners collaborated together as this is longer than two weeks or one/two months practice teaching time.

5.2. Success or Failure: factors determining the outcomes of SUPs

When we analyse the results of SUPs in all functional areas, their success or failure seemed to depend on how SUPs reacted to three dimensions: (i) people, (ii) partnership climate, structures and policy, (iii) resources.

5.2.1. People dimension

In Myanmar, the results showed that the actors and their ways of handling SUPs played the most influencing role in establishing successful SUPs. Here, the 'people dimension' represents a holistic view including the attitudes, perceptions and feelings of participants, the ways they collaborate with each other and the way they negotiate or handle conflicts as well as the leaderships and management they apply during collaboration. In the people dimension, two elements played crucial roles: (i) leadership and (ii) attitudes.

Effective SUPs in this study meant that the learning and professional development of their participants are optimized. According to our results, the learning and professional development of participants maximized when they were led by **leaders** who were supportive, open-minded and experts in managing and organizing things. In addition, the knowledge and skills required to understand the educational contexts are also essential leadership skills to implement effective partnerships. The category of leaders contains district and township education officers (DEOs and TEOs), school principals, heads of departments of teacher training institutions, and university rector and academic board of the university. According to literature, most of the effective partnerships were created when the leaders of the organizations came up with an idea or a vision (Grobe, 1990). Although in the Myanmar case, most of the partnerships started from a top-down procedure, their success and quality has been influenced by the knowledge and management skills of leaders. First and foremost, in this study, the leadership behaviours of encouraging for innovation can be observed in school principals in ITE SUPs. For example, one ST mentioned that he like the school principal's way of giving

him autonomy and freedom in teaching and learning. The principal encouraged him to try his best for successful learning of school children.

I had a great time at school. I had freedom to do whatever I wanted or create in my teaching for the achievement of school children. I like the principal so much. He encouraged me and gave me autonomy. I wanted to be like him when I become a principal one day (ST4)

Leadership also had impacts on SUPs in other functional areas as well. Particularly in the case of CDT trainers, the success of trainings mainly depended on the interest, support and initiatives of TEOs and DEOs. In the trainings which received the support of TEOs in arranging necessary resources such as projectors, laptops for PowerPoint presentation, CDT trainers were more satisfied with their work and claimed that they did a great job for distributing the knowledge and skills about the new curriculum which they have learnt from university or college teachers.

Another important thing is that the interest of township education officers. For us, our township officer was very interested in education. If we asked material we need, for example, projectors for trainings of specific lessons, she made it happen. She arranged to get projectors in every classroom. (CDT trainer 1)

The township officer cannot provide projectors for us. He said like 'To get projectors or TV is not possible, so please do it possible in another way'. Even they cannot provide projectors, they should have arranged TV and CD players or something. But nothing has arranged. It was a pity that we could not implement fully what we have learnt from our training. (CDT trainer 2)

Besides the leadership element under people dimension, attitudes and perceptions towards partners and SUPs is another essential element. This is an overarching element which includes attitudes of participants towards their partners such as mutual understanding and respect, trust, desire to learn, being passionate about profession and attitudes towards SUPs comprising awareness of knowledge or skills limitation, power relationship and so on. According to Karasoff (1998), attitude is a critical variable in the early stages of partnership development. The new partnership program makes participants engaging in a paradigm shift from working independently to jointly, from a singular to collaborated structure; from competition to collaboration (Karasoff, 1998). These paradigm shift can cause feelings of fear, apathy and cynicism among participants while they are trying to adapt to the partnership framework (Karasoff, 1998). There are several reasons why these negative feelings may appear. According to Karasoff (1998), these reasons might be different philosophies and organizational styles among partners, lack of understanding of partners' profession as well as cultural and racial differences among organizations. In addition, the professional ego or to protect their turf should also be taken into account for appearing those negative attitudes. The attitudes of the paradigm shift were obvious in CDT developers when academic university professors and schoolteachers worked together for developing new curriculum.

For example, we added some brainstorming questions for arousing the curiosity of children. We don't want to teach lessons without activities. We wanted to start lessons with asking question; so, we wanted to include 'Q&A' section as well as class activities and group

activities. But for university professors, they favoured more on content and usually excluded the class or group activities we proposed. (CDT developer: school teacher1)

The need to protect their turf has been seen in the academic professors' sides of mathematics group as they did not really want to include many discussion activities and group works which are assumed important activities by schoolteachers. After several conflicts and debates, the partners agreed to their differences in opinions, then they continued to work together through negotiations and adaptation. According to Islam (2010), the success and quality of partnership depends on how the partners handle these negative attitudes and how they overcame these situations to build mutual trust and understanding.

Derived from interview findings, 'leaders of each institution' are the major actors in determining the success and quality of SUP. Based on the interview responses, a quantitative question for influencing actors was developed. Seven influencing actors were included in the question: (i) policy makers (ii) university leaders (e.g., rectors, head of department), (iii) education officers (e.g., TEOs), (iv) school leaders (e.g., school principals), (v) university teachers, (vi) mentor teachers and (vii) student teachers. Although the policy makers were never mentioned by interview participants, they were included on the basis of literature. Survey participants were asked to rank these influencing actors (1= most important actor to 7= least important actor). *Figure 3* shows the quantitative ranking data results.

Policy makers University leaders (eg.head of department, rector) Educational officers (eg.minister or TEO) 3.98 4.03 School leaders (eg.principals) 4.47 4.15 University teachers Mentor teachers working in schools Student teachers 1.00 2.00 3.00 4.00 5.00 6.00 SchT (n=172) ■ ST (n=173)

Figure 3: The perceived influencing actors of SUPs by participants (n=345)

Survey question: What do you think about the role of the following actors/players in determining the effectiveness of SUP? Who has the bigger role?

Note: Average rank position of the important actors of SUP, the more influencing actors being at the top (close to 1) and the less important ones at the bottom (close to 7). (n=345)

5.2.2. Atmosphere, partnership structure and policy dimension

The **climate or working atmosphere** is very important in determining the success and failure of SUPs. This dimension is obvious in every SUP, and it is also related to the leadership component of the people dimension. The atmosphere dimension is related to people dimension because the attitudes and behaviours of people in a partnership and the ways they feel, act and

create the working atmosphere. For example, in the school environments in which teachers and school principal are supportive and friendly, the teaching and learning of STs were more productive.

When student teachers are teaching, I have told the mentor teachers not to make comments in front of the children in classrooms. I told them to give feedbacks only in their break times or in the meetings. As the student teachers are young, we understand that they don't have so many experiences in classroom controlling and teaching skills. And we don't want to hurt their feeling and confidence (MT6)

One time, I was teaching a lesson. Mentor teacher was observing my teaching outside of my classroom. Just only for few minutes. After that, in teachers' room, she gave me feedbacks that some concepts I taught was incorrect. I respect she gave me feedbacks after my teaching. It was very considerate of her. I liked working with this teacher. (ST7)

On the other hand, lack of **policy for encouraging the intensive collaboration** between schools and universities led to the lack of interest in collaboration. There were no clear policies for schools and universities to collaborate together in education. Moreover, as until now, there was lack of research interest in SUPs, this has remained a totally untouched area of research in the country. As a result, participants who were participating in current SUPs practices in the country did not have a higher-level understanding of the SUPs and their essence and importance in education. *Table 2* provides some parts of the quantitative findings on factors influencing SUPs.

Table 2: Descriptive statistics on factors influencing the quality and success of SUP

Items		Student teachers (n=174)		Schoolteachers (n= 173)	
	M	SD	M	SD	
Environment which allows you to speak up your opinion and accepts your mistakes	4.08	1.093	3.99	1.226	
Environment where people are open to alternative ways of getting work done	3.99	1.168	3.93	1.241	
Environment where people value new ideas and innovation	4.10	1.105	3.93	1.240	
Environment where leaders provide time, resources and venues for identifying problems and organizational challenges	3.94	1.205	3.82	1.373	
A trustful relationship and mutual respect between partners	4.25	1.018	4.23	0.998	

Survey question: Please indicate how strong the (positive) impact these factors might have an impact on the quality of collaboration between schools and teacher education universities and colleges according to your opinion. Please use a 1-5 scale '1' meaning 'this does not have any impact' and '5' meaning 'this has a major impact' on the quality of collaboration.

5.2.3. Materials or Resources Dimension

In this study, the resources also took a significant role in shaping the success and failure of partnerships. SUPs in the country were under-developed partnerships, hence, the resources among partners were not shared as common properties. However, the resources within each partner organization influenced the whole partnership processes.

Time was the most frequently mentioned resource, especially in ITE, STs often complained about the short period of time for their practice teaching. Although in some cases,

STs got more than two weeks of practice teaching due to the flexibility of school principals, the usual practice teaching assigned for them is only two weeks. STs who got only two weeks period of time said that this time was not enough to get to know the school's culture as well as the characteristics of children in their learning. More importantly, they said that it was difficult to build trust and mutual understanding when they did their practice teaching within two weeks. The second resource lacking was **human resources and materials**. The issue of human resources emerged when STs did their practice teaching where teachers were not available and not sufficient in schools. They had struggles for arranging too many classes and activities which became an overload for them. SUPs proved to be more effective when schools had enough teachers, and principals took care of STs more attentively through observation and planning and discussion of lessons together. Lack of material resources appeared in ITE, curriculum development and implementation as well as continuous professional development and in research data collection by UTs. In Myanmar, although there were not procedures or rules for sharing resources among partners, resources seem to play a significant role in determining the success and quality of SUPs.

5.3. The roles of SUPs in promoting teacher learning

Participants in this study showed significant improvements in their professional knowledge and skills as well as experiencing positive impacts on their emotions and attitudes. In both qualitative and quantitative findings, participants showed that their professional knowledge about learners, classroom management, pedagogical knowledge and content knowledge has significantly improved. Furthermore, their curriculum content knowledge, reflective skills, analytical skills, teamwork and collaboration capacities also showed improvement. Moreover, when two or three groups of participants are compared based on their level of communication, participants who had intensive communication with their partners showed significantly higher improvements in their learning and professional development. For example, the following *Table 3* shows that there is a positive correlation between level of communication among partners and student teachers' professional development.

Table 3: Pearson correlation table between levels of communication and STs' professional development

Variables	Communication level between MTs and UTs	Communication level between STs and MTs
My subject matter knowledge	.134	.199**
My pedagogical content knowledge	.080	.189*
My capacity to develop cross-curricular	.209**	.246**
My capacity to trying out new things in my teaching practice	.145	.242**
My teamwork and collaboration skills	.102	.320**
My knowledge about curriculum and curriculum reform	.125	.226**
My knowledge about up-to-date educational issues in national and global contexts	.102	.267**

My capacity to connect theoretical knowledge to practical	.175*	.184*
My repertoire of teaching methods and teaching strategies	.193*	.052
My knowledge about how to conduct research	.183*	.225**

^{***}p < .001, **p < .01, *p < .05

Besides, participants' learning showed significant different when their roles in SUP activities are compared. For example, descriptive statistics showed that teachers who have been mentors have higher mean values than those who have never been. Independent sample t-test has been performed to determine the impact of teachers' mentoring role in the different professional development areas. Statistically significant differences (p < .01 and p < .001) were found in almost all professional development areas of schoolteachers. **Table 4** describes a part of this finding as an example.

Table 4: Summary of Independent Sample t-test based on teachers' mentoring role (n=162)

Variables	Non-mentor Mentor teachers teachers (n=60) (n=102)		teachers		t	p	Cohen's d
	M	SD	M	SD			
Pedagogical knowledge	3.42	1.197	3.93	1.078	-2.605	0.011	1.123
Knowledge about learners	3.20	1.177	3.88	1.083	-3.503	0.001	1.117
Repertoire of teaching methods and my teaching strategies	3.36	1.182	3.92	1.106	-2.944	0.004	1.134
Capacity to trying out new things in my teaching	3.33	1.058	3.87	1.115	-2.562	0.004	1.094
Professional self-confidence	3.60	1.211	4.13	1.077	-2.456	0.008	1.123
Capacity to find enjoyment in teaching	3.52	1.062	3.97	1.113	-2.391	0.015	1.095

^{***}p < .001, **p < .01, *p < .05

Through the above findings of different professional knowledge and skills improved in teachers, we can explore the roles of SUP in supporting and stimulating teacher learning. First, engagement in social participation occurred in every situation where mutual learning happened between partners. According to the interview responses, teachers' professional learning and development occurred whenever they tried to communicate and engage in social dialogue with their partners. The following interview response shows how MT tried to communicate with STs.

Student teachers are currently studying at the university. So, they kept in touch with using new teaching methods, and creating teaching aids. I found out that children are more interested in lessons with games and activities. So, I tried to talk to student teachers and asked them about the games and activities they used during teaching. I wanted to learn from them. (MT7)

The role of SUP in encouraging participants to engage in social dialogue is obvious not only in ITE but also in curriculum development teams, the research development area and continuous professional development. Interview respondents explicitly reported that learning or acquiring new knowledge occurred whenever teachers engaged in social communication with their partners. The obvious case is when university teachers go to school for data collection of their PhD dissertation. Due to this data collection, UTs got the chance to engage in conversation, which gave them new concepts in their teaching and learning.

I went to school frequently during these three months, so I became very friendly with teachers. One day, I was talking to one teacher. While sitting next to her on her desk, I found students' essay books. As she knew that I was curious of these essays, she let me read them. I asked her why she asked children to write essays and what these essays were about. She mentioned that when she finished after one week teaching, she asked her students to write essay about their feelings such as 'do you like studying physics? Do you want to continue learning physics? What do you like? Why do you like/dislike? What are your difficulties?' etc., to let children to express about their experiences and feeling after they had learned this week. When I read about them, it was impressive. But after reading the essays, I realized it was a good idea to do it. You can observe your children's learning, their feeling as well as their attitudes and difficulties about the subject. (UT2)

Besides enhancing social engagement, SUPs also support to look at the other communities' perspectives by crossing boundaries. Boundaries are seen as 'sources of difficulties in communication' (Tsui & law, 2007, p.1290). However, they can also be sources of innovation and change when 'participants try to reflect on their communities and have a fresh look at other communities' (Tsui & law, 2007, p.1290). In this study, this boundary-crossing happened when participants got a chance to observe other communities at distance from their long-standing practices. This boundary crossing appeared mostly in CDTs and in the research development area when university teachers went to school for science projects or in other cases, to collect data.

I was a schoolteacher for some years. But now, I am a university professor and have not experienced as schoolteachers for decades ago. So, because of this research project, I paid a visit to schools, and I realized that there are a lot of changes and a lot of things I do not know about the schools in nowadays. (UT3)

And they are primary school teacher dealing with young children every day, their usage of words was very good that they can communicate so easily with children and made them understand. For us, we usually communicate with university students, so we are not really in practice to communicate with children. So, in this project, I learnt from these teachers how to communicate with the young children. (UT3)

This having a fresh look at other communities and reflecting on their communities appeared in several interview responses. Furthermore, teachers showed that their knowledge and attitudes changed after they tried to accept or look at partners' views and practices with open minds. Here, the role of SUP is more than allowing participants to engage in social dialogue, but it also encourages participants to cross boundaries with bravery.

In Myanmar, as we discussed earlier, SUP in teacher education was a long-existed and top-down partnership where all partners do not have a clear understanding of the roles, and responsibilities, especially the essence of SUP in ITE. The essence of SUP here means that all partners forgot about the need of intensive collaboration between partners to support learning. In this situation, the role of SUP in bringing the two partners together is prominent. This is why the roles of SUP in bringing participants to engage in social dialogue, stepping out from their communities and taking a fresh look at others, and reflecting, analysing and accepting differences with open minds are essential. Overall, through the finding of this study, we have seen that how these functions of SUPs supported teachers' learning and the development of their professional knowledge, skills and attitudes.

5.3.1. Can a lower-level SUP foster learning and professional development of participants?

Although the current SUP practices had been discussed from the theoretical perspectives of different scholars, it is necessary to keep in mind that partnership should be seen as a process, not as a fixed defined event. For that reason, different scholars had placed their definitions of partnerships in a continuum. Nevertheless, few scholars had discussed that relatively high level of learning or outstanding professional development could appear in underdeveloped partnerships. Most of the literature directly or indirectly argued that higher level or more complex partnerships foster mutual learnings, trust building and understanding. It may be because of the lack of interest in observing lower-level partnerships or because of the assumption that only higher-level partnerships can bring mutual learning and development within the organizations. As a result of this, this dissertation discusses whether poor levels of partnerships can foster mutual learning and professional development even within a limited time.

In ITE, results have shown that both MTs and STs claimed that they have developed their professional knowledge, skills and attitudes. Interview responses have proved that both partners gained extensive professional knowledge through formal communication as well as informal communication. As we have seen, SUPs in ITE were in the lower level of partnership models as defined by different scholars. Nevertheless, both qualitative and quantitative results had proved that teachers' learning, and professional development were significant even through in limited partnership practices. In the case of curriculum development and implementation, there were also evidences that partners learnt a lot from each other. Despite the fact that partnership was a top town process where power distance is significant, mutual understanding and trust had been built among CDT developers. Likewise, in CPD and research development functional areas, SUPs had shown mutual learning among partners. These partnerships were also limited partnerships; however, dialogue and communication have emerged during collaboration which led to mutual learning and understanding among partners.

Partnerships processes grow gradually depending on their human dimension (Grobe, 1990). This also highlights the fact that 'partnership is a process' and it also shows that people's understanding and trust will develop slowly if enough time is given to the participants to develop their partnerships. In Myanmar case, despite the low-level partnership, the awareness of the importance of partnership has risen in participants. Within a limited time of collaboration, participants have shown that their mutual understanding and trust have

developed gradually. Mutual respect and paying attention to others have developed higher than in their initial period of participation.

6. CONCLUSION

Most of the literature about SUPs has been focusing on their roles in teacher education and teachers' professional development, especially on how teachers develop, what knowledge or competences they gain or how their communities adopt various practices. This study has paid special attention to the multi-functionality of SUPs, exploring how they can be used as a multi-functional tool to promote educational development. This does not mean that the outcomes of SUPs related to teachers' learning and professional development have been neglected. In the results section of the dissertation, the nature of SUPs in the Myanmar context has been presented, including the factors determining their success and failure and the impact of SUPs on teacher learning and professional development.

In the theoretical perspectives chapter, seven functions of SUPs have been identified: (i) teacher learning and professional development, (ii) education research and research development, (iii) facilitating change and spreading educational innovations, (iv) school improvement, (v) university improvement, (vi) curriculum design and reform implementation, and (vii) enhancing participation and engaging in social dialogue. The exploration of the multifunctional nature of SUPs and the use of this multi-functionality framework in educational development in Myanmar is one of the notable outcomes of this study. Based on our research findings, one can state that SUPs in Myanmar, despite their lower level, have active roles in all of these functions, especially in enhancing teacher learning and professional development, supporting national curriculum reform and implementation, and, finally, facilitating educational change in the country.

Although the seventh functional area (enhancing participation and social dialogue) did not receive much emphasis in the analysis above, this also has to be underlined here. The first and last functions of SUPs, that is, supporting teacher learning and enhancing participation and social dialogue, should be seen together. According to our research findings, SUPs have promoted teacher learning and professional development by engaging in social dialogue. In this study, one could observe the significant role of SUPs in engaging the members in social participation leading to mutual learning and the development of professional competencies.

Another noteworthy contribution of this dissertation is the application of general partnership theory to the analysis of SUPs. A key element of this is looking at partnerships as entities reaching specific levels of cooperation and placing them on a scale from lower to higher development levels.

Besides, the prominent role of SUP in facilitating the country's education reforms as a change catalyst has been explored. SUP appeared as a change catalyst, particularly in the case of curriculum development and implementation, through facilitating collaboration among participants. School-university cooperation supporting curriculum development and implementation seems to be the most successful SUPs in the country.

In the area of curriculum development and implementation, we can see other crucial roles of SUPs and their significant benefits. Firstly, SUP for curriculum development and

implementation raises the awareness of all teachers and university teachers to acknowledge the benefits of partnerships in promoting their professional development. Moreover, it might have also raised the awareness of educational authorities and policymakers since significant feedback has been given by participants. This might be the first step of SUPs to generate innovation in education across the country. Secondly, without school-university cooperation, the national education curriculum reform could not have been implemented successfully. The third essential point of SUPs, perhaps the most important one, is 'giving the opportunities to UTs and schoolteachers to communicate, discuss and collaborate intensively', which had never happened before in the country.

This study also includes a chapter about Hungary. The Hungarian experiences might support a better understanding of the potential of school-university cooperation in the Myanmar context. Although the current conditions are not favourable for education development in Myanmar due to political conflicts, these experiences might be used in the future. The two Hungarian school cases presented in this study have shown how bottom-up innovation and bottom-up SUPs can develop and survive during ups and downs situations. To put it differently, the two Hungarian school cases might give 'hope' to Myanmar schools to initiate and implement bottom-up SUPs and pedagogical innovation in schools.

Although partnerships in Myanmar have not yet been advanced and several challenges had to be overcome to build 'symbiotic relationships', there is much hope for the future since progress has been made. The following remark by Richard Clark in 1991 through analysing his own experiences in participating in SUPs reflects the current school-university cooperation status in Myanmar:

While truly symbiotic relationships have not been forged yet (...) many exciting efforts have been initiated and, in at least several of the partnerships, there are signs that mutual interests are beginning to be served. (Clark, 1991, p. 9)

In Myanmar, despite the challenges and the lower level of partnerships, the awareness of participants and mutual interests in establishing SUPs have been raised. Although some areas of SUPs, such as research development and school and university improvement have not yet developed explicitly, we have seen the potential of this in the future. Nevertheless, without these SUPs, the communication and collaboration between the two parties would not have occurred as the difference in power status and professional backgrounds are huge in the country. This study has shown that SUPs can serve as bridges between two entities and can be used as a multi-functional tool to support educational reforms in developing countries like Myanmar.

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Explanation of CDTs

For curriculum development teams (CDTs), I have three groups divided based on their roles in developing and implementing the national basic education curriculum. The three groups of CDTs are as follows:

- 1. CDT developers: members of CDTs who are responsible for developing national curricula such as basic education schoolteachers, academic university professors/teachers, university professors from teacher training institutions, etc. They are the people who wrote the new curriculum. This study includes three CDT developers: one university teacher and two schoolteachers.
- 2. CDT trainers: the schoolteachers or the school principals whom CDT developers trained. The roles of CDT trainers are to train the CDT trainees in their respective school township areas. In this study, these CDT trainers were the mediators or brokers between 'universities and schools' because they attended the trainings provided by UTs and then, they trained schoolteachers. Three CDT trainers participated in this study.
- 3. CDT trainees: the schoolteachers from basic education schools trained by CDT trainers. They did not have direct communication with university teachers like CDT trainers had. Two CDT trainees participated in this study.