The Principals' Praxis of Pedagogical Leadership in Nurturing Teaching and Learning in Cambodian Primary Schools

Sath Sorm[*]

Ilhan Gunbayi[**]

To cite this article:

Abstract: The research was undertaken to find out the strategies adopted by principals to exercise pedagogical leadership in nurturing teaching and learning in Cambodian primary schools. The exploratory sequential mixed design synthesized by holistic multiple-case study in the first, and survey design in the second phase. Punhea Lueu and Kandal Steung district in Kandal province were chosen as research field. Specifically, 4 principals from Punhea Lueu were selected purposively for semi-structure interview. Then, the qualitative results were utilized as the basis for designing a questionnaire for survey data collection. 38 principals from both districts were randomly selected. Analytically, content analysis supported by Nvivo software was applied with qualitative data whereas percentage of descriptive statistical analysis was quantitively computed. As results, trustworthiness, social relation, norm of reciprocity, and expectation were built for social capital while cultivating hardworking habit, self-discipline, student cooperation and cohesion among students are the important components for building academic capital. To build intellectual capital, teacher autonomy, sharing knowledge, experience and problem were practiced. For professional capital, principals have promoted evidence-based teaching strategies, provided enough pre-service, in-service and developed external cooperation. This study provides practitioners the social-based strategies to lead teaching and learning effectively.

Keywords: Academic, Capital, Intellectual, Professional, Social, Strategy

Introduction

School leaders have been seen as very crucial chameleons in charge of broad array of school activities by possibly changing alternative strategies to meet the various conditional demands. Regarding the term *pedagogy*, according to Manen (1991), it derives from the Greek word *pedagogue,* referring not to the teacher, but to the watchful guardian whose responsibility was to lead (*agogos)* the young boy *(paides)* to school. The pedagogue would be expected to see it as the child stays out of trouble and behaves properly. This is a kind of "leading" that often walks behind the one who is led. Etymologically, a pedagogue is a man or woman who stands in a caring relation to children: In the idea of leading or guiding, there is a "taking by the hand," in the sense of watchful encouragements. In a broad sense, Male and Palaiologou (2013) conclude that pedagogy is a triangulated concept based on the relationship of social praxis that is concerned with theory, practice and a set of social axes. Pedagogy, therefore, is essentially now the creation of learning environments in which the centrality of interactions and

[*] Akdeniz University, Antalya, Turkey, sorm_sath@hotmail.com, ORCID: 0000-0002-8289-2780
[**] Akdeniz University, Antalya, Turkey, igunbayi@akdeniz.edu.tr, ORCID: 0000-0001-7139-0200

relationships among learners, teachers, family and community (i.e. the values, beliefs, culture, religion, customs and economic circumstances) interact with external elements (such as the global economy, climate and social phenomena that, additionally, influence the life of the community) in order to jointly construct knowledge. Similarly, Abel (2016) states pedagogical leaders is the teaching and learning supporter who do not only take care of classroom teachers as the curriculum implementors, but it also encompasses many roles and functions in learning organization. For example, pedagogical leadership impacts teaching and learning by building organizational culture of continuous quality improvement. Pedagogical leaders influence pupil's learning by nurturing family engagement, ensuring fidelity to the organization's curricular philosophy, using data to evaluate the effectiveness of the learning program, and meeting standards created to optimize learning environments. Therefore, the leadership in this style is required to work with more various actors by merely not only leading teaching or administering, but encouraging involvement and fostering engagement also (Siraj-Blatchford, 1999). Thus, pedagogical leadership covers broader aspect of improvement of teaching and learning than instructional leadership which focuses mainly on teaching and learning.

In the case of pedagogical leadership practice, Cambodia does not practice well based upon some researches which focus on pedagogy not as a whole, but some components. The researcher can assume as such since there has not been any research on pedagogical leadership in Cambodia so far. The issues related to pedagogical leadership practices are: lack of parent involvement (Eng, Szmodis & Mulsow, 2014; Garcia Coll et al., 2002), lack of community involvement (Kheang, O'Donoghue & Clarke, 2018; MoEYS, 2016; UNESCO, 2011) etc. These affect partly pedagogical leadership practice based upon Sergiovanni (1998).

Objectives of the Study

The overarching objective of the research was undertaken to mainly investigate the experiences of principals in applying pedagogical leadership to nurture teaching and learning via building capitals in primary schools in the context of Cambodia. Because this study was employed mixed methods, the specific objectives were formulated into two forms of questions in accordance with mixed social paradigms, constructivist and positivist questions. Qualitatively, what are the school principals' experiences in practicing pedagogical leadership in nurturing teaching and learning in primary schools in the context of Cambodia? The four constructivist questions were formulated as follows:

1. In what way do principals develop social capital?
2. In what way do principals build academic capital?
3. In what way do principals develop intellectual capital?
4. In what way do principals develop professional capital?

Quantitatively, to what extend do school principals practice pedagogical leadership in nurturing teaching and learning in primary schools in the context of Cambodia? The sub-research questions were guided by positivist paradigm as follows:

1. To what extend do principals practice social capital?
2. To what extend do principals practice academic capital?
3. To what extend do principals practice intellectual capital?
4. To what extend do principals practice professional capital?

Literature Review

As ETUCE (2012) found, 21st century school leaders exert more pedagogical leadership that interacts closely with teachers, and democratic leadership involving all relevant actors in and around the school. Originally, pedagogical leadership was firstly proposed by Sergiovanni (1998) via his seminal work on *Leadership as pedagogy, capital development and school effectiveness*. It gains more and more attention among scholars and researchers while instructional leadership is authentically problematic. However, there have been still few researches on pedagogical leadership in comparison with instructional leadership. He emphasized that pedagogical leadership invests in capacity building by developing social and academic capital for students, and intellectual and professional capital for teachers.
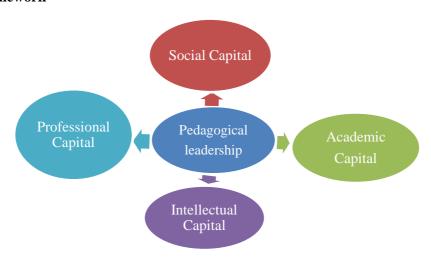
Theoretical framework

Figure 1. Theoretical framework of pedagogical leadership

Building Social Capital

OECD (2007) gave the definition to social capital as networks together with shared norms, values and understandings that facilitate cooperation within or among groups, while Bourdieu (1986) defines social capital as the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition or in other words, to membership in a group, which provides each of its members with the backing of the collectivity-owned capital, a 'credential' which entitles them to credit, in the various senses of the word (Hauberer, 2011). Putnam (1993) emphasizes communal vitality. Forms of social capital are the general moral resources of the community, and they can be divided into three main components: trust, social norms and obligations, and social networks of citizen activities, especially voluntary associations. Coleman (1988) explains that the form of social capital depends on two main elements: trustworthiness of the social environment which means that obligations will be repaid, and the actual extent of obligations should be held. Without a high degree of trustworthiness among the members of the group, the organization could not exist. Additionally, he also argues that norms in a community that support and provide effective rewards for high achievement in school greatly facilitate the school's task. When a norm exists, it constitutes a powerful, though sometimes fragile, form of social capital.

Pedagogical leaders' role is to cultivate social capital for student development through building caring communities which consists of norm, obligation and trust (Sergiovanni,1998). For Sergiovanni, social capital is compulsory for maintaining students in the right track of development. If there is no or lack of social capital support, the child will generate by themselves by moving more and more to the student subculture. Then, it orients them to practice a norm and code of conduct that encourage them to behave against the social norm in which schools are trying to foster.

Relying on Leana and Pil (2006), social capital comprises of two layers. Internal social capital refers to the interrelation among actors in the organizational system. The relation can occur between teachers and teachers, school leaders with teachers, and leaders with other staff etc. Nahapiet and Ghoshal (1998) suggest three facets in the form of clusters of internal social capital: The structural, the relational and cognitive dimension. The structural dimension is the properties of the social system and of the network of relations as a whole. The term describes the impersonal configuration of linkages between people or units. They use the concept of the structural dimension of social capital to describe about the overall arrangement of relation between actors that is, who you reach, and how you reach them (Burt, 1992). Rational dimension identifies the quality of the organization members' connections which includes trust, norms, and obligations. Cognitive dimension concerns the shared meaning and interpretation of network members. Knowledge and meaning are embedded in a social context; they are both created and sustained through ongoing relationships in such collective (Nahpiet & Ghoshal, 1998).

External social capital refers to the relationship between schools and external communities in which building external partnership is a main strategy for school to absorb resources to support school operation. These resources include information, matching funds, expertise, and regulatory and political support. Because different partners possess different resources, communities having multiple partners can access diverse resources, providing a comparative advantage over communities that have few partners. In the same vein, Barroso-Castro et al. (2016) argue that organization benefits from external social capital in three ways. First, such external social capital ties can serve as boundary spanners, providing channels for communication back and forth between the external environments. Second, highly connected directors can play another vital role in the organization they govern by obtaining support from influential agents or external stakeholders that may be critical to the organization's performance. Third, the legitimacy of decisions taken by the firm will also be improved by the presence of board members who are highly connected to other organizations with established members' reputations.

Academic Capital

Academic capital is built through focused communities cultivation in which deep culture of teaching and learning should nurtured, while the rituals, norms, commitments and traditions of this culture are practiced (Sergiovanni, 1998). Youtchoko (2016) creates seven tips for teachers to foster culture of learning. Firstly, teachers should set high expectations on student learning. When expectation is set, the students tend to strive to reach the expectations throughout the year because high expectations need more time to answer questions, more specific feedback and more approval. Secondly, teachers should motivate the students to have positive interaction with each other. Bullying should be forbidden. Student interact can be take place via group discussions, study clubs or student councils etc. It is useful for them to support and to assist each other. Such a classroom culture will become collectiveness, ease and positivity. Thirdly, teachers should give them **a voice during class so that they feel empowered and courageous of expressing their view and asking questions.** Teachers should also teach the students about the art of communicating and disagreements. This will be crucial not only in a classroom, but as they continue to grow and enter the professional world.

Fourthly, classroom should be make a safe place to fail. Teachers should tell them not to worry about their mistakes and explain them that failure as a big part of learning process. The fifth is that teachers should create a model on how students can learn. Guiding to set and to manage the goal are the big part of learning. Teachers can do discovery lessons with their students to help students learn how to take charge of their own learning and foster curiosity. Then, teachers should give feedback to the students often. Feedback is key tool for students' self-assessment and reflection. They realize if they are on the right track or need adjusting in their learning process. This feedback makes students feel confident in themselves. The last tip is that teachers should not only celebrate grades, but celebrate the accomplishments also. It is important for teachers to celebrate or praise the students who obtain the best score or grade; in addition, it is more important to speak highly of the students who achieve even it is

small. Victories for every student may be different, but it is important to recognize them so that students will gain more confidence and continue to grow.

Nagaraju (2004) posits it the psychological product of learning rather than a reflex and instinct in which implies the unlearned behaviour tendencies. It needs repeated activities done as cycle. Relying on Donaldson-Pressman, Jackson and Pressman (2014), learning habit is a way to master skills that are necessary for academic, social and emotional development. Habits are not innate and inherited. They are performed every time in the same way with great ease and facility. They brings accuracy in the action with at least attention or no attention. Nervous system is the principle factor in formation of habits. Based on Nagaraju (2004), family is a crucial enabler to nurture student learning habit, so parents should change family's routine carefully, reward system and expectation because these can boost student's self-esteem and organizational skill for overcoming the challenges. To do so, relying on Donaldson-Pressman, Jackson and Pressman (2014), parenting skill should be promoted and practiced as a family culture.

Intellectual Capital

Sergiovanni (1998) define intellectual capital as the total result of what everyone among the colleagues in the school knows and shares with each other that can help the school to be more effective in advocating students learning and development. School can build it through inquiring communities for teacher as a part of professional development. Pedagogical leader in intellectual capital realize that inquiry in classrooms by interacting with student does not flourish if inquiry among teachers is ignored. Where there is little discourse among teachers, discourse among students will be harder to promote and to maintain. Aspirations to transform classrooms into learning communities for students will remain more rhetoric than real unless schools become learning communities for teachers too.

To build intellectual capital, this study was applies Hord (1997) model's professional learning communities consist five dimensions. Supportive and shared leadership emphasizes that leaders' roles are to empower teachers to democratically participate in decision making and to give them appropriate autonomy. To get it done, school leaders should possess the ability to share authority, the ability to facilitate the work of staff, and the ability to participate without dominating (Prestine,1993). That is similar to Sergiovanni (1994), the sources of authority for leaders are rooted in shared ideas. It is provided by the institution, but reinforced by subordinates. Second dimension is collective creativity. Professional learning communities engage school staff at all levels in processes that collectively seek new knowledge and ways of applying that knowledge to their work (Hord, 1997). Shared vision and value dimension is about shared belief and commitment that all of school staff, including leaders, are holding to deal with mission, purpose goals, objectives or a sheet of paper near the principals' office (Isaacson & Bamburg, 1992 cited in Hord, 1997). The shared values and vision among school staff navigate school decision making about teaching and student learning, and support norms of behaviour. In this community, the vision is a total quality focus (Martel,1993). These values can create the norms of a self-aware, self-critical, and increasingly effective professional organization, utilizing the commitment of its members to seek ongoing renewal and improvement (Sirotnik, 1999; Little, 1997). The dimension of supportive conditions determine *when* and *where* and *how* the staff regularly come together as a unit to do the learning, decision making, problem solving, and creative work that characterize a professional learning community (Hord,1997). There are two types of supportive condition underpinning professional learning community practice: Physical condition and people capacity. Physical condition consists of time to meet and to talk, small size of the school and physical proximity of the staff to one another, teaching roles that are interdependent, communication structures, school autonomy, and teacher empowerment (Louis & Kruse, 1995).

The last dimension is shared personal practice. It lays stress on how teachers share their teaching tactics and help each other in classroom practice for effective teaching and fulfilling students' needs. This practice is not evaluative but is part of the "peers helping peers" process that is conducted regularly by

teachers who visit each other's classrooms to observe, script notes, and discuss observations with each other (Hord,1997). Darling-Hammond (1998) report that teachers who spend more time collectively studying teaching practices are more effective overall at developing higher-order thinking skills and meeting the needs of diverse learners. Teachers share their practice and enjoy a high level of collaboration in their daily work life. Teachers' mutual respect and understanding nurture the flourished culture in workplace. It motivates the teachers to ask for help, support and makes them trust each other. It also makes teachers to tolerate and encouraging each other in debate, discussion and disagreement. Moreover, they feel comfortable to share their success and failure (Wignall,1992 cited in Hord,1997).

Professional Capital

To build professional capital, we should cultivate communities of practice. Sergiovanni (1998) views that professional capital is similar to intellectual capital in the sense that they focus on collegiality, sharing and helping each other. The difference is that collegiality in professional capital takes place more seriously to reach the level of creating a single practice of teaching in the school that is shared by many. Sharing and helping attributes are beyond the boundary of the schools. For him, communities of practice are more likely to emerge in small schools, schools within schools, family-grouped schools, teams that stay together for more than one year and other configurations found in learning communities that provide for continuity and that promote sharing. That is consistent with Coake and Clark (2006) who argue that CoPs should be extended their interaction with members of international communities.

Based on Buckley and Gianakopulos (2010), sharing, interacting, actively participating and collaborating learning from each other become the central activities in a knowledge society. They argue that communities of practice are the innovation in knowledge sharing and exchanging information. They further state that one of the most important aspects of communities of practice are a group of people share knowledge, learn together and create common practices in which community members frequently help each other solve problems, give advice with each other and develop new approaches or tools for their field. Similarly, Wenger, McDermott and Snyder (2002) describe CoPs as a group of people who share a concern, a set of problems or a passion about a topic, who deepen their knowledge and expertise by interacting in professional practices. CoPs present a theory of learning that starts with this assumption: engagement in social practice is the fundamental process by which we learn and so become who we are (Wenger, 1998). Coake and Clark (2006) see CoPs as the crucial carriers of informal knowledge and developer of knowledge.

Research Methodology

Based on the nature of this study, exploratory sequential research design, specifically the instrument development model, was deployed because the overall aim of this research is "to seek the experiences of the principals in applying the pedagogical leadership for nurturing teaching and learning in their schools." The other reason behind choosing this research design is that, according to research problem, we see it is qualitatively oriented consistent with the main purpose of exploratory sequential research design which is to generalize qualitative findings obtained from a few individuals in the first phase to a larger sample gathered in the second phase (Creswell & Plano Clark, 2011). More specifically, holistic multiple case study was undertaken in the first phase because the study was done with only 4 school principals as the single unit of analysis in four contexts of primary schools (Yin, 2012), while survey design was conducted in the second one (Groves et al., 2009).

Population and Sample size

Ponhea Lueu and Kandal Steung district of Kandal province in Cambodia were chosen as research field because they surround Phnom Penh capital city that is more applicable for pedagogical leadership practice due to more sufficient material resources supply than other provinces and districts, and are more accessible for researcher. Ponhea Lueu consiststs of 11 communes covering 28,184.90 km^2 with

population of 90,652 while Kandal Steung consists of 18 communes covering 2,169.05 km^2 with population of 86,768 (KPO, 2012). According to Kandal Provincial Office of Education, Youth and Sports (2017), there are totally 75 primary schools in the two districts. Ponhea Lueu consists of 43 primary schools, 392 classes, 321 teachers and 12834 students whereas Kandal Steung comprises of 32 primary schools, 363 classes, 223 teachers and 12790 students.

Purposive sampling was employed to select 4 school principals from Ponhea Lueu district to participate in semi-structure interview based upon at least two years of experiences as principals, whereas simple random sampling technique was deployed to choose 38 principals in which 20 were from Punhea Lueu, and 18 were from Kandal Steung district according to the list of primary schools, receiving from the Directorate of Education, Youth and Sport of Kandal province (2017).

Data Analysis

Analytically, qualitative data collected through interviews was analyzed by content analysis. Qualitative content analysis has been defined as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). Nvivo was used to support this data analysis. On the other hand, the data collected through questionnaire was analysed quantitatively by using descriptive statistics. Percentages were computed by Statistical Package for Social Sciences (SPSS) 18.0 respectively. Also, the results were presented into pie chart and tables. Remarkably, the data collection proceeds from 10 March to 30 April 2018.
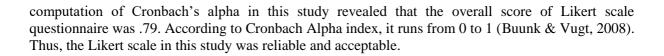
Ethical Consideration

Prior to the data collection process, all research ethics was carefully adhered in every stage. The researcher sought permissions from Educational Directorate of Kandal Steung district in legal and respective way. Relevant documents such as interview questions and an official letter from Akdeniz University was submitted to Educational Directorate Office. The researcher asked for a list of primary school principals. Then, the researcher selected the potential participants based upon the information on the list. The researcher asked national educational directorate of Kandal province for an official letter as legal proof for presenting to the principals for inviting them to anticipate in data collection process. The gathering data process preceded unless there were voluntary agreements with the principals' signature. To be more confident in privacy assurance, the names of participants were not released. The informed consent letters were clearly stated about the rights of informants in refusing to answer the questions which they think that they are sensitive, and they have a say to withdraw from this research any time. After data collection, all the collected data was treated in a confidential manner that is protected the confidentiality and anonymity of the participants and organization involved in the research.

Reliability and Validity

In order to ensure reliability of the qualitative interview question, pilot study was conducted with 1 principal before the actual interview in the first phase because it provides the opportunity for researcher to identify or refine questions, correct some errors and make modification. The selection of participants was based on voluntarism so that principals felt opened and free to express their opinion and described experiences in front of questions and answer. Moreover, data were used as direct quotations from the interviews without making any modification on them, and Cohen's Kappa coefficient was calculated to determine inter-rater trustworthiness of themes by two independent researchers (One was a researcher of this study, and another was an external researcher). The score was .81 (perfect agreement) (Landis & Koach, 1977)**.**

Especially, Cronbach alpha was calculated to ensure internal consistency reliability. This measure generally is used to indicate a multiple item in Likert scale based on the mean or average correlation of each items in the scale with every other item (Leech, Brrett & Morgan, 2005). As a result, the

computation of Cronbach's alpha in this study revealed that the overall score of Likert scale questionnaire was .79. According to Cronbach Alpha index, it runs from 0 to 1 (Buunk & Vugt, 2008). Thus, the Likert scale in this study was reliable and acceptable.

Findings

Phase I: Results of qualitative data

Building social capital

The thematic analysis of qualitative data on what the school principals' experiences are in practicing pedagogical leadership in building social capital are shown in Table 1.

Table 1.

Building social capital

	Building Social Capital	PA	PB	PC	PD
1	Adhering to non-violence policy			√	
2	Being transparent	√			√
3	Being honest to each other	√	√	√	√
4	Building trust	√	√	√	√
5	Exchanging information	√	√		√
6	Expectation is to develop the school	√	√	√	√
7	Following the work routine			√	
8	Helping each other	√	√	√	√
9	Keeping good relation in school	√	√	√	√
10	Keeping good relation with community	√	√	√	√
11	Promoting equality				√
12	Spending money when it is necessary	√			√
13	Spending times talking with colleagues and students	√			√
14	Tolerating with each other		√	√	
15	Well planning daily activities		√		√

Building Trust

Based on the table 1 above, trust is a main components of social capital cultivation since all of the interviewees agreed that building trust can flourish the social capital. Particularly, how to build trust? The results showed that there are some interactive attributes contributing to trust building such as honesty, good relation, talking openly with each other in a friendly way, upholding a sense of unity and mediation, making clear plan and following regular routine work, adhering to non-violence. As PA replied "*To build trust with my colleagues, I must be honest with the people around me, open for talking inside and outside the schools. More importantly, I keep all of my staff united. Even if sometimes there have been conflict or contradiction among our colleagues, I always mediate to find the way to compromise.*" It is similar to PB who said, "*I adhere to honesty with all of my colleagues, and I keep good relation with the students.*" Additionally, following routine work with clear planning, adhering to non-violence principle are also the keys. As PC said "*I follow the work routine and make fun with my colleges, on the other hand, I have had clear plan and regular routine in our daily work. Moreover, I normally adhere to non-violence principle in daily communication with all the people.*

External social capital depends on external trust as well. How to build trust between school and community? This question was asked to find more strategies for building trust between the schools and external community. Notwithstanding the strategies above, the results show that school principals try to cultivate trust by mostly participating in social activities. PA said, "*To build trust between my school and community, I normally make good relation with all the people*". He further said "*I trust different types of people such as police, local authority etc. very strongly, but less in doctor.*" And to strengthen good relation with the community, "*In the past 12 months, I participated a lots in community activities in the past 12 months such as cleaning pagoda, attending ceremonies, repairing roads.*"

Helping

Helping contributes much in social capital formulation in general and trust in particular. It was raised by all of the respondents. PA said, "*I sometimes guide my teaching staff to use good teaching strategies, and to perform class management better.*" Besides that, "*I have ever helped my teaching staffs by motivating, giving reward every at the end of the year, and advise the students to love and to help each other.*" In return, "*100% of the teachers in my school, contribute a lots for the common interest.*" In the same vein, PB stated, "*I have helped them with additional teaching techniques, and gave them material resources.* For the sake of common good, "*100% of teachers in my school always contribute times and money to the common interest of our community such as repairing roads, building schools, school ceremonies…*". Similarly, for PC, "*I help my teaching staff with additional teaching techniques, and every beginning of the year, I always call all teachers to have a meeting, then I advise them to help whoever has problem.*" As result, "*100% of teachers in my school have contributed both times and money for our community such as repairing roads, building schools, school ceremonies,*" he added.

Not so contrast to the three informants above, PD said, "*For colleagues, I help teachers with additional teaching techniques, and support them with money when they are facing with financial issues. I have told them to help each other.*" In return, "*100% of teachers in my school have contributed considerable times and finances for common interest such as repairing roads, participate many community events, building school constructions, school ceremonies etc.*"

Making and maintaining good relation and cooperation

Good relation is a crucial element of social capital. In the interview, all of interviewees confirmed that the relation in their schools is very good and smooth. To look deeply into the way those school principals make good relation in their schools and with communities alike, PA replied, "*We are honest with each other, and exchange information by using telephone, letter, talking directly as channel of communication.*" Unlike PA, PB said "*I create the meeting with teachers, and students through daily conversation face to face, meeting and by utilizing social media*". Not very different from PB, PC stated, "*I establish an open environment for nurturing free talking to each other so that we can talk directly, sometimes, by phone as means for communication, and I tell subordinates to forgive if any his or her colleagues make mistakes and help each other when anybody encounters problems, more essentially keep good teaching*". Akin to PC, PD said, "*I show the equality of wok and equality of right, kept honest, and promote working in teams. The teachers have given a good teaching.*"

Besides internal relation questions, the way in which school principals build good relation with community is also a vital inquiry in social capital section. PA's technique is that "*We have participated in community activities and exchange information with them.*" That is different from PB who states that "*I normally invite them to meet and discuss about our community and school issues.*" Similarly, PC said that "*We normally invite them to meet and ask for help when we need.*" Similar to the above three informants, PD shortly replied, "*To improve communication between your school and community, we exchange experiences.*"

Parent involvement is crucial in external relation for building social capital. Thus, what strategies principals have adopted to get parents involved in education both at home and at school? PA answered,

"*We try to get parent to involve in education through recording book and explain them about the advantages of their participation in their children education. On the other hand, we adhere to a slogan "At day is not enough, at nigh add more".* For involvement at school, "*I invite them to meet at school to attend ceremonies at the beginning of academic year and also at the end of some years.*" For PB, "*At home, I asked them to check recording books, to write comment and further suggestion every month. I also told them to monitor their children's homework while at school we arrange ceremonies and invite them to join, especially every at the beginning of school year, and sometimes we invite parents to meet at school if we still have problem about their children development.* Similar to PA, PC said, "*... I told them to encourage their children to learn at home. Normally, I tell them a slogan "At day is not enough, at night add more. ...at school, I invite them to join in our program at every beginning of academic year."* Related to PB, PD said, "*We send parents students' recording book at the end of every month, and meet them at home with parents directly when it needs. At school, we invite parent to participate in meetings or a discussion about their children progress.*"

In terms of cooperating with other schools, PA said, "*To promote cooperation between our school and others, we normally exchange information and skills with each other.*" PB replied, "*To promote cooperation between our school and other schools, we discuss about teaching techniques at every end of the month, and sometimes we exchange administrative skills with each other if any school administrators are unable to deal with any management tasks.*" PC said "*With other schools, we exchange skills and experiences with each other*", whereas PD stated, "*To keep relation with other schools, we usually change meeting places in turns.*"

Expectation

Expectation is also an important factor in social capital and highly rated by the respondents. The question was what they expect from building social capital. As a result, majority of the interviewees have the same expectation in developing their schoolsw2. PA said, *"For my school, I expect that it will be more united, clear work orientation; my expectation from the relation between my school and community is to exchange experiences each other."* For PB's expectation is that "*The good relation in school and with community is to develop my school."* Similarly, PC stated, "*Via this good relation, we expect that the school will improve, and we will trust more strongly each other in community."* Not far different from PB and PC, PD expected, *"We expect that the school will improve; From good relation with community, we expect that school and community will develop better."*

Build academic capital

The thematic analysis of qualitative data on what the school principals' experiences are in practicing pedagogical leadership in building academic capital are shown in Table 2.

Table 2.

Building academic capital

	Building Academic Capital	PA	PB	PC	PD
1	Assigning regular homework	√	√	√	√
2	Asking students to help each other	√	√	√	√
3	Building trust among students	√	√	√	√
4	Curriculum focus should not be too narrow, not too open				√
5	Encouraging students to be hardworking		√	√	√
6	Establishing conducive school environment	√	√		√
7	Finding external support	√	√		
8	Keeping good communication with teachers			√	
9	Making group discussion		√		√
10	Motivating students		√	√	
11	Taking care of underperforming students	√	√	√	√

#					
12	Playing game	√	√	√	√
13	Providing sufficient material resources				√
14	Promoting student-self preparation	√	√	√	√
15	Promoting student learning to link with real life	√	√	√	√
16	Promoting student cooperation	√	√	√	√
17	Sharing knowledge			√	√
18	Setting up student council		√		√
19	Setting up study club			√	√

Assigning regular homework

Homework plays an important role in academic capital because it nurtures the culture of student learning and teaching via repeated activities. It is raised by all of the participants. For example, PA said, *"My teachers give homework to students every day."* When the students come to school, he, moreover, added, *"80% of my students come to school with completed homework."* Exactly the same to PA, PB also said, *"My teaching staffs give students homework every day."* As results, he estimates, *"70% of my students come to school with completed homework."* Similarly, PC said, "*I told teachers to give homework to the students every day, but only five times a week they have done." The result is that "90% of my students come to school with completed homework,"* he continues. Not contrast to the interviewees above, PD said, *"Teachers in my school assign my students to do homework every day and every subject."* Consequentially, "*99% of the students in my school come to study with completed homework,"* He added.

Promoting student-self preparation

All of the participants rated student-self preparation as necessary for students to be ready for learning at school. When all of informants were asked "By your estimation, what percentages of students come to school with being well prepared (uniform, reading at home, learning material, coming to school on time...)?" PA replied, "*70% of my students come to school with well preparing."* More precisely, when the same question was asked to PB, he thought about one minute, then he replied, "*80% of the students in my school arrives school with well preparing, 100% is ready for uniform, 60% for reading at home, 100% for learning material and 90% for arriving school on time."* PC said, "*85% of my students come to school with well preparing"* while PD replied*, "70% of my students come to school with well preparing."*

Promoting student learning to link with real life

Pedagogically, student learning should be connected to the real life problems so that the   students are simply to understand the contend, and are be able to apply that knowledge in the real life practice. PA said, *"It depends on the lesson. Some lessons are attached to the real life while some are not. For example, biology is easy because we can show them the real animals they have ever seen before. But, it is hard for teachers to teach physics in the real life because it needs some experiments and it difficult for student to imagine."* Similarly, PB said, "only about *50% of the lessons are attached the students' real life because some need doing experiment and practicing while others are easy to explain."* On the other hand, PC raised, "*About 75% of the lessons are attached to real life because some need more critical thinking that is beyond the primary school student level to understand."* More positively, PD said, "*Most of the lessons in my school are attached with real life because the teachers are very good at explaining*."

Taking care of underperforming students

Poor performance students are the challenges for most of the teachers. Whenever arriving the class or going home, they think about how to help their students to be hardworking, outstanding, pass the exam or what is the problem with my students? Therefore, a question asked to the interviewees was: what

strategies have you used to help your students who perform poorly in the class? As results, PA replied, "*To help students who perform poorly in the class, we change their seat to sit with good students, and create student club so that the outstanding ones can share knowledge with or help the low performing students.*" "*I create a special class on every Thursday for additional lesson*", PB answered. Additionally, PC states, "*To assist low performant students, I create a special class every Thursday of the week for additionally support*" whereas PD replied, "*To help student who perform poorly exercise, we ask simple questions, and keep good relation.*"

In addition to helping low performance student, the four principals were assigned to answer other similar question, what strategies have you used to encourage student to be hardworking? Consequentially, PA replied, "*To encourage students to be hardworking, we have shown a good student or someone as model so that they can follow or imitate.*" In contrast, PB replied, "*To encourage students to be hardworking, we give homework regularly, and divide task clearly for them.*" For PC, "*We motivate them by rewarding certificate of honour.*" Moreover, PD said "*To get students to be hardworking, I ask the teachers give the students regular homework.*"

Building trust

As described in social capital, trust is a most important dimension for long-term relationship. Not only for building social capital, but it also pays a contribution into inquiring communities. What build trust among students? According to the results, helping, equality, study club, student council, and honesty were practiced. PA said, "*I always advise them* (students) *to love and to help each other.*" For PB, "*I explain students about the advantages of helping each other when any of their friend has problems. More importantly, we have student council for tackle students' or study problems.*" On the other hand, PC said, "*I tell them not to tell a lie and to keep promises and not to look down on each other. Especially, I ask outstanding students to help poor performing students; through study club, the students can share their knowledge and experiences with each other.*" It is consistent with PD, "*We have set up student council and study club for sharing knowledge and discussing about any topic or issues so that they are able to meet and to make frequent communications that improve their trust among themselves, and help to teach each other.*"

Playing game

Game is very common in children education. Based on the interview, all of interviewees encourage the teachers to use game strategy as a tool to make students happy in their study, and increase collaboration among their classmates. PA said, "*Well, when there is free time or breaking time, I encourage the teachers to play game with their students in order to increase relation between students and their teacher.*" Similarly, PB stated "*I have ever told teachers to set up a game program in their classroom to promote student understanding, and makes them happy in their learning.*" It is consistent with PD, "*Besides study club, I encourage students to play game so that they learn to help and share their learning strategies each other.*" It is somehow different from PC, "*Teachers always ask students to play game at the breaking time in purpose of attracting the student.*"

Promoting student cooperation

Student cooperation is an effective technique for improving high student achievement, and it is also a core concern of pedagogical leaders. As sequences, PA said, "*My students normally work together well when the teachers ask them to work in group because I always tell them to love and help each other if anybody have any question or problem. Furthermore, I advise to set up small groups so that they are able to discuss and to learn from each other.*" PB replied, "*Well, in my school, the students cooperate as usual; especially, when teachers give them the joint tasks in the class, they discuss and understand each other.*" Similarly, PC states, "*My students usually work together in group discussions. The outstanding students always help the poor performing students. On the other hand, they respect each other.*" Finally, PD said, "*Yes, the students in my school usually work together well when the teachers*

assign to do team work or group discussion. They tolerate with each other without discriminating who is intelligent or unintelligent."

Table 3.

Building intellectual capital

	Build Intellectual Capital	PA	PB	PC	PD
1	Creating an open environment	√	√	√	√
2	Designing clear regular plan		√	√	√
3	Encouraging the teachers to continue learning (lifelong learning)			√	
4	Enhancing teacher cooperation			√	√
5	Granting teacher autonomy	√	√	√	√
6	Increasing general knowledge	√			
7	Promoting sharing knowledge	√	√	√	√
8	Promoting teacher participation in discussing and decision making	√	√	√	√
9	Promoting freedom of expression	√	√	√	√
10	Training teachers sufficient pedagogical skill	√			√
11	Promoting mental training	√			
12	Upholding teacher professional ethics			√	√

Building intellectual capital

The thematic analysis of qualitative data on what the school principals' experiences are in practicing pedagogical leadership in building intellectual capital are shown in Table 3.

Creating open environment and pedagogical skill

The first main theme of intellectual capital is creating conducive environment for communication. The question about open environment was answered by the four interviewees. All of them have almost the same strategies when referring to open environment. PB said "*Well, we try to create an environment that motivate the students to talk and to discuss freely in school, but they also respect the rule in the classroom in study time.*" Indirectly, it agrees with PD who states, "*The teachers in my school are friendly, helpful and tolerate with the students, and we have good building and cleaned compound that allow the students to play and to talk happily*." PA replied, "*To create open environment for teachers to discuss or talk each other freely, I tell them clearly and publicly about open discussion or talking.*" And PB answered, "*I tell them to talk each other freely. No need to hide.*" Not very different from PA and PB, PC said, "*For creating open environment, I always welcome and let them feel free to express their view. Any time after teaching, they can discuss or talk wherever, especially in front of school build freely.*" Similarly, PD, "*We try to make friendly environment so that they can talk or discuss freely and openly. To achieve so, we tell them clearly and publicly about rights to express their ideas.*"

Promoting teacher participation in discussion and decision making

In democratic view, participation is a main pillar of good governance in public administration and education alike. Specifically, it is also a core component of intellectual capital because it was rated 100% by all the interview participants. For example, PA said, "*Teachers in my school participate in discussion and decision making almost every time. The teachers in my school sometimes participate in designing curriculum, and in budget planning every time*", whereas PB said, "*Teachers have gotten involved in discussing and making decision about most of the school issues very often. Every time we make school budget plan together as I always invite them to participate.*" However, he further emphasizes "*Our*

teachers have never joined in designing curriculum because it is already set by MoEYS." It agrees with PC who states, "*Teachers in my school often get involved in discussing and in decision making about school affair. All the time we make school budget planning they participate actively, but they do not join in designing curriculum because it is the duties of MoEYS.*" Finally, PD is consistent with PA, "*Every time in every month the teachers get involved in discussing and making decision about school issues. Teachers have joint in designing curriculum every time, and they participate in all school budget planning.*"

Promoting sharing knowledge and problem

Sharing knowledge as well as issues is the indispensable element of intellectual capital. The findings are shown as follows: The PA mentions, "*We share knowledge or experiences through technical meeting, and if the anyone knows any new idea or knowledge, we arrange a class for him or her to present in a demonstrative class (ni tours). Every week, if I cannot solve the problem, I always ask my superior for help.*" More likely to PA, PB expressed, "*We have a class for learning and teaching from each other (ni tours). The teachers who know new teaching techniques teach the teachers who do not know. Normally, the teachers share their idea and problems with me about five times a week.*" It is in line with PC who said, "*I normally invite good teachers to share with other teachers in a demonstrative class.*" On the other hand, he further said, "*The teachers share their experiences or problems with me once in a month in technical meeting.*" Similar to the three principals above, PD states "*I have given the teachers strategies of teaching techniques and of making good relation with students and their guardians. Additionally, I gave them pedagogical books, and every week the teachers share their experiences as well as problems with me.*"

Promoting freedom of expression

Freedom of express plays an important role in building intellectual capital. As PA said, "*Sometimes they* (teachers) *have criticized about MoEYS.*" It agrees with PC who said, "*I always welcome and let them feel free to express their view.*" Additionally, PB mention, "*Our teachers sometimes also criticize about school issues; some issues are caused by our superiors or from community involvement; for example, parents are too busy to help us in their children's issues that are difficult to figure out.*" PD expressed, "*We tell them clearly and publicly about rights to express their ideas.*"

Granting teacher autonomy

Teacher autonomy was asked to look for power distribution the leaders have given to the teachers for an independent pedagogical and exam paper decision. As results, PA replied, "*50 % of pedagogical decision are made autonomously by the teacher himself or herself.* To design exam paper, *firstly, we make drafts and then we have discussions with other teachers from different schools in the same cluster to design it together. Lastly, we decide together which contents should or should not include in the exam paper.*" For PB, "*Teachers in our school are 100% autonomous in pedagogical decision in their daily teaching. In terms of exam paper, the teachers in my school normally make drafted exam paper before designing the completed one, then they have a meeting with other teachers from other schools; after that, they make discussions about what should we include or excluded in our exam paper. Finally, they design exam paper together.*" This is consistent with PC, "*Our teachers are 100% autonomous in pedagogical decision in the class.* For designing exam paper, *our teachers make drafted exam paper and have discussions with other teachers from different schools, then design exam paper together.*" Not different from PB and PC, PD said, "*Our teachers are 100% autonomous in pedagogical decision in the class.* About the autonomy in designing exam paper, *"We make drafted exam paper, and we have discussions with other teachers from different schools; then, we design together*."

Designing a clear plan

Planning, especially lesson plan, is another technique the principals have used to build intellectual capital because, according to them, it makes us do activities smoothly and productively. As PB said, "*I build professional capital by planning clearly what I will do to be a good educator, and by implementing. For example, I design and monitor lesson plan regularly*." Similarly, PC, "*I make a clear plan for any important activity; then, I follow well what I have planned.*" PD raised, "*We should plan clearly before we do any activities, for example, lesson plan should be designed professionally every day when we teach in the class we should follow it well.*"

Building professional capital

The thematic analysis of qualitative data on what the school principals' experiences are in practicing pedagogical leadership in building professional capital are shown in Table 4.

Table 4.

Building professional capital

No	Building Professional Capital	PA	PB	PC	PD
1	Applying evidence-based teaching strategies	√	√	√	√
2	Getting informal in-service training from NGOs or Foreign embassy				√
3	Providing enough pre-service training	√	√	√	√
4	Providing enough formal in-service training		√	√	√

Pre-service training

Pre-service training is a compulsory program for novice teachers. According to the result, all of participants provide the same answer. For PA, "*My teaching staff have been trained pedagogical skill for 2 years before becoming a teacher*." While PB added, "*To become formal recognized teachers, generally they have to be trained pedagogical skill for two years*." Not different from PA and PB, PC added, "*Normally, the teachers in my school have been trained about pedagogical skill for 2 years before becoming a formally recognized teacher*." PD stated, "*Before becoming a formal teacher, our teachers have to be trained about pedagogical skill by MoEYS for two years*."
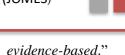
Formal in-service training

Based on table above, formal in-service training has been provided by MoEYS to teachers about once per year. As PA expressed, "*My teaching staff do not get formal in-service training often*." It agreed with PB, "*Sometimes our teaching staff have gotten formal in-service training from MoEYS for additionally consolidating teaching capacity*." Similarly, PC, "*Our teachers receive in-service training from MoEYS once in two years*." That is different from PD who said, "*Once a year our teaching stuffs received formal in-service training from MoEYS*." For informal in-service training, it was cited only from PD who mentioned, "*Sometimes the teachers in my school get informal in-service training from NGOs*."

Applying evidence-based teaching strategies

Evidence-based strategy in teaching is important for effective teaching because it provides the students concrete proof of explanation so that they understand cleanlier, and it makes the teachers easy to put into practice. In this point, the school leaders were asked in order to investigate into the teaching strategies in their school used for their daily teaching. PA said, "*About 70% of our teaching strategies are evidence-based because we follow student-centered approach*" while PB said, "*Teaching strategy in our school are 80% evidence-based depending on what kind of lessons is and material resources we*

have." More optimistically, PC stated, "*100% of our teaching strategies are evidence-based*." Additionally, PD said, "*Our teaching strategies are evidence-based depending on particular subjects, and material resources*."

Phase II. The Results of quantitative data

The following findings based on quatitative data is about the results obtaining from Likert scale questionnaire consisting of five scales. 1=Strongly disagree, 2= Disagree, 3= I don't know, 4=Agree, 5= Strongly agree. These findings are represented by percentage (%).

Social capital

The results show that the items for building trust in schools and with external communities were highly positive. This mean that school principals have put strong emphasises on building trust as a keystone in social capital cultivation. As evidence, item 1, 2, 3 and 4 were equally rated in level of agreement scale (73.2% agreed; 26.3% strongly agreed). Other supportive themes of social capital which were rated highly positively were making good relation among the staff in schools and with external partners. As shown in item 9, it was rated by the majority of the participants. 86.8% agreed, and 13.2 % strongly agreed that they have actively anticipated in a lot of social activities such as ceremonies, weddings, building roads etc. It is similar to item 12 in which 81.6% of participants rated in agreed and 18.4% rated in strongly agreed scale. These indicated that principals have tried their best to make and to maintain good relation internally and externally. Noticeably, the highest rated one was item 23 in which 68.4% agreed, and 31.6% strongly agreed they have expected that the good relation in schools, with other schools and with communities would bring more school development.

Table 5.

Building social capital (n=38) (%)

No	Social capital	1	2	3	4	5
1	To build trust in my school, I must keep good relation with all my colleagues.				73.7	26.3
2	To build trust in my school, I try to maintain unity with all my colleagues.				73.7	26.3
3	To build trust in my school, we must help each other.				73.7	26.3
4	To build trust in my school, I try to keep honest to each other.				73.7	26.3
5	To build trust between my school and community, I must keep good relation with community.				78.9	21.1
6	To build trust between my school and community, I must keep honest with community.				78.9	21.1
7	To build trust between my school, and community, I must exchange information with community.				81.6	18.4
8	I completely trust different types of people in your community such as police, local authority, teachers and doctors.	2.6	2.6		76.3	18.4
9	In the past 12 months, I participate in community a lot of activities such as ceremonies, wedding, election, building roads...				86.8	13.2
10	My school has gotten additional fund from MoEYS.				73.7	26.3
11	My school have gotten fund from NGOs and community		5.3	7.9	63.2	23.7
12	To build good relation in my school, we must keep honest with each other.				81.6	18.4
13	To build good relation in my school, we exchange information with each other.				81.6	18.4
14	To build good relation in my school, we increase meetings and discussion.				78.9	21.1
15	To build good relation in my school, we promote equality in our school.				78.9	21.1
16	To build good relation between school and community, we exchange information with each other.				81.6	18.4
17	To build good relation between school and community, we have frequent meeting with community				76.3	23.7
18	To build good relation between school and community, we create opportunities to exchange experiences.		5.3	2.6	68.4	23.7
19	To get parents to involve in helping students learning at home, we send recorded book every month.				65.8	34.2
20	To get parents to involve in helping students learning at home, I tell them to urge their children to learn additionally at home by adhering a slogan: at day is not enough, add at night.				73.7	26.3
21	To get parents to involve in school activities, I have created parent meeting program so that they participate every year.				71.1	28.9
22	To get parents to involve in student learning at school, I invite them to discuss at school to find solution whenever the student has problem.			2.6	81.6	15.8
23	I expect that the good relation in school/ between school and community brings more development for my school.				68.4	31.6
24	I don't expect that the good relation in school/ between school and community brings more development for my school.	68.4	31.6			

Academic capital

The results below reveal that all of school principals agreed (78.9%) and strongly agreed (21.1%) that teachers in their schools have given homework to the students every day. This is one of strategies principals urged teachers to cultivate hardworking habit. Fruitfully, majority of students come to schools with completed homework as shown in item 26 (78.9% greed; 18.4% strongly agreed; only 2.6% disagreed). Furthermore, underperforming students were not ignored. School principals employed various strategies to help them. As seen in item 30, they have created special classes on every Thursday for consolidating their student learning (81.76% agreed; 13.2% strongly agreed; only 5.6% disagreed). On the other hand, the assessment was done on participants' view on curriculum. It revealed that the curriculum is acceptable (84.2% agreed; 15.8% strongly agreed; only 5.3% disagree). To improve student learning and cooperation, they have encouraged teachers to create game and to play with students (55.3% agreed; 21.1% strongly agreed; 18.4% disagreed and 5.3 % strongly disagreed). More importantly, item 36 shows that most of the lessons in their schools have been attached to students' real lives.

Table 6.

Building academic capital (n=38) (%)

No	Academic capital	1	2	3	4	5
25	The teachers in my school give home-work to the students every day.				78.9	21.1
26	Almost all of my students come to school with completed homework.		2.6		78.9	18.4
27	Most of my students come to school with well preparing (uniform, reading at home, study materials, punctuality).		2.6		78.9	18.4
28	To make my student hardworking, I take a good student as a model and tell other to imitate.		2.6		65.8	31.6
29	To make my students hardworking, I motivate them, who earn highest scores, by giving rewards.				71.1	28.9
30	To help weak students, I create a special class for additional teaching.		5.6		81.6	13.2
31	To help weak students, I arrange the weak students to sit with outstanding students.		2.6		78.9	18.4
32	To help weak students, I have made good relation with them.				76.3	23.7
33	To help weak students, I create a student club and student council so that the good students are able to help the weak students from different means.				84.2	15.8
34	The curriculum in my school is acceptable.		5.3		84.2	10.5
35	The curriculum in my school is too open that is hard for students to catch up.	13.2	50	7.9	26.3	2.6
36	Most of the lesson in my school attaches to student's real lives.	2.6	5.3		78.9	13.2
37	I advised teachers to create and play game with students.	5.3	18.4		55.3	21.1

Building intellectual capital

Table 7 indicates sharing knowledge and experiences among school staff is a main dimension in intellectual capital. The results show the majority of participants agreed and strongly agreed that they have shared their knowledge and experiences among their colleagues in different ways at different occasions in accordance with item 38, 39 and 40 Moreover, they always discuss with colleagues to find reasonable solution to dealt with students problem (84.2% agreed; 13.2% strongly agreed; only 2.6% disagree). In addition to the previous elements, the teachers have participated actively in school decision making with principals as indicated in item 42 and 44. Apart from those, school principals have provided enough freedom of expression to the teachers whenever they intend to use as shown in item 45 and 46.

Table 7.

Building intellectual capital (n=38)(%)

No	Intellectual capital	1	2	3	4	5
38	I always share my knowledge as well as my experiences with the teachers in technical meeting.	2.6	2.6		65.8	28.9
39	I always share my knowledge as well as experiences with teachers in demonstrating class.		2.6	2.6	78.9	15.8
40	Teachers always share their experiences and problems with each other every week.			2.6	78.9	18.4
41	Teachers in my school always make discussions with their colleagues to find solution for dealing with student's problems.		2.6		84.2	13.2
42	Teachers in my school always participate with me in most of school decision making.		13.2		71.1	15.8
43	Teachers have never joined in designing curriculum because it is the duty of MoEYS.	5.3	39		47.4	7.9
44	Teachers in my school always participate in budget planning.		2.6		65.8	31.6
45	To build an open environment for teachers to freely communicate, I tell them openly to talk each other freely without worrying.		7.9	2.6	65.8	23.7
46	Teachers always express their opinion and suggestion for further developing student learning.		2.6		76.3	2.1
47	Teachers have never criticized school issue.		21.1	5.3	65.8	7.9

Building professional capital

Table 8 indicates teachers in participants' school were trained pedagogical skill 2 years by MoEYS before becoming an officially recognized teacher. This means that primary school teachers in Cambodia have been trained long enough to be a professional teacher. Additionally, official in-service training was given to most of teachers as seen in item 49 (42.1% agreed; 15.8% strongly agreed; 10.5% " I don't know."; 31.6% disagreed). More importantly, most of teachers have used evidence-based teaching strategies in their teaching, while teacher autonomy were positively rated by 78.9% in agreed and 21.11% in strongly agreed scale. The table further explicates that principals have encouraged their teaching staff to exchanges skill and experiences with external partners (71.1% agreed; 23.7% strongly agreed; 2.6% disagreed and 2.6 % strongly disagreed).

Table 8.

Building professional capital (n=38) (%)

No	Professional capital	1	2	3	4	5
48	Teachers in my school have been trained pedagogical skill for 2 years before becoming a professional teacher.			2.6	71.1	26.3
49	Teachers in my school have been gotten formal in-service training at least once a year from MoEYS.		31.6	10.5	42.1	15.8
50	Teachers in my school have never gotten informal in-service training from NGOs.	2.6	42.1	10.5	34.2	10.5
51	Teachers in my school have never gotten informal in-service training from foreign embassy.	2.6	42.1	10.5	34.2	10.5
52	Teaching strategies of the teachers in my school are highly evidence-based.	2.6	13.2	5.3	57.9	21.1
53	Teachers in my school are fully autonomous in pedagogical (teaching strategies) decision making in their class.				78.9	21.11
54	To design annual exam paper, the teachers in my school always discuss with other teachers from other schools, and then they create together.		7.9		73.7	18.4
55	I encourage the teachers to exchange skills with other teachers from other schools.	2.6	2.6		71.1	23.7

In conclusion, we found that the participants in both interview and questionnaire of the four dimensions of pedagogical leadership have practiced pedagogical leadership very positively.

Discussion

Both qualitative and quantitative findings in terms of the important ones which are contributed to the phenomena of research in the study were discussed and concluded together.
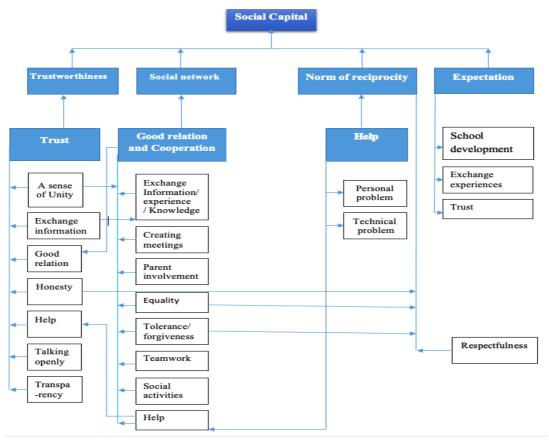
Building social capital

Figure 2. *Building social capital*

Trustworthiness

Trust is a main component for building and maintaining social capital. It is a precondition and the product of successful cooperation (Sztompka,1999), and the lubricant of cooperation for healthy relationship (Putnam, 2000; Axelrod, 1984). Coleman (1988) argues, without a high degree of trustworthiness among the members of the group, the institution could not exist. The results of this study are very positive in terms of building trust both inside and outside schools. There are seven main strategies in which school principals have built trust. Firstly, making effective communication for keeping good relation with each other by using different techniques such as talking face to face, communicating on phone, utilizing social media such as WhatsApp, Facebook, Telegram etc. Secondly, they keep honest among their colleagues and with community. They keep promise, not telling a lie. It is consistent with Brewster and Railsback (2003), the respected principals should exhibit honesty to foster environment for all interactions with school, support staff, parents, and students. Thirdly, they help each other when their colleagues and community members need because, based on the results from interviews and Likert scale questionnaire, 100% of the participants expressed the same view of the significance of helping each other in cultivating social capital. BNP (2015) summarizes from the work of Robinett that one of the keys to building and keeping authentic relationship is helping without expecting returned benefit meaning that we give first and keep giving, and give without expectation, they will trust you even more in the future.

Fourthly, they usually exchange information with each other. It is in line with Avenhaus and Sjöstedt (2009) who argue that discussing and exchanging information can build trust that reduces social risks. Similarly, sharing information enables service become more efficient and improve transparency (Karla, Karina, Pablo & Elsa, 2012). Fifthly, they commit to keeping unity among their colleagues. The unity

expectation for school development is the cause of trust maintenance because lack of trust among colleagues affects negatively the work performance. Sixthly, talking openly also support trusts. As PA replied "*To build trust with my colleagues, I must be honest with the people around me, open for talking inside and outside the schools.*" Providing opportunity for talking openly about threat or issues can create a new trust between educator and community (Wagner et al., 2006). Remarkably, trust level between schools and the community is relatively high, according the results above. However, trust is also risky with betrayal (SEP, 2015; Siegrist, Earle & Gutscher, 2007).

Seventhly, transparency is a benchmark postmodern key term widely applied in good governance through which has been utilized to build trust (Hearn, 2019; Klous & Wielaard, 2018; Bannis, Golman & O'toole, 2008). It is a bridge connecting trust and relationship. If there were no transparency, there would be lack of trust. If there were lack of trust, there would be no social capital. In ancient culture, the people believed in what they hear, but in today's culture, they believe in only half of what they hear because seeing is believing (Oliver, 2004). As results, raised literally by PA and PD, they hold transparent to create social capital while PB and 81.6 % agreed and 18.4% strongly agreed that they have employed exchange information technique as a tool for building trust. On the other hand, all of interview participants also create opened environment for free communication. It is similar to (Reinhart, 2017), creating opened work space and promoting opened communication are the effective ways for cultivating transparency

Building and maintaining social network

There are two types of relationship the school principals have built, internal which describes about the interpersonal interaction among colleagues in their organization, and external relationship which emphasizes the interrelationship in community, between schools and other schools, schools and NGOs, schools and their superiors such as district or provincial educational directorates etc., schools and students' parents, and school and religious organizations etc. The results show relation in their schools are very good. Technically, they have utilized multiple modes for communicating depending on particular situation such as social media, telephone, letter, talking face to face. Additionally, they create some events which allow the people to interact with each other: meeting and team work. Based on his Hawthorne experiment from 1924 to 1927, the most prominent pioneer Elton Mayo concluded that good relation brings high work morale and productivity (Mayor,1933). As Morley (2019) states, relationship-oriented leaders often act as mentors to their subordinates by scheduling the time to talk with subordinates and integrate their feedback into decisions. It is similar to Rüzga (2018), relation-oriented leaders usually encourage teamwork and collaboration by building positive relationships and communication.

To build healthy external relationship, the relationship between school and school has been created mostly by technical exchange. For example, when any schools, especially in the same cluster, face with any administrative affaire that requires computer skills, they ask for technical support from their neighbours. In addition, the teachers from different schools always design exam papers together in every main exam. As PA, PB and PC states, to promote relationship between their schools and others, they always exchanged information, experiences and skills, and help each other whenever any schools encounter technical issues. As Potane, Vitorillo, Maghuyop and Bayeta (2018) found, school-school partnership helps to improve social trust, awareness, understanding with other schools, and technical assistance. Besides school to school relationship, principals have promoted good relationship with local community as well.

More importantly, getting parents to involve in educational process is an effective strategy for student development in particular and education in general (Durisic & Bunijevac, 2017). The results show that school principals make relationship with parents in two ways, school to home; for instance, sending recording and asking for comment, asking them to help their children learning at home, especially homework, by adhering a slogan "*At day is not enough, at nigh add more*" and home to school. For

example, sometimes they invited parents to discuss for finding common strategies to help their children who have unsolved problems with their study and behaviour, and they always invite parents to join school ceremonies, most of all every beginning of academic year. It is consistent with Epstein (1995), school leaders can get parent involved in education by encouraging parents to make active communication between school and home, to help children learn at home, and school should motivate collaboration between schools and community. Therefore, external relation or external social capital can provide useful resources for organization performance (Simao, Rodrigues & Madeira, 2016; Kim & Cannella, 2008).

Norm of reciprocity

Norm is an important element of social capital for gluing and consolidating individual and individual; individual and organization and organization and external partnership tie cordially and harmoniously. It is the mutual relation that every actor's expectation will respond favourably by returning benefits by benefits (Gilovich, 2017). Moreover, Fehr and Gachter (2000) argue that reciprocity means that in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by the self-interest model; conversely, in response to hostile actions they are frequently much more nasty and even brutal. According to the results, to create norm of reciprocity, the principals have created positive culture by applying different attributes such as equality, respectfulness, helpfulness, forgiveness, and honesty.

The strategy for making social capital, applied by the principals is that they have treated all of school staff equally. In the finding section above, equality of right and work was raised by PD and rated highly, 78.9 % in agree and 21.1% in strongly agree. This means that school principals have not discriminated social status or gender distinction. Equality is a key attribute in maintaining long-term relation which supports work performance because it is highly correlated with relationship satisfaction (Devito, 2005).

Respectfulness is similar to equality and shares similar benefit for good relationship and cooperation at schools. It is a norm of social capital which sticks interpersonal bond together. If there were no respect, there would be no social capital. As Halpern (2005) argues reciprocity, trust and other forms of social capital cannot exist without mutual respect. As promoted by PC, "*Showing respect with each other between students and students are practiced without considering who is intelligent or not; especially, when they do teamwork.*" It is line with De Cremer (2002) who found that respect really motivated group members to contribute more to the group's welfare and that was most pronounced among group members who felt least included (i.e., peripheral members) relative to group members who felt included (i.e., core members).

Expectation

As we know, social capital is based on mutual benefit. When we do something for someone, we expect him/her does the same back to us, so do pedagogical leaders. This reciprocal action is called by Huysman and Wulf (2004) as mutual obligation. In this study, there are three achievements that school principals have expected from building social capital with internal and external actors, namely school development, exchanging experiences and trustworthiness. This is a good behavior of educational leadership because followers want leaders who ensure the consistency of purpose and to set expectation for the good of organization (English, 2008). Leaders' expectation orients the personnel to complete their obligation while subordinates also expect the leader's good behavior and motivation in return. Thus, expectation in social capital is a reciprocal obligation.
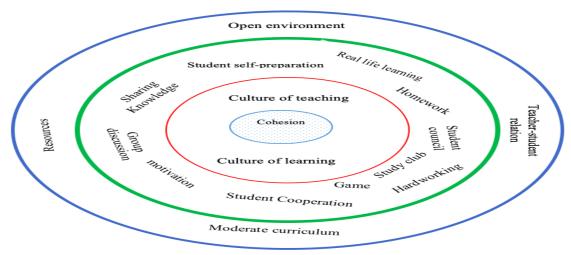
Building academic capital

Figure 3. *Building academic capital*

Cultivating hardworking habit

Strategy for developing academic capital is to cultivate the student hardworking attitude. Besides learning at schools, homework, self-preparation and study club for active learning are the part of hardworking cultivation as well because it helps the students to nurture their intrinsic motivation. The intrinsically motivated student is more self-regulated, low anxious, cognitively engaged individuals, optimistic (Pintrich & Garcia, 1991). Additionally, the findings show that principals have tried to promote extrinsic motivation by giving reward to outstanding students. Extrinsically motivated students tend to focus on earning higher grades, obtaining rewards and acceptance from peers (Adamma et al., 2018). Shortly, both of them affect student performance positively. Relationally, extrinsic motivation affects intrinsic motivation (Wentzel & Brophy, 2014; Biehler & Snowman, 1990; Brophy, 1997; Deci, 1975). As Maslow's theory, before getting intrinsic motivation, self-actualization needs, they should get enough physiological needs, extrinsic motivation. However, Deci (2012) argues that too much extrinsic reward tends to decrease intrinsic motivation, lack of extrinsic motivation tends to increase intrinsic motivation.

Based on the results, regular homework is the main technique the participants have utilized to develop culture of deep culture of teaching and learning in their school. In return, biggest majority of their students come to school with completed homework. Donaldson-Pressman, Jackson and Pressman (2014) persuasively argues that learning is not a race to the top, but it is gradual process that is practised every day, and homework is a good habit for assisting the students to nurture their self-mastery, autonomy, intrinsic motivation and self-efficiency. However, it is apparently a heavy burden for primary school students to do homework every day. It is contrast to recommendation from Cooper (1989), for grade one to grade three, one to three assignments should be provided per week. For grade four to grade six, two to four homework should be assigned per week. For grade seven to grade nine, three to five assignments should be given per week while four to five assignments a week should be provided to grade ten to grade twelfth.

Moreover, 100% of the interviewees, 78.9% agreed and 18.4% strongly agreed that they have promoted a culture of student's self-preparation for school such as uniform, study materials and reading at home, and punctuality, but different level of practice by estimation. Creating a daily self-preparation routine before the class is an effective activity to boost student's self-confidence and to affect student's achievement very positively. These habits have normally supported by parents, especially helping their children with reading at home (Klein, 1978).

Sharing knowledge and cooperation among students

A sense of community cannot be excluded the sharing of knowledge, experiences, thoughts or information with each other among members and neighbours. Knowledge sharing is a main element of intellectual discourses, developed through which individuals are able to re-adapt and reconstruct knowledge by opening up multiple perspectives and to challenge one's understanding while taking into account peers' perspectives (Ghadirian et al., 2014). As evidence, this research found that PC and PD have promoted knowledge sharing among students. It is consistent with most of questionnaire participants who agreed that they have asked students to share knowledge with each other. To promote knowledge sharing, leaders' role is to create a secure, trust and motivated environment that allow students to feel confident and valuable in contributing and sharing their idea or information. Generally, students do not share something with anybody if they feel that he or she is not trustable (Eardley & Uden, 2011; Cozza, 2017). On the other hand, leaders should create a culture of knowledge sharing in their school wholly and among students specifically. As Fullan (2002) posits knowledge sharing should be enhanced as a cultural value.

Student council

Forming student council is a practical mechanism the principals have used to develop intellectual capital. As PB and PD stated, they have set up student councils for students to help and share knowledge and experiences each other, and develop personal growth altogether. This is paralleled with 84.2 % who agreed and 13.2% who strongly agreed that they have created student councils in their schools. Only 2.6% disagreed. Remarkably, in Cambodia, student council was introduced along with Child Friendly School Policy by MoEYS in 2007. There have been a lot advantages obtaining from this mechanism. According to UNICEF (2013) and DoES (2002), student council assists schools to reduce dropout rate. More importantly, in their research of Cambodian student council program evaluation, Dougherty et al. (2014) reported that it gives the students opportunities to develop leadership, enhances their confidence and fosters marketable skills. More importantly, student council members possess the characteristics of a good child, good student, and good friend than non-members. They show a more positive attitude towards gender equality in future career opportunities, and more aspiration to go to college than non-student council members.
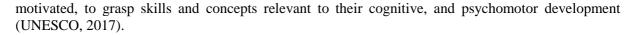
Group discussion

Group discussion is another mechanism in which principals and teachers have done to increase student cooperation. Based on the results, informants PB and PD have encouraged the teachers to make group discussions in the class as a technique for promoting student collaborative learning. This is consistent with majority of questionnaire participants who 57.9 % agreed and 15.8% strongly agreed, and 26.3% disagreed that teachers in their schools usually create group discussions and teachers only play a role as a facilitator in discussing process. Vygotsky believed that all learning is generated by social interaction with peers, teachers and others, so teachers should create small groups in the classroom to promote discussion (Smagorinsky, 2007).

Playing game

Game-based pedagogy has been adopted worldwide, and become very popular and beneficial for child-centred inquiry and discovery learning in primary school level. Psychologists claim that playing game is not just a filling of an empty period, or just a relaxation or leisure activity, but it is an important learning experience (UNESCO, 1988). All of interviewees have used game strategies as a tool to promote student collaborative learning. It is paralleled with the majority of the questionnaire participants who 78.9% agreed and 21.1% strongly agreed that the teachers in their schools have set up game programs both inside and outside the class. However, this finding is contradictory to MoEYS (2016b) in the sense that teachers do not use enough learning game and song in their teaching. Beneficially, playing game makes the class atmosphere more enjoyable for learning, and helps students to be more

motivated, to grasp skills and concepts relevant to their cognitive, and psychomotor development (UNESCO, 2017).

Study club

The results show that 78.9% agreed, 13.2% strongly agreed and only 7.9 % disagreed that they have created study club. That is consistent with PC and PD who said that they have created study club for students to learn collaboratively and to help each other. Several researches reported that students of all ability get considerable benefits from peer teaching, and from explanation, commitment offered by their classmates (Davis, 2009). Newton and Ender (2010) found, study club help students a lots from their own members. First of all, it exposes the students to different way of thinking and learning, and it helps the students to consolidate their existing knowledge through peer teaching. It also gives the students a trust environment to develop and discuss freely. Moreover, the members in the group feel motivated, confident, and released anxiety via supporting and helping each other. Especially, they improve metacognitive strategies, critical thinking and problem-solving skills. They know how to work in team and are awareness of different perspectives and the benefits of diversity.

Real life learning

The lessons are connected to the real life according to the results. Pedagogically, linking school and classroom to the real life problem is a professional duty which all educators should perform. As responsible teachers, it is essential for them to set up a learning environment in which teaching is connected to real-world attaching to students' lives, experiences and practical problems (Kimonen & Nevalainen, 2013). Beneficially, it assists the students to know what and why they are learning and where they are going. Then, they are able to apply what they have learnt at school to solve in their daily life problems (PC, 2004). Based on the interview, linking lesson to the real life is applicable in some particular subjects, but others cannot because it needs scientific experiment and critical thinking, for instance physics and chemistry. As PA said, *"It depends on the lesson. Some lessons are attached to the real life while some are not. For example, biology is easy because we can show them the real animals they have ever seen before. But, it is hard for teachers to teach physics in the real life because it needs some experiments and it difficult for student to imagine."*

Moderate curriculum

Curriculum should not be designed too narrowly, too opened. In the era of fourth industrial revolution, students need more skills and opened knowledge so that they are able to work flexibly, especially technology and other creative subjects. Contradictorily, too narrow curriculum affects students' learning process negatively in particular and is a major risk to educational quality and school effectiveness, not compatible with digital age market in general; Consequentially, students may lose their choices and opportunities (Spielman, 2018; Baker, 2016; Nusche, Radinger, Falch & Shaw, 2016). In contrast, too broad curriculum has negative impact on student learning, and the quality of education as well since it lacks the focus of students' needs that blurs on student's concentration. Broad curriculum causes problems for not only students, but also for teachers because they must carry out overload and hard to fully concentrate on any specific work (DFC, 2017).

Open environment

According to the results, most of the principals have designed open environment in their school. Based on the interview findings stated by PA, PB and PD and 81.6% agreed and 10.5% strongly agreed that they have created conducive environment which is open and friendly to foster community of inquiry in their schools. O'Donnell, Hmelo-Silver and Erkens (2006) argue nurturing effective learning and knowledge can be accomplished via learners' active interaction with their social and physical environment.

Cohesion of relation among students

As stated by PA, PB, PC, PD, and rated by the majority of the questionnaire participants, it reveals that the principals have advised students to help each other. This is the same to the social capital in which all members are necessary to build trust via helping each other. In addition to help, PC has asked the students to be honest by not telling a lie and keeping promises.

> *I tell them not to tell a lie and to keep promises and not to look down on each other. Especially, I ask outstanding students to help poor performing students; through study club, the students can share their knowledge and experiences with each other.*

That is in line with most of questionnaire participants who agreed (65.8%) and strongly agreed (31.6%) that they have told the students not to tell a lie. For Garrison, Anderson and Archer (1999), group cohesion is a basic element of social presence dimension in community of inquiry. Trust does not only help to nurture healthy relationship, but it also strengthens the group cohesion for collaborative learning also. It ensures how strong group cohesion is (Mikalachki, 1969). Consistently, Forsyth (2010) argues that trust among group members is the core component of group cohesion that group cohesion is the strength of bond linking each member to a group as a whole that represents the health of group.

Building Intellectual Capital

Figure 4. Building intellectual capital

Shared and supportive leadership

Based on their participants' statement, teachers get involved in making decision on various issues both formally and informally such as curriculum, budget planning and other school affair. It is paralleled with item 42, "teachers in my school always participate with me in most of school decision making.", which rated by 71.1 % in agree and 15.8 % strongly agree scale, only 13.2 % rated in disagree. This means that the majority of principals have encouraged teachers to join in decision making. Imber (1983) raises two theoretical arguments to convince that teachers participate more in decision making provide students certain benefits. First, teachers understand and know what students really need because they interact with students every day. The second is that, psychologically, when teacher involve in decision making, they feel more responsible for what they have made. They are more likely to comply with decisions more than those who did not participate, so they work harder to push those decisions work out well. As long as they work harder, the students are assumed that they will get benefits.

There are two important obligations in which the principals have empowered the teachers apart from participation in accordance with the results: teaching strategies and exam paper. Teachers are autonomous fully. The principals just only give some technical advices. For exam paper, first of all, they make a draft, then they make a discussion with teachers from different schools in the same cluster to seek which questions should include in the exam. There have been several researches found and authors hold the same position that teacher autonomy serve a lot of benefit to educational improvement (Teng, 2019; Amzat & Valdez, 2017; Cheon, Reeve, Ho Yu & Jang, 2014). Remarkably, Cheon, Reeve, Ho Yu and Jang (2014) reported that autonomy-supportive teaching makes greater teaching motivation (psychological need satisfaction, autonomous motivation, and intrinsic goals), teaching skill (teaching efficacy), and teaching well-being (vitality, job satisfaction, and lesser emotional and physical exhaustion). They further posit that empowering autonomy-support benefits teachers in much the same way students receive.

Collective creativity

It is essential to all levels of a school work collaboratively to address problems and improve learning opportunities (Leo & Cowa, 2000). The results reveal that the principals have enhanced collaborative works to seek strategies for addressing school issues as a whole and students' problems in particular. Partially, as evidence, the qualitative results show that whenever the principals or teachers have unsolved issues, they normally find help or discuss with their superiors or their colleagues to seek for effective strategies to address. As PA states, "*Every week if I cannot figure out problems, I ask my superior from help.*" Additionally, when teachers have issues, they also ask or discuss with their principals as PB, PC, PD said. Akin to the interviewees, 84.2% agreed and 13.2% strongly agreed, and except only 2.6% disagreed that teachers in their schools always make discussions with colleagues to deal with students' problems. Teachers can plan and work together based on shared vision to seek for problem solution create several benefits such as increasing academic effort and understanding student data, promoting **more creative lesson plans, less teacher isolation** (Davis, 2018). Such a professional collaboration work, Hargreaves and O'Connor (2018) posit that it benefits students and teachers alike.

Shared value and vision

Educational staff share visions for school improvement which focus on student learning and staff work through plan, program, mission, procedure, policy, goal, objective collaboratively. Shared vision relying on collective value provides the foundation on informed leadership, staff commitment, student success and sustained growth (Huffman, 2003). In this study, participating in decision making, planning and designing curriculum above are the contribution of shared value and vision. Not only among educational staff, Sergiovanni (1994) argues about shared value that building learning community in school is necessary in the sense that it interconnects teachers and students to be together by shared value and ideal. These boost teachers and students to the higher level of self-understanding, commitment and performance. One type of the common shared vision and value we always find in every school of Cambodia is poster or label on the wall of principals' offices, meeting halls or on classroom walls. It is agreed with Isaacson & Bamburg (1992) who argue that a sheet of paper which is posted in principals' office is the vision. In Cambodian, some of them are used in the form of proverb, slogan and some are literally sated. For example, the posters below have been posted on the walls of meeting halls at Kandal Steung District.

The 3 M Model
1. Behavior in teaching
2. Subject to be taught
3. Pedagogy

Four sublime states
1. Loving-kindness: loving everyone-wish them happy.
2. Compassion: sympathy is to help every one.
3. Sympathetic joy: No being jealous and delight with everyone 's happiness.
4. Equanimity : be neutral to everyone.

Therefore, in this study, democratic participation, and making dialogue are the core shared belief that school principals, teachers and other school staff uphold because social, academic, intellectual and professional capital are encouraged them to work together for a common purpose of school development and student learning.

Supportive condition

Relying on Hord (1997) and NIU (2012), one of the main components of one is supportive environment which the voice should be heard, respected, encouraged and supported while the members should hold accountability on their action. In this regard, the principal's role is to set up an open environment for open communication that make the members feel free to talk. The findings show that all of interviewees have built open environment for teachers and other school staff to talk freely and openly. This qualitative data is consistent with questionnaire results of "open environment item" which were rated 65.8% in strongly agreed, 23.7 % in agreed and only 2.6% in "I don't know" and 7.9% in disagreed scale.

Shared personal practice

Hord (1997) asserts that shared personal practice is a part of "peers helping peers" process in which mutual respect and understanding is the basic criteria of this kind of work place culture. As PA said that they share knowledge or experiences in technical meeting, and if the anyone knows any new idea or knowledge, they arrange a demonstrative class (ni tours) for him or her to present. Similarly, item 40 "Teachers share their experiences and problems with each other every week" was rated 78.9% agree, 18.4% strongly agree and 2.6% neutral. Therefore, we conclude that sharing experiences, knowledge and problems have been encouraged and practiced widely in their schools. That is in line with Huffman (2003) who mentions that shared personal practice is a peer review and given feedback on teacher instructional practice in order to increase individual and organizational capacity.

Conclusion

Pedagogical leadership puts a primary focus on student learning and teacher development through cultivating four main capitals within which are overlapped each other, and some concepts are reciprocal in nature according to the results. Empirically, social capital in this study consists of four elements: trust, help (norm of reciprocity), good relation and cooperation (social network) and expectation. Trust was built by other seven forces such as maintaining a sense of unity, exchanging information, maintaining good relation, keeping honesty, helping each other, talking openly and being transparent. Norm of reciprocity was generated by helping each other both personal and technical issues and respectfulness, while social network was created by eight elements: exchanging information, experiences or knowledge, creating meetings, promoting parent involvement, maintaining equality, being tolerant or forgiving each other, working in team, participating in social activities and also helping each other. The principals

expected from building social capital that their schools would be developed better. They were able to get experiences from their partnership, and they hoped that it would bring trust among their colleagues and the communities.

In terms of academic capital, it puts strong emphasis on focused community that cultivating culture of teaching and learning is a leaders' obligation. To gain so, there are some prerequisites of cultivation the principals have shown in the study. Cohesion of trust and helpfulness among the students are the first priority that principals cultivate, and one of which is moderate curriculum that should not be too narrow or too big. Other is fostering daily teaching techniques that are the habitual activities which require teachers to do repeatedly such as caring underperforming students, encouraging student to be hardworking, giving regular homework, keeping good communication with teachers, motivating students, student self-preparation. Noticeably, there are four strategies leaders ask teachers to improve student collaboration such as group discussion, student council, study club and playing game. These makes the students to gain intrinsic motivation for cooperate and sharing knowledge with each other. Thus, there are two main strategies the principals want to improve in academic capital, academic learning habit and social relationship. Shortly, what described above have been applied to nurture the culture of teaching and learning of focused community that is commonly known as academic capital.

Based upon the theoretical formation of professional learning community developed by Hord (1997), it consists of five main dimensions of intellectual capital. For supportive and shared leadership, leaders have asked teachers to anticipate democratically in many school programs such as planning, missions and decision making while collective creativity dimension has been practiced through motivating the teachers to work collectively to find collective solutions for students' or teaching problem whenever any of them face. Shared value and vision are practiced through democratic participation and making dialogues among school staff towards school development and student learning whereas supportive condition is the same to what we see the finding in social and intellectual capital, leaders always make an open environment for their staff and student to express their concern (freedom of speech) and make suggestions. For share personal practice, leaders encourage their stuff to share their knowledge and experiences with them and among themselves.

Intellectual and professional capital have similar and overlapped characteristics since they emphasise on the sharing knowledge, experiences and cooperation among colleagues. The distinction is that professional capital promote teachers' capacity via pre-and in-service training and inspires them to share more in-depth about skills to reach the level of joint single practice of teaching in the school that shared by many (Sergiovanni, 1998), and motivates teachers to share and cooperate with teachers from other schools or other communities because it enables them to develop their profession beyond the territory.

References

Abel, M. (2016). Why Pedagogical Leadership? The McCormick Center for Early Childhood. Retrieved from https://mccormick-assets.floodlight.design/wp-content/uploads/2018/03/4-25-16_WhyPedagogicalL leadership.pdf on September 20th, 2019.

Avenhaus, R. & Sjöstedt, G. (2009). Negotiated Risks: International Talks on Hazardous Issues. Springer.

Adamma, O.N, Ekwutosim, O.P. & Unamba, E.C. (2018). Influence of Extrinsic and Intrinsic Motivation on Pupils Academic Performance in Mathematics. Supremum Journal of Mathematics Education, 2(2), 52-59

Amzat, I. H., & Valdez, N. P. (Eds.). (2017). Teacher empowerment toward professional development and practices: Perspectives across borders. Springer.

Axelrod, P. (1984). The Evolution of Cooperation. Basic Books.

Baker, K. J. (2016).14-19 Education: A New Baccalaureate. Edge Foundation.

Barroso-Castro, C., Villegas-Periñan, M.D.M. & Casillas-Bueno, J.C. (2016). How boards' internal and external social capital interact to affect firm performance. Strategic Organization, 14(1), 6–31.

Biehler, R. F., & Snowman, J. (1990). Psychology applied to teaching. Boston: Houghton Mifflin.

Bourdieu, P. (1986). The Forms of Capital. In J. Richardson (Ed.). Handbook of Theory and Research for the Sociology of Education. Greenwood.

BNP (Business News Publishing) (2015). How to Be a Power Connector: Review and Analysis of Robinett's Book. Business Book.

Brewster, C. & Railsback, J. (2003). Building Trusting Relationships for School Improvement: Implications for Principals and Teachers. North Regional Educational Laboratory.

Brophy, J.E. (1997). Motivating Students to Learn. The McGraw Hill Companies, Inc.

Burt, R. S. (1992). Structural Harvard University Press.

Buckley, L. & Gianakopulos, M. (2010). Sharing Knowledge in a Knowledge City Using CoPS. ECIC2009-2nd European Conference on Intellectual Capital: ECIC 2009. Academic Publishing Limited.

Cheon, S. H.; Reeve, J.; Ho Yu, T. & Jang, H.R. (2014). The Teacher Benefits from Giving Autonomy Support During Physical Education Instruction. Journal of sport & exercise psychology, 36(4), 331-346.

Coake, E. & Clark. S. (2006). Encyclopedia of Communities of Practice and Information Management. Idea Group Inc.

Coleman, S. J. (1988). Social capital in the creation of human capital, American Journal of Sociology, 94, S95-S120.

Cooper, H. (1989). Synthesis of Research on Home work: Grade Level has a Dramatic Influence on Homework's Effectiveness. The Association for Supervision and Curriculum Development. Retrieved from https://pdf s.semanticscholar.org/ 479a/d93fad486fde6 309637e7 334fa 91525024 da.pdf on September, 20th, 2019.

Cozza, B. (2017). The Multi-age Learning Community in Action: Creating a Caring School Environment for All Children. Rowman and Littlefield

Creswell J. W. & Plano Clark, V. L.P (2011). Designing and Conducting Mixed Methods Research. Sage Publications, Inc.

Darling-Hammond, L. (1998). Teachers and teaching: Testing policy hypotheses from a national commission report. Educational researcher, 27(1), 5-15.

Davis, L. (2018). Teacher Collaboration: How to Approach It in 2018. Schoology Exchange. https://www.schoology.com/blog/teacher collaboration-how-approach-it-2018

Davis, B.G. (2009). Tools for Teaching. John Wiley & Sons, Inc.

Deci, E.L. (1975). Intrinsic Motivation: Perspectives in Social Spychology. Plenum Press.

DoES (Department of Education and science) (2002). Student Councils: A Voice of Students. Retrieved from https://www.education.ie/en/Publications/Education-Reports/Student-Councils-A-Voice-for-Students.. pdf on September 1st, 2019.

Devito, J. A. (2005). Essentials of Human Communication. Person

De Cremer, D. (2002). Respect and cooperation in social dilemmas: The importance of feeling included. Personality and Social Psychology Bulletin, 28(10), 1335-1341.

DFC (Design For Change) (2017). Disadvantages of Wide Curriculum in Public Schools. Retrieved from http://www.designsforchange.org/disadvantages-wide-curriculum-public-schools/ on September 1st, 2019.

Donaldson-Pressman, S., Jackson, R.& Pressman, R. (2014). The Learning Habit: A Groundbreaking Approach to Homework and Parenting that Helps Our Children Succeed in School and Life. Penguin Group.

Dougherty, L., Jacobson. L., Pham, M. & Phillips, L. (2015). Student Council Program Evaluation. Caring for Cambodia-Lehigh University Partnership. Retrieved from https://ed. lehigh.edu/sites/ed.lehigh.edu /files/documents/CFC%20Annual%20Newsletter%202015%20Final.pdf on September 1st, 2019.

Durisic, M. & Bunijevac, M. (2017). Parental Involvement as a Important Factor for Successful Education, c. e. p. s. Journal,7(3), 137-153

Eardley, A. & Uden, L. (2011). Innovative Knowledge Management: Concepts for Organizational Creativity and Collaborative Design. IGI Global.

Epstein, J. L. (1 995). School/Family/Community/Partnerships: Caring for the Children We Share. Phi Delta Kappan, 76(9), 701–712.

Fehr, E. & Gachter, S. (2000). Fairness and Retaliation: The Economics of Reciprocity. Journal of Economic Perspectives, 14 (3), 159–182.

Fullan, M. (2002). The Role of Leadership in the Promotion of Knowledge Management in Schools. OECD Conference on March 18-19, 2002.

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical Thinking, Cognitive Presence, and Computer Conferencing in Distance Education. American Journal of Distance Education, 15(1), 7-23.

Ghadirian, H., Ayub, A.F.M., Silong, A.D., Bakar, K.B.A & Zadeh, A.M.H. (2014). Knowledge Sharing Behaviour among Students in Learning Environments: A Review of Literature. Asian Social Science, 10 (4), 38-45.

Gilovich, T. (2017). Social Psychology. Content Technologies. Inc.

Groves, R. M., Fowler Jr, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2011). Survey methodology (Vol. 561). John Wiley & Sons.

Hauberer, J. (2011). Social Capital Theory: Towards a Methodological Foundation. Springer.

Halpern, D. (2005). Social Capital. Polity Press

Hargreaves, A. & O'Connor, M.T. (2018). Collaborative Professionalism: When Teaching Together Means Learning for All. Corwin

Hearn, S. (2019). Building Trust and Transparency in your Organization: Transparency is a Growing Concern in the Business World-How can We Create a more Honest, Trusting Company Culture? Innovation enterprise Channel. Retrieved from https:// channels .theinno vationenterprise .com/ articles/hot-to-motivate-employees-building-trust-and-transparency-in-your-organisation on September 15th, 2019.

Hord, S. M. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Southwest Educational Development Laboratory.

Hsieh, H, F. & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. Qualitative Health Research,15 (9), 1277-1288

Huffman, J.B. (2003). The Role of Shared Values and Vision in Creating Professional Learning Communities. NASSP Bulletin, 87 (637), 21-34.

Huysman, M & Wulf, V. (2004). Social Capital and Information Technology. The MIT Press.

Eng, S, Szmodis, W. & Mulsow, M. (2014). Cambodian Parental Involvement: The Role of Parental Beliefs, Social Networks, and Trust. The Elementary School Journal, 114 (4), 573-594.

English, F.W. (2008). The Art of Educational Leadership: Balancing Performance and Accountability. Sage Publication, Inc.

ETUCE (European Trade Union Committee for Education) (2012). School Leadership in Europe: Issues, challenges and opportunities. ETUCE School Leadership Survey Report.

Forsyth, D.R. (2010). Group Dynamics. CA: Wadsworth.

Imber, M. (1983). Increased Decision Making Involvement for Teachers: Ethical and Practical Considerations. The Journal of Educational Though,17(1), 36-42.

Isaacson, N., & Bamburg, J. (1992). Can Schools Become Learning Organizations? Educational Leadership, 50(3), 42-44.

Kandal Provincial Office of Education, Youth and Sports (2017). Public Education Statistics And Indicators 2017/2018 (In Khmer).

Karla, M.C., Karina, C., Pablo, F and Elsa, E. (2012). Information Sharing – Benefits. JCS & T. 12(2), 49-55.

Kheang,T., O'Donoghue, T, & Clarke, S. (2018).Primary School Leadership in Cambodia: Context-Bound Teaching and Leading. Palgrave Macmillan.

Kim, Y. & Cannella, A. A. Jr. (2008). Toward a Social Capital Theory of Director Selection. Corporate Governance: An International Review, 16(4), 282-293.

Kimonen, E. & Nevalainen, R. (2013). Transforming Teachers' Work Globally: In Search of a Better Way for Schools and Their Communities. Sense Publisher.

Klein, A. E. (1978). Parent Involvement in Children's Reading Readiness Development. Reading Horizons: A Journal of Literacy and Language Arts, 18(4), 271-276.

Klous,S. & Wielaard, N. (2018). Building trust in a smart society: Managing in a modular, agile and Decentralized Way. Infinite Ideas

Landis, J.R & Koch, G.G. (1977). The Measurement of Observer Agreement for Categorical Data. International Biometric Society, 33(1), 159-174.

Leech, N. L. Brrett, K.C. Morgan, Geoge, A. (2005). SPSS for Intermediate Statistics: Unse and Interpretation. Lawrence Erlbaum Associtetes, Inc.

Leo,T. & Cowa, D.E. (2000). Launching Professional Learning Communities: Beginning Actions. AIR (the American Institutes for Research),8(1),1-16.

Leana, C. R., & Pil, F. K. (2006). Social capital and organizational performance: Evidence from urban public schools. Organization Science, 17(3), 353-366.

Louis, K.S. & Kruse, S.D. (1995). Professionalism and community: Perspectives on reforming urban schools. Corwin Press.

Manen, M. V (1991). The Tact of Teaching: The Meaning of pedagogical Thoughtfulness. State University of New York.

Male, T. & Palaiologou, I. (2013). Pedagogical leadership in the 21st century: evidence from the field. Educational Management Administration & Leadership, 43(2), 214–231.

Martel, L.D. (1993). Building a learning community: School leaders and their organizations need to share a vision to challenge all young minds. School Administrator, 50(6), 22-27.

Mayor, E. (1933). The Human Problems of an Industrial Civilization: The Early Sociology of Management and Organization. Macmillan Company.

Mikalachki, A. (1969). Group Cohesion Reconsidered: a Study of Blue Collar Work Groups. School of Business Administration. University of Western Ontario

MoEYS (Ministry of Education, Youth and Sport) (2016). Education Statistics & Indicators.

Nagaraju, M.T.V. (2004). Study Habits of Secondary School Students. Discovery Publishing House.

Nahapiet, J., & Ghoshal, S. (1998) Social Capital, Intellectual Capital, and the Organizational Advantage. Academy of Management Review, 23(2), 242–266.

Newton, F. B., & Ender, S. C. (2010). Students helping students: A guide for peer educators on college campuses. John Wiley & Sons.

NIU (Northern Illinois University) (2012). Instructional Guide for University Faculty and Teaching Assistant. Retrieved from http://www. niu.edu /facdev/_ pdf / gui de/instructguide.pdf on September 15th, 2019.

Nusche, D., Radinger.T, Falch.T. & Shaw, B. (2016). OECD Reviews of School Resources: Denmark 2016. OECD Publishing.

O'donnell, A.M., Hmelo-Silver, C.E., Erkens, G. (2006). Collaborative Learning, Reasoning, and Technology. Lawrence Erlbaurn Associates Inc.

OECD (Organization for Economic Cooperation and development) (2007). Human Capital. How What You Know Shape your Life. OECD. Retrieved from https://read.oecd-ilibrary .org /edu catio n/hu man-capital_9789264029095-en#page36 on September 15th, 2019.

Oliver, E. R. (2004). What is Transparency? McGraw-Hill Companies, Inc.

Spielman, A. (2018). A Letter to the Public Accounts Committee. Ofsted: Raising Standard and Improving Lives.Parliament. Retrieved from https://assets.publishing.service.Gov.uk/government/uploads/system/uploads/attachment_dat a/file/ 7527 21/HM CI _P AC_letter_3110 18.pdf on September 15th, 2019.

PC (Peace Corps) (2005). Working with CCBI volunteer workbook. Information Collection and Exchanges Publication No. M0073. Retrieved from https://files.peacecorps.gov/multi media/pdf/library /M0073.pdf on September 15th, 2019.

Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M. L. Maehr and P. R. Pintrich (Eds.), Advances in Motivation and Achievement. Greenwich, CT: JAI Press.

Potane, J. Vitorillo, R. R., Maghuyop, R. O.& Bayeta, R, Jr, (2018). School-to-School (STS)Partnership Towards Sustainable and Transformative Development of Schools Network in Cagayan de Oro City. Peacecorps. Retrieved from https:// ssrn.com/abstract= 320 02 57 on September 15th, 2019.

Prestine, N.A. (1993). Extending the essential schools metaphor: Principal as enabler. Journal of   School Leadership, 3(4), 356-379.

Putnam, R.D. (2000). Bowling a Lone: The Collapse of Revival of American Community. Simon & Schuster Inc.

Putnam, R. D. (1993). The Prosperous Community: Social Capital and Public Life. The American Prospect, 4(13), 35-42.

Reinhart, P.(2017). How To Promote Transparency In Your Business. Retrieved from https://www.wework.Com /creator/how-to-guides/how-to-promote-transparency-in-business/ on September 15th, 2019.

SEP (Stanford Encyclopedia of Philosophy). (2015). Trust. Stanford Encyclopedia of Philosophyhttps://plato.stanford.edu/entries/trust/

Sergiovanni, T. J. (1998). Leadership as Pedagogy, Capital Development and School Effectiveness, International Journal of Leadership in Education: Theory and Practice, 1(1), 37-46.

Sergiovanni, T.J. (1994). Building community in schools. San Francisco: Jossey-Bass.

Simao, L.B.; Rodrigues, R.G. & Madeira, M. J.(2016). External relationships in the organizational innovation. Revista de Administração e Inovação, 13(3), 156-165.

Siegrist, M., Earle, T.C & Gutscher, H. (2007). Trust in Cooperative Risk Management: Uncertainty and Scepticism in the Public mind. EarthScan.

Siraj-Blatchford, I. (1999). Early Childhood Pedagogy: Practice, Principles and Research, in: Mortimore, P. (1999). Understanding Pedagogy and its Impact on Learning. Sage Publication, Inc.

Sirotnik, K. A. (1999). Making sense of educational renewal. Phi Delta Kappan,80(8), 606-610. In Morrissey, M. S. (ed). Professional learning communities: An ongoing exploration. Southwest Educational Development Laboratory

Smagorinsky, (2007). Vygotsky and Social Dynamics in Classrooms. The English Journal, 97(2), 61-66.

Sztompka, P. (1999). Trust: A Sociological Theory. Cambridge University Press.

Teng, F. (2019). Autonomy, Agency, and Identity in Teaching and Learning English as a Foreign Language. Springer Nature Singapore Pte Ltd.

UNESCO (the United Nations Educational, Scientific and Cultural Organization) (2017). Traditional Children's Games in South-East Asia (Interactive Games). Retrieved from https://bangkok.unesco.org/ content/traditional-childrens-games-south -east-asia-interactive-games on September 15th, 2019.

UNESCO (the United Nations Educational, Scientific and Cultural Organization) (1988). Games and Toys in the Teaching of Science and Technology. Science and Technology Education. Document series No. 29. UNESCO. http:// www.unesco.org/education /pd f/ 32 5_41.pdf

UNICEF (2013). Child Friendly Schools Help Cambodian Children Enjoy Learning. UNIEF Cambodia for Every Child. Retrieved from http://unicefcambodia. blogspot com/2013/05/ child-friendly-schools-help-cambodian.html on September 15th, 2019.

Wagner, T., Kegan, R., Lahey, L.L., Lemons, R.W., Garnier, J., Helsing, D., Howell, A. & Wenger, E. (1998). Communities of Practice Learning: Meaning, and Identity. Cambridge University Press.

Wentzel, K.R. & Brophy, J.E. (2014). Motivating Students to Learn. Routledge: Taylor and Francis Group.

Wignall, R. (1992, June). Building a collaborative school culture: A case study of one woman in the principalship. Paper presented at the European Conference on Educational Research, Enschede, The Netherlands.

Yin, R. K. (2012). Applications of case study research. Sage Publications Ltd.