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NEW GENERATION PEDAGOGICAL RESEARCH CENTER



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ចង្វារជីវ: នៅសាលារៀនជំនាន់ថ្មី

Teacher Collaboration in Professional Learning

Community at New Generation School

A Mini-Thesis

In Partial Fulfilment of the Requirement for  
Master's Degree of Education in Mentoring

TY VUOCHNEA

February 2021

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## ការសហការរវាងគ្រូក្នុងសហគមន៍សិក្សាវិជ្ជាជីវៈ នៅសាលារៀនជំនាន់ថ្មី

### Teacher Collaboration in Professional Learning Community at New Generation School

Supervisee : Ty Vuochnea

Supervisor : Srou Lihol

Examination Committee :	1. H.E. Sieng Sovanna	Chair
	2. Dr. Sun Somara	Vice-chair
	3. Dr. Nauv Vira	Member
	4. Mr. Kong Maneth	Member
	5. Mr. Srou Lihol	Secretary

February 2021

មូលនិយមសង្ខេប

គោលបំណងនៃការសិក្សាគឺ ស្វែងរកឱ្យឃើញពីរបៀបដែលលោកគ្រូ អ្នកគ្រូសហការគ្នា នៅក្នុងសហគមន៍សិក្សាវិជ្ជាជីវៈ នៅសាលារៀនជំនាន់ថ្មី និងស្វែងរកឱ្យឃើញការជះឥទ្ធិពលរបស់ សហគមន៍សិក្សាវិជ្ជាជីវៈទៅលើការសិក្សារបស់នៅសាលារៀនជំនាន់ថ្មី។ ការស្រាវជ្រាវនេះ បាន ប្រើប្រាស់វិធីសាស្ត្រករណីសិក្សា នៅក្នុងវិធីសាស្ត្រស្រាវជ្រាវតាមបែបគុណវិស័យ។ ព័ត៌មាននៅ ក្នុងការស្រាវជ្រាវនេះគឺបានមកពីការសំភាសគ្រូបង្រៀនចំនួន ៧នាក់។ លទ្ធផលសិក្សាបានបង្ហាញ ថា ចំពោះការអនុវត្តសហគមន៍សិក្សាវិជ្ជាជីវៈនៅសាលារៀនជំនាន់ថ្មី ប្រធានក្រុមបច្ចេកទេស កំណត់ពេលវេលាច្បាស់លាស់សម្រាប់ការប្រជុំដើម្បីចែករំលែកបទពិសោធន៍ ហើយនិងវិធីសាស្ត្រ បង្រៀន។ លើសពីនេះទៀត ការប្រជុំក្រុមបច្ចេកទេស លោកគ្រូ អ្នកគ្រូចែករំលែកយុទ្ធសាស្ត្រ បង្រៀនដែលមានប្រសិទ្ធភាពក្នុងការបង្រៀនដល់សមាជិកក្រុម យកទៅបង្រៀនដើម្បីជំរុញការ សិក្សារបស់សិស្ស។ លើសពីនេះ របៀបវារៈនៃការប្រជុំផ្ដោតទៅលើវិធីសាស្ត្របង្រៀនដែលជួយ សិស្សរៀនយឺត និងរៀបចំកិច្ចតែងការបង្រៀន។ ការសិក្សាបានបង្ហាញថា គ្រូអាចលើកឡើងនូវ បញ្ហាប្រឈមដែលពួកគាត់បានជួបប្រទះក្នុងការបង្រៀន ដើម្បីរកដំណោះស្រាយចំពោះបញ្ហាទាំង នោះ។ ការស្រាវជ្រាវក៏បានបង្ហាញដែលថា បន្ទាប់ពីគ្រូបានលើកឡើងនូវបញ្ហាសិស្សរៀនយឺត និង សិស្សដែលមានអាកប្បកិរិយាមិនសមរម្យនៅក្នុងការរៀនក្នុងថ្នាក់ក្នុងពេលប្រជុំក្រុមបច្ចេកទេស ដើម្បីរកវិធីសាស្ត្រជួយពួកគាត់បានកត់សម្គាល់ឃើញថា សិស្សមួយចំនួនបានផ្លាស់ប្តូរអាកប្បកិរិយា របស់ពួកគាត់ដោយសិស្សខ្លះផ្ដោតចិត្តទុកដាក់ទៅលើការសិក្សា និងមានវប្បធម៌សហការរវាង សិស្សក្នុងថ្នាក់រៀន។

## **ABSTRACT**

The objective of the study is to find out how the teachers collaborate in Professional Learning Community (PLC) in NGS and explore the influencing PLC on students' learning at NGS. This research employed a case study research design within a qualitative methodology. The study was conducted through semi-structure interview with 7 participants. The finding of study showed that implementing PLC at NGS, each group of technical group leader set specific time to meet to share experiences and teaching method in teaching. In addition, in PLC, teachers cooperate to create item for test before monthly test or semester test and create teaching material to improve their teaching performance in the classroom. In technical meeting, teachers share their effective teaching strategies to all member to apply in their teaching to foster students to achieve in their learning. Moreover, the agenda of meeting covered teaching methodology, the strategies to support slow learning students, and prepare the lesson plan. The findings revealed that among members can raised the agenda to meet when they faced difficulties in teaching to find the solution to deal with those problem. It also revealed that after teacher raised the challenges relevant slow learner and students with inappropriate behavior to find the solution to help them, noticed that some students had change their attitude by some students change attitudes by focusing on learning, having a collaborative culture, and develop their learning.

**SUPERVISOR’S RESEARCH SUPERVISION STATEMENT**

TO WHOM IT MAY CONCERN

Name of program: Master’s Degree of Education in Mentoring

Name of candidate: Ty Vuochnea

Title of thesis: Teacher Collaboration in Professional Learning Community at New Generation School.

This is to certify that the research carried out for the above titled master’s thesis was completed by the above-named candidate under my direct supervision. I played the following part in the preparation of this thesis: guidance in research problem development, literature review, methodology, data analysis, and discussion finding.

Supervisor (Name): Srou Lihol

Supervisor (Sign): .....

Date: .....

## CANDIDATE'S STATEMENT

TO WHOM IT MAY CONCERN

This is to certify that the thesis that I “**TY VUOCHNEA**” hereby present entitled “Teacher collaboration in Professional Learning Community at New Generation School.”

For the degree of Master of Education major in mentoring at New Generation Pedagogical Research Center is entirely my own work and, furthermore, that it has not been used to fulfill the requirements of any other qualification in whole or in part, at this or any other University or equivalent institution.

Signed by (the candidate): .....

Date: .....

Countersigned by the Supervisor: .....

Date: .....

## **Acknowledgements**

I would like to express my deepest thanks and my high appreciation to my constructive supervisor, Mr. SROU LIHOL, who supported me in completing this thesis. I am grateful to him for his valuable and professional advice and guidance throughout the writing of this research work.

Secondly, I would like to thank the Secondary school principals, teacher and students in New Generations School for supporting and providing me with the necessary cooperated and sharing information.

My thanks and respects also go to all NGPRC instructors who instructed and helped me from their heart and all classmates which helped me a lot from the beginning of the research.

For the opportunity which was provided to me to participate in the NGPRC, Master of Education in Mentoring (MED), I would like to express my honest and profound gratitude to the Minister of Education, Youth and Sports.

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## **List of Abbreviations**

PLC	Professional Learning Community
MoEYS	Ministry of Education, Youth and Sport
NGS	New Generation School
SMART	Strategic and specific, Measurable, Attainable, Results-oriented, and Time bound

# CHAPTER 1: INTRODUCTION

## 1.1 Background of the Study

Teacher training department (2015) state that the high qualify teachers is the key factor in student learning, while the prerequisite to developing the teaching compel is high quality preparation, recruitment, placement, support and assessment of each teacher with supportive legislative instruments. “By 2030, ensure that all learners acquire knowledge and skills that needed to promote sustainable development through education for sustainable development and sustainable lifestyles, gender equality, human rights, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development”. (Education 2030 Framework for Action, 2015, p. 18). Moreover, in a school has organizing teachers as different team is called technical team. And each team have to a meet to share experience or something around their teaching and student learning at specific time and place in monthly are called technical meeting; and the meeting is created to carry out the purpose of providing the professional development more frequently and closer to classroom and to nurture collegial relationship among teachers. Teachers must work together to support student to achieve their study and teachers participate to identify the level of student achievement, make a goal to improve the current level, working together to reach that goal, and providing periodic evidence of progress (DuFour, 2004). On the other hand, adjusting learning activities to the cultural context and providing collaborative and communicative learning skills on the other, help to create an environment of learning that is fitted for a ‘learning by designing’ approach. (Berkvens, 2009).

Practicing PLCs as the key driver for classroom instruction improvement and establish a learning culture that use strategy wisely in school (Hairon & Tan, 2016). In a PLC school,

teachers work together by planning curriculum, setting common assessments, identifying at-risk students, and find that solution to intervene for each student, share their concerns, reflect on their instructional strategies, and make decisions (K-12 BLUPRINT, 2014). To enable Professional Learning Community to have a positive impact on student achievement outcomes, schools need to have a mission, collaborative teams to achieve shared goals, a results-oriented focus, and a commitment to continuous improvement (Rentfro, 2007). There are three major themes to create professional learning community that are evident in the policies, programs, and practice of the school. These themes are: a solid foundation consisting of collaboratively developed and widely shared mission, vision, values, and goals, collaborative teams that work interdependently to achieve common goals, and a focus on results as evidenced by a commitment to continuous improvement (Eaker, DoFour, & DuFour, 2002).

## **1.2 Statement of the Problem**

Professional learning communities enable deep learning among teachers' participants, and encourage the ownership of their learning. As such, PLCs have an influence on the implementation and motivation of teachers and school leaders on what they apply in their classrooms and schools and on the way they do it. PLCs have also been reported to have a positive impact on teachers' professional learning, performance and an ultimate leading to positive impact on student achievement (Bolam et al., 2005). Professional learning communities are reliant on a supportive and stimulating policy environment, both at national and decentralized level. PLCs must be institutionalized formally before they can be sustainable. At implementation, leaders of PLCs need to have the capacity to facilitate their PLCs effectively (VVOB, 2017). However, when a school starts to function as a professional learning community, teachers become aware of the incongruity between their commitment to ensure learning for all students and their lack of

a facilitative strategy to respond when some students do not learn (DuFour, 2004). In Cambodia there has been lack of previous research to investigate effective PLC implement in upper secondary school.

### **1.3 Research Purposes**

The purpose of this study is to investigate the how teachers collaborate in professional learning community and to explore the influence of implementing professional learning community on students learning. The finding of this research will provide information to build a culture of collaboration in PLC and the result of implementing PLC on students learning.

### **1.4 Research Objectives**

The aim of this study is:

- (1) To find out how the teachers collaborate in Professional Learning Community at NGS.
- (2) To explore the influencing of professional learning community on students' learning at NGS.

### **1.5 Research Questions**

This study sought to answer the following research questions:

- (1) How do the teachers collaborate in Professional Learning Community at NGS?
- (2) How do the professional learning community influence on student learning at NGS?

### **1.6 Significance of the Study**

The information from this study assists teachers, school administrators, and other stakeholders to be aware of the ways to implement of a teacher collaboration model of professional learning communities at NGS. Furthermore, this research is useful for DOE

implementation of the professional learning community model of teacher collaboration and its impact on student learning such as NGS which just implement PLC around few years. Specifically, the deeply gain from this research can be possible contribute to the other public school outside NGS to learn to collaborate among teachers to get good result in order to improve student learning by practicing Professional Learning Community. This research is useful for NGS itself to reflect on implementing PLC and develop to ensure effectively and efficiency of applying it.

### **1.7 Operational Definition of Key Terms**

The following terms are essential to the correct interpretation in this study and thus need to be defined before presenting such results.

**Influence** refers to the capacity to have an effect on the character, development, or behavior of someone or something (Oxford Dictionary of English, 2012).

**PLC** refers to the group of teachers work together to support each other, share and strengthen positive behavioral norm to improve student learning (Kape, 2017).

**Collaboration** refers to a systematic process that teachers work together to make their classroom practice in the right ways to achieve of students learning results (DuFour et al., 2006).

**Student learning outcome** refers to describing performance of students through assessment in the class and help students understand why that knowledge and those skills will be useful to them.



## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Definition of Professional Learning Community**

The basic structure of the professional learning community is a collaborative team that shares a common purpose. Building a school's capacity to learn is a collaborative rather than an individual task (DuFour & Eaker, 1998). The very essence of a learning community is a focus on and a commitment to the learning of each student. Members of PLC work together to identify clearly about what students need to learn, lead them on a timely basis, provide systematic interventions that make sure students receive extra study time and support for their learning when they face difficulty, extend and enrich learning when they have already mastered the intended outcome (DuFour, Eaker, & DuFour, 2002). In addition, the professional learning community is an inclusive learning communities into reality is also going to be critical to ensuring effective professional learning communities in a complex and changing world, as is really getting to grips with serious challenges that have the potential to detail the whole process (Louis & Toole, 2002). Professional learning community means teachers committed to work collaboratively in ongoing processes of collective inquiry and action research to get good result for the students that they serve and is composed of collaborative teams whose group members work interdependently to reach common goals linked to the objective of learning for all (DuFour, DuFour, Eaker, & Many, 2006). On the other hand, a professional learning community is a group of educators who share opinion or experiences to enhance teaching practice and create a learning environment to enable all students reach their study (Servis, 2019).

DuFour (2004) stated to improve a schools focus on improving professional learning community is currently in general acceptance that people use to describe every

imaginable combination of individuals who interested in education like; committee of a school, a level teaching team, an entire school district, a high school department, a state department of education and a national professional organization. Although professional learning community is often foster as unique opportunities of learning, a bit is known about how they get started and how they are supported interestingly, the participating of teachers is essential in realigning individual behavior to the group's goals; the trusted conversations appeared to confidential members that regardless of the tension the group remained committed to getting the work done (DuFour, 2005). In addition, the hypothesis model of professional learning community was consisted of 5 components: (1) shared values and goals, (2) collective responsibility of students' learning, (3) shared learning, (4) shared leadership, and (5) caring relationship (Shúilleabháin, 2015).

## **2.2 Foundation of Professional Learning Community**

Imagine a school that functions as a professional learning community resting on a four-legged table with one leg representing mission, another leg vision, the third leg values, and the fourth leg goal.

### **2.2.1 Vision**

In a PLC, the vision statement forms the basis for school improvement planning, budgeting, and staff development, among other activities. To achieve the purpose of students learning, the members of a PLC are guided a clear vision of what the entity have to become to help all students learn (DuFour et al., 2006).

Brayan Smith (as cited in DuFour, 1998, p.65) offers five scenarios for implementing a vision within an organization”:

1. Telling: The boss assumes that he or she knows what the vision should be and announces it to the organization in the grand dictatorial tradition: “it's my way or the highway.”

2. Selling: The boss assumes that he or she knows what the vision should be and attempts to persuade members of the organization before proceeding.
3. Testing: The boss has an idea about what the vision should be but seeks reactions from those in the organization to help him or her refine and redesign the vision before proceeding.
4. Consulting: The boss puts together a representative committee of members of the organization and encourages it to develop a vision for his or her review and approval.
5. Co-creating: The boss and members of the organization, through a collaborative process, build a shared vision together.

### **2.2.2 Mission**

The schools have addressed the problem of the mission and the mission statement is given meaning by addressing three fundamental questions positions the school like; statements clarify what students will learn, how we know what students is learning, and statement clarify how the school will respond when students do not learn (DuFour et al., 2002). DuFour & Eaker (1998) showed that principals have to answer the questions that address the core of the purpose of schooling: what is it we expect our students to learn and how will fulfill the collective responsibility to ensure that this learning takes place for all of students.

### **2.2.3 Value**

The term of value is certainly an emotion-laden word in the current political climate. Several significant benefits will accrue to the school that engages its members in the identification and promotion of shared values. A PLC develops values statement means that linked to vision, statements are few in number, statements are used as a main stone for improvement, and value are exactly as behaviors and commitment (DuFour et al., 2002).

Moreover, in the term values is likely to be problematic that the group can use a different term such as collective commitments or guiding principles and sharing values that able to make individuals to act autonomously (DuFour & Eaker, 1998).

#### **2.2.4 Goal**

Kotter (as cited in DuFour, 1998, p.111) advised that some of the initial improvement goals should be specially designed to create short-term wins that are:

1. Visible-large numbers of people can see for themselves whether the result is true or just hype.
2. Unambiguous-there can be little argument over the results
3. Clearly related to the change effort.

### **2.3 Collaborative culture in Professional Learning Community**

In a professional learning community, the term of collaboration is embedded into every appearance of the school culture that all major decision relevant to the leaning mission- made through collaborative processes and PLC is characterized by cooperative teams whose all members work interdependently to reach goals (DuFour et al., 2002). Collaboration was presented in different forms that some collaboration is structured with an agenda and facilitated by the instructional facilitator, but other collaboration was informal and unstructured, such as hallway discussions between teachers and teachers (Flick, 2013). Collaboration in a professional learning community represents a systematic process that teachers work together to make their classroom practice in the right ways to achieve of students learning results (DuFour et al., 2006). The culture of collaboration happened purposely designed and nurtured with student achievement in mind and characterized by supportive adult-to-student relationships that teachers wanted the students to be successful not only academically but also in life in general (Shúilleabháin, 2015).

## **2.4 Advantages of Professional learning community**

Professional learning communities have helped teachers work and learn together as they rethink their practice, raise the challenge existing about teaching, and reexamine their students' learning needs (Stepanek & Barton, 2012). Teachers may acquire a wealth of knowledge applicable to their own teaching styles and methods from observing other teachers. Professional interaction among teachers increases the likelihood of information and idea sharing which should further the likelihood of student achievement in the classroom. The most teachers indicated that their participation in a professional learning community had a favorable impact on student academic achievement (Bennett, 2017). The culture in the school was also characterized by supportive adult-to-student relationships and teachers preferred their students to be successful; teachers worked with students to help them be successful (DuFour, 2004). When implement PLCs correctly, it is a powerful driver for school change, in which, PLCs shift the focus to the students instead of on teachers or school directors (East, 2015a).

## **2.5 Teachers' collaboration in Professional learning community**

In a professional learning community, all teachers work together by preparing assessments, planning curriculum, and sharing teaching responsibility (Rentfro, 2007). Each group of teacher must meet each other during the workday to talk about their explicatory or concerning to improve the classroom practice and teams have to concentrate on their efforts on incensory questions relevant to learning and generate products that reflect that focus, such as lists of necessary outcomes, and strategies for improving students' result (DuFour, 2005). Moreover, professional learning communities are strong connecting that enable educators to promote ongoing growth and improvement for themselves and their students and based on the suppose that learning results from the varied perspectives and experiences that members share with another as they work toward

common goals (Neuman, 2007). DuFour & Marzano (2011) revealed that schools work in collaborative teams to clarify what students have to learn, collect evidence of student learning, analyze the evidence, identify the most powerful teaching strategies and transfer them across all group members and collaborative team work together interdependently to achieve SMART goals. At the heart of success in implement a PLC is the needed of teachers' willingness to learn and the role of school principals is to provide the structural and support to teachers' will to learn (Hairon & Tan, 2016). Teachers require to have enough time to engage in collaborative learning, and that itself cannot deprive them of time to cope with existing day-to-day teachers' workload, which include teaching and non-teaching responsibilities (Ratts et al., 2015). Ratts et al. (2015) revealed that the PLC members who observed peers in class, provided feedback on teaching, worked with colleagues to judge quality of student activities, and collaboratively reviewed student work to improve instructional analysis were more likely to improve their teaching quality. Increasing the level of PLC effectiveness teachers share the responsibility to participate and be more willing to talk to each other and share ideas or experiences (East, 2015b). A PLC was linked with collective efficacy and teachers' commitment to student and support teachers' collective learning, in which contribute to the improvement of teachers' collective efficacy on teaching strategies and student discipline as well as the enhancement of their commitment to students (Lee, Zhang, & Yin, 2011).

## **2.6 Professional learning community and students learning**

Bennett (2017) revealed most teachers indicated that their participation in a Professional Learning Community had an impact on student academic achievement and ideas developed within the Professional Learning Community were geared toward giving high-quality instruction for all students. PLCs allow teachers an easy way to share best practices and brainstorm innovative ways to improve learning and drive student

achievement (Serviss, 2019). The professional learning communities improved student achievement after setting task as a PLC, no consistent relationship between participation of teacher and student failure rates in a PLC and no consistent correlation existed between the student learning results from effective PLCs and those that did not meet the criteria of an effective PLC (Aylsworth, 2012). A group of teachers is looking closely at their students' learning outcomes and skill gaps and figuring out ways to work together to deal with the challenges and see how the students did (McLaughlin & Talbert, 2010).

In the Professional Learning Community, students will get advantages from the ongoing their teachers' collaboration, as they will develop 21st century skills, as master core content, effectively communicate, collaborate, be creative, be problem solvers, and think critically and they will be effectively engaged in constructing their knowledge with the guidance of a team of caring adults (Elbousty & Bratt, 2009).

## **2.7 New Generation School**

### **2.7.1 What is New Generation School?**

The establishment of New Generation School is an official policy of the Ministry of Education, Youth, and Sport and is a part of educational reform in Cambodia. The NGS policy is consistent by having a providing a further supports the National constitution of the Kingdom of Cambodia, the National Education Law, the National Development Strategic Plan, Millennium Goals, and the Rectangular Strategy of the Royal Government of Cambodia. New Generation Schools are known a new reform recently inaugurated by the MoEYS in 2014 to create 'autonomous' public schools to innovate and improve quality of education. The government is able to make intensive investments in such schools under conditions that ensure high standards of good governance under the new policy defining New Generation Schools. New Generation Schools follow precedents in other countries

where some public schools receive autonomy from the state to excite educational innovation.

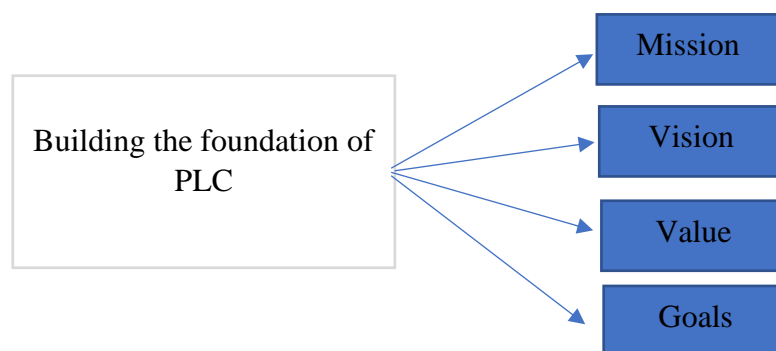
### **2.7.2 New generation school policy**

These challenges were appeared throughout the integration of ASEAN member increased economic competition, rapid penetration of Cambodian society by technology, increasing urbanization, the expansion of private schools, and a large youth population who require intensive guidance in today's world of competing choices and ideas. The current policy has been developed to give guidance to all educators and administrators at all levels regarding the implementation of NGS. The New Generation Policy has a vision is to lead the emergence of a new administrative framework that ensures the necessary conditions needed for successful educational investment. In addition, NGS has goal to create a new development track within the public education system that will lead to the set of autonomous public schools, which receive high investment linked to new standards of governance and accountability as well as professional standard for 21<sup>st</sup> Century learning. This policy has vision drives to the appeal of a new administrative framework that make sure the essential conditions needed for educational investment to success. Moreover, the goal of NGS schools is make a new development track with the public education system that will lead to the innovation of autonomous at public school, which receive investment linked to new standards of governance and accountability as well as professional standards for 21<sup>st</sup> Century learning. In addition to the overarching goal, seven specific sub-goals can be elaborated and they divide into three different themes such as strictly role of the school governance and management for increasing the accreditation system of the schools, enhancement with new variety teaching approach. Two primary strategies apply in monitoring and evaluating NGS implementation framework. The first strategy focuses the continuous improvement of NGSs such as learning and teaching environment, ICT, library



service etc. And the “process indicator” will apply in this assessment. The second strategy is concentrating on the “Certificate Accreditation” based on the accreditation indicator. Moreover, this certificate will provide the opportunity for NGSs to access special source funding to function their school for achieving the highest education standard. By contrast, the schools will turn to be the normal school, unable to access the special funding and other privileges accorded to New Generation Schools when they lose the accreditation.

**Figure 1:** Building the foundation of Professional learning community



## 2.8 Summary of Literature Review

This chapter has presented a review of theoretical and research literature relevant to the professional learning community. It has highlighted definition of Professional learning community, collaboration, advantages of implement PLC and building foundation of professional learning community and. The next chapter presents the methodology used in this study.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Research Design**

Qualitative method explores attitudes, behavior and experiences through focus groups or interviews. It attempts to get an in-depth opinion from participants as attitudes, behavior and experiences which are important (Dawson, 2007). The case is studied in depth but the goal is to understand how the particulars of the persons or settings studied help one understands some broader issue on a deeper level and case study research is a form of qualitative research that endeavors to discover meaning, to investigate processes, and to gain insight into and in-depth understanding of an individual, group, or situation (Lodico, Spaulding, & Voegtle, 2010). This study used a case study of an upper secondary school in Cambodia.

### **3.2 Sample Size and Sampling Technique**

Sample is a group of individual, items, or events that represents the characteristics of the larger group from which the sample is drawn (Flick, 2013). Qualitative researchers concentrate on how the sample of cases, units, or activities illuminates key features of social life and purpose of sampling is to collect cases, events, or actions that clarify and deepen understanding. Researcher uses purposive sampling. A nonrandom sample in which the researcher uses a wide range of methods to locate all possible cases of a highly specific and difficult-to-reach population.” (Neuman, 2007. P. 273). The participants of the study were teachers who were technical team leaders and teaching at upper secondary school. Researcher interviewed 7 teachers in upper secondary school, that one from math, one from Khmer, one from chemistry, one form Physic, one from English, one form biology, and one from history.

**Table 3.1: Interview participants' background information**

<b>Participants</b>	<b>P1</b>	<b>P2</b>	<b>P3</b>	<b>P4</b>	<b>P5</b>	<b>P6</b>	<b>P7</b>
<b>Gender</b>	Female	Female	Female	Male	Male	Male	Male
<b>Age</b>	22	27	27	32	29	35	33
<b>Degree</b>	Bachelor	Bachelor	Bachelor	Bachelor	Bachelor	Bachelor	Bachelor
<b>Years of experience</b>	6	3	2	8	4	4	5

### **3.3 Research Instrument**

In this study, researcher used qualitative method to conduct the research by interview and observation to gain in-depth of data. Semi-structured interviews are in-depth interviews where the respondents have to answer preset open-ended questions and the questions in the interview guide comprise of the core question within many associated questions related to them. (Jamshed, 2014). Interview is an important way to find out what is on participants' minds – what they think or how they feel about something. An interview can provide a researcher with information about people's attitudes, their values and what they think they want to do. (Fraenkel, Wallen & Hyun, 2012). In this research, researcher used question guides in the form of semi-structure to interview participants of collect the data. In addition, the researcher uses technical meeting minutes to analyze by collecting all meeting minutes for all technical group.

### **3.4 Data Collection Procedure**

Qualitative data collection procedures often involve with spending a lot of time in the natural setting under study or with the research participants collecting related information unobtrusively (Flick, 2013). As the purpose of this study is to gain in-depth

understanding of data collected by the records of semi-structured interviews are used. Researcher prepared all documents and data collection tools, such as information sheet, interview schedule, and informed consent form. All these documents were written in English and translate into Khmer in advance of the interviews. Each interviewer spent around 30 to 40 minutes at the comfortable place where the respondents felt trust in responding to researcher’s interview question.

**Table 3.2: Chronological order of data collection processes**

Date	Activities
<b>Week 1</b>	<ul style="list-style-type: none"> <li>• Seeking school approval</li> <li>• Gathering teacher’s list from school administration</li> <li>• Selecting participants</li> </ul>
<b>Week 2</b>	<ul style="list-style-type: none"> <li>• Contacting and asking the consent from participant</li> </ul>
<b>Week 3</b>	<ul style="list-style-type: none"> <li>• Conducting interview with participants</li> </ul>
<b>Week 4</b>	<ul style="list-style-type: none"> <li>• Validating the transcripts with the interview participants</li> </ul>

### **3.5 Data Analysis**

The researcher collected the data for this study using qualitative methods. After gathering the data from the field, the researcher listened to the tape recordings, transcribed the interview tape and analyzed the respondents’ responses. Qualitative data analysis is the classification and interpretation of visual material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and focus on the case (individual or group) and its special features and the links between them (Flick, 2013). In this study, researcher used content analysis. This method, researcher systematically works

through each transcript assigning codes within text and the researcher interpreted data into text and researcher has already a list of categories or read through each transcript and let the categories emerge from the data (Dawson, 2007).

### **3.6 Ethical Considerations**

Before starting the data collection, researcher asked for permission and approval from the school principal and teachers for tape-recorded interviews. Researcher explained the aim and objective of study verbally to participants and told them truthfully that their involvement was voluntary. The participants can deny the interview if they don't feel comfortable. In this research, all participants were voluntary and their names were kept confidential. The information obtained from participants kept confidential that audio recordings were kept in a password protected and will be destroyed at the conclusion of the research.

## **CHAPTER 4: RESULTS/FINDINGS**

This chapter presents qualitative finding of the study. Analysis of data from interviews has identified and contributed to understand about how teachers cooperate in professional learning community and its influence on student's learning. It is noted that the finding revealed no obvious difference between responses of participants of different genders and length of experience, responses of all participants contributed to the findings presented here. The data is described in themes that emerged in the process of the data analysis to address two research questions:

- (1) How do the teachers collaborate in Professional Learning Community at NGS?
- (2) How do the Professional Learning Community influence on student learning at NGS?

### **4.1 Research Question 1**

The first research question is asked about how teachers collaborate in PLC at NGS. Analysis of data from interviewing participants and technical meeting minutes revealed the themes described in the following sections.

#### **4.1.1 Technical meeting minutes**

Analyzing technical meeting minutes of each technical group, found that two groups meeting are held monthly and, in some groups, weekly, meaning four times a month. Four groups mentioned that the topics in meeting were about creating item for monthly and semester test and preparing the lesson plan and sharing teaching method to encourage students to pay intention in their learning. Three groups report showed that the topic of meeting raised about the solution to help lower students and all students to be active in the class while teacher was teaching and when group members faced challenges in teaching

like students were not active in the class, they raised up and request a meeting to discuss to find out the suitable solution to address it. In addition, the meeting minutes revealed that the time for the meeting seemed to regularly follow the schedule. But there is also flexibility depending on the actual situation. Four groups' reports showed every month before monthly examination, each technical group meet up to prepare exam tests to be valid.

#### **4.1.2 Technical meeting**

In the New Generation School requires all technical teams have regular meeting in order to improve effectiveness of teaching and learning, which is known Professional Learning Community. In the meeting, teacher can share the teaching experience and new knowledge relate to teaching to each other. Seven interview participants mentioned that technical team leaders have to make a plan and specific action for each group in order to run PLC.

One participant excitedly stated:

“There has regular meeting because meeting minutes has to record into teacher career path, so we set a meeting twice times per week is require.”

Another participant expressed that implementing PLC must be held on a weekly basis to address any issues or to find the solution that team members faced in their teaching. Technical team meetings follow each subject with the design of the technical team leader.

P4 stated:

“Last year, I had a meeting one time per month, but this year is the new year that school is evaluated from the school board. That why all the subjective technical team leader has to assign the meeting four times per month. So, we changed the

meeting from monthly to weekly, which we decided to have a meeting every Saturday from 2:00pm to 3:00pm.”

One participant revealed:

“We met every Saturday from 3:00pm-4:00pm, but sometime we couldn’t meet due to absent group member because my group have only two members.”

#### **4.1.2.1 Creating Teaching Material and sharing teaching strategies**

Interview data showed that technical group meetings raised the teaching methodology and teaching material was mentioned as one of the other topics to share the teaching technique in the group. All team members have exchanged experiences, then apply any method of teaching that the group has practiced and got effectiveness. Of the seven interview participants, P1, P2, P4, P5 and P6 stated that the topic was raised in the meeting depended on group member but all most about teaching methodology to ensure teaching effectively.

For example, P1 said,

“Topic in technical meeting based on team member but some was related to teaching methodology to teach students about reading, grammar, essay, and almost teachers have problem with teaching grammar and essay.”

Another participant mentioned that his group meeting posed the agenda relevant to teaching methodology and creating teaching material to support teaching in order to get effectiveness.

P3 stated that:

“For my group, the topic of meeting relates to teaching technique and creating teaching material to use in teaching...We shared idea relevant to problems in



teaching such as teaching methodology and creating teaching material if one of our group members faced difficulty in teaching.”

#### **4.1.2.2 Preparing lesson plan**

For two participants stated that teachers of each technical team collaborate to help team members who had problem with prepare lesson plan, especially help the new teacher to prepare effective lesson plan. If there are gaps in lesson plan preparation, the team members work together to check and help to edit it.

P5 said:

“We discussed about our lesson plans. ...because my team have two new teachers. So, they didn’t have experience to prepare lesson plan that why we help to check and edit to facilitate their teaching.”

#### **4.1.2.3 Helping slow learners**

The main task for teacher collaboration is students’ learning. Each the technical team works together to help slow learners who need to helps and supplement their learning. For instance, the technique to help them is finding the root cause, providing remedial class, creating new excited material, and using an appropriated teaching method. P4 claimed that for slow learners we often raise to find the strategies to support the students, in which we have a remedial class to help. For his class specifically, besides remedial class, he assigned students in a small group to help each other and had short testing, formative testing.

Another participant, P5 explained:

“For slow learners, I tried to assigned them to work in group that has mix-ability students, which those who performed better can help those who performed poor. I

motivated outstanding students to feel helpful to weak students, and I didn't keep them studying alone in the class.”

P1 similarly described that we discussed with team member about slow learners and solved by giving remedial class. We decided to teach them one hour per day for extra teaching but based on teachers themselves whether they have free time to teach or not.

#### **4.1.2.4 Creating item for exam**

Three interview participants mentioned that they have to meet every month or semester in order to create test for exam. All team members assigned specific time to create standardized item to ensure those tests can measure student's learning outcome. P5 stressed that a week before monthly exam, they discussed about test by conducting peer checking to avoid problem during exam.

One participant explained:

“Before monthly examination, we discussed how to prepare items and team members cooperate to assign test and recheck before exam day to avoid error during testing.”

Another participant responded that:

“We raised students' outcome to be a topic in the technical meeting whether why the fall examination at the high rate, so we started to find the solution with creating and item to get a validity test, and now NGS has created a testing program to support students to get the better result in their study.”

## **4.2 Research Question 2**

This section reports on finding to respond Research Question 2, How do the professional learning community influence on students' learning at NGS. By analyzing the

data from participants and put it into themes, the main themes are presented in the following:

#### **4.2.1 Improve student learning outcome**

Interview findings revealed that the six of the 7 participants identified after the teacher meeting to deal with lower students, they improved their learning outcome in which the result of monthly exams has changed from low to mediate and some lower students got high scores. P1 explained that, “For students learning outcomes have changed that previously we implemented PLC students’ outcome was not valid, some students got higher scores without quality, but after implementing PLC it seems good that they got a good score”. P2 stressed, “students more active in their study differ from those who were previously when we had a technical meeting”.

P3, P5 and P6 mentioned students’ learning outcomes have changed. They showed some lower students have improved their monthly exam result even though they were not 100 percentages, but in a positive rate. P4 said that, “They got a good result if compared previously.” P4 added, “For my subject, the previous exam, students failed half of the class, but when technical meeting, I changed the teaching method and noticed that students got the better score. And, if students like playing games, I created lessons that are an educational game for them”.

#### **4.2.2 Student behavior**

Students get new knowledge, satisfy with teacher’s teaching and do not boring when they in the class during teaching. Sometime teachers used teaching methodology wrongly with the content of the lesson that make students don’t want to study with them. But when teachers meet to find the solution and share the experiences, the teachers try to use effective

teaching method that get from other teachers and notice it is effective one in which students changed their learning attitude from boring to satisfaction with teachers' instruction.

One participant explained:

“Sometime students got the new and different knowledge and did not boring with their studying. The teachers used teaching method in their instruction made students didn't want to learn anymore but when they got the comments from other teachers to apply another one, they changed their teaching style, changed study environment in the class, notice that students want to study.”

#### **4.2.3 Collaborative culture**

When teachers have faced challenges with lower-learning students, they cooperated to find the solution in the form of PLC in order to share new experience and technique to help them. After that, they apply the best one to teach lower-learning students, and they notice that those students got a good result. Through interviewing, two participants mentioned that changing variety strategies in the teacher, in which got from technical group members can improve student's performances. And they have a cooperative culture. It means that they can work with each other to do the task or project that has been provided by the teacher.

One participant responded that:

“For slower-learning students, we meet each other to find the way to help them by sharing different teaching methods in teaching in order to improve their learning. After that, we decided to use a method called cooperative learning by asking them to work in a group, mixed ability to help the lower student. So, the students

cooperate in a group to do the assignment that is assigned by the teacher and students feel good to work in a group in which they have a cooperative culture.”

P3 stated that:

“A teaching strategy that I got from the meeting is collaborative learning that assign students to work in group to help each other to complete the tasks are provided by teacher. That strategy, I noted that it was effective on students that higher students help lower students and sometimes they can share the idea around the group.”

## **CHAPTER 5: DISCUSSION**

The final chapter starts by summing up the key findings for the two research questions. Then, it discusses the findings in relation to the literature. The chapter ends with the reflections of the researcher on completion of the study and a final conclusion.

### **5.1 Teachers collaboration in Professional Learning Community**

According to the findings showed that each group meet each other during the working day in order to discuss about their explicatory or concerning to improve the classroom practice and preparing the curriculum before starting the new study year. The finding is similar to empirical studies that examined teacher collaboration in professional learning community. Each teams must focus their efforts on important questions relevant to learning and generate products that reflect that focus, such as lists of necessary outcomes, and strategies for improving students' result (DuFour, 2005). In a professional learning community, teachers work together by writing common assessments, planning curriculum, and sharing teaching responsibility (Rentfro, 2007). The finding revealed that teachers work with each other to share the experiences, to create test items, to prepare lesson plans, to create teaching material, and to solve the challenges that faced in the teaching. Teachers require to have enough time to collaborate in group, and that itself cannot deprive them of time to cope with existing day-to-day teachers' workload, which include teaching and non-teaching responsibilities (Ratts et al., 2015). Anyway, the regularly meeting and specific time is the way to ensure effective in the meeting among technical team member to share and find the solution to address the problems. If technical group members don't have enough time and commitment to conduct a specific meeting, the practicing PLC is not effective. Collaboration in a professional learning community represents a systematic process that teachers work together interdependently to make their classroom practice in the right ways to achieve of students learning results (DuFour et al., 2006). The

collaboration of the teachers is effective only if the team members have experienced, talented and successful in teaching and they are willing to share, support and collaborate with other teachers. All teacher need to work together with high commitment to motivate students to achieve their learning.

## **5.2 Professional learning community and students learning**

Bennett (2017) revealed most teachers indicated that their participation in a Professional Learning Community had an impact on student academic achievement and ideas developed within the Professional Learning Community were geared toward giving high-quality instruction to all students. The findings in the research showed that after applying PLC regularly, students have changed their attitude by paying attention to their teacher's teaching in the class after the teacher uses an effective strategy that got from other teacher's wo provide in the technical meeting. According to findings, it is noticed that students have a cooperative habit to do the tasks in the class provided by teachers. The objective of teachers' meeting is students learning, in which teachers need to find or share teaching experiences to all members in each technical group or colleagues in order to strengthen students' learning to the achievement of their performance. Moreover, professional learning communities are strong connecting that enable educators to promote ongoing growth and improvement for themselves and their students and based on the suppose that learning results from the varied perspectives and experiences that members share with another as they work toward common goals (Neuman, 2007).

## **CHAPTER 6: CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS**

### **6.1 Conclusion**

In this chapter, the two research questions were addressed by the analysis of data gathered from interviews. In summary, implementing PLC teachers cooperate each other to prepare lesson plan, help lower learning students, create items, create teaching material and share the teaching experiences. Therefore, teachers need to pay close attention and monitor students' learning to help students who are learning poor and face difficulty in their study. The result of finding also showed that implementing PLC can help students to change their attitude to pay attention to their learning in the class, make them have cooperation culture and improve their learning. So, implementing PLC regularly, it can improve students' achievement. Moreover, the meeting regularly and specific time is the way to ensure effective in implement PLC to deal with the issue appears in teacher's teaching and students' learning. Implementing PLC effectively requires the active participation of teachers to share experiences as well as good teaching methods to support students learning. On the other hand, the PLC process is also related to the relationship between teachers and students. If the teacher has a good relationship, the teacher can understand the students can know what the students need, so teacher can bring those issue to discuss with teacher in PLC. Beside this, PLC is useful for new teachers who lack experience in teaching where old teacher to can support the new ones to improve his/her teaching. The teachers should further develop their professional skill so that PLC has an impact on students learning.



## **6.2 Limitations of the Study**

This study has some limitations. Firstly, the objectives of this study are to investigate teachers' collaboration of professional learning community in a NGS and the influencing of professional learning community on students' learning in an NGS. Secondly, only seven participants were requested to have an interview. The researcher used a case study to find how teachers at NGS collaborate in PLC and the influence of PLC on students' learning. The findings of this study cannot be used to generalize all teacher collaboration in professional learning community at all New Generation School.

## **6.3 Recommendations**

Although future research is implicated for this study, some recommendations can be made for teachers to implement PLC effectively to students learning. It is important and interesting to note that PLC influence to students in which teacher has to cooperate actively and regularly to support students in their study. These recommendations are particularly for teachers. This study was conducted with the hope that it can be as a basic for further research which will lead to improvement of better situation which cooperation among teachers in implement PLC that it can help students' achievement. In Cambodia there has been no previous research to investigate effective PLC implement in upper secondary school. Because the number of participants in this study was limited due to time constraints, it is commended that further research with more participants. Also, the study was conducted to investigate how Professional Learning Community influence to students learning. Addition, further research should seek for the reasons as to what are the challenges to applying PLC in public school.

Recommendation 1: Collaboration between teachers and teachers is crucial in the Professional Learning Community, so teachers must work together to find solutions as well

as sharing teaching experiences to improve students' learning at capacity, mentally and behaviorally

Recommendation 2: To make culture of collaboration among teachers, teachers have to build good relationship and be trust with other. To be cooperate to deal with the learning and teaching challenges, it requires trust to ensure effective work that the teachers can raise precise problem in the meeting in order to cope with all problem facing in their teaching.

The recommendations are supported by Berry, Daughtrey and Wieder (2009) that best practices for collaboration that are most tightly link to teacher effectiveness:

1. Scheduling adequate time for collaboration.
2. Aligning collaboration structures for both horizontal and vertical.
3. Structuring collaboration meeting formally.
4. Creating an atmosphere of mutual trust.

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## **APPENDIX A: INTERVIEW QUESTIONS**

### **The interview questions for the first research question:**

1. What are the way teacher's collaboration in Professional learning community?
  1. Have you ever had a technical meeting?
  2. Do you meet regularly? When?
  3. How often do you meet each other? How long it takes?
  4. What the topics do you raise in your meeting?
  5. Have you heard about PLC? To you, what does PLC mean?
  6. Based on your experience, how do you build PLC effectively?
  7. Do you think PLC is important in your instruction? Why or Why not?
  8. Do you think teachers' collaboration in PLC is crucial? Why or Why not?
  9. What the challenges are implemented PLC?
  10. How do you deal with the challenges?
  11. What do you expect from members' collaboration in PLC?
  12. What are the requirements for participation in PLC?
  13. How do you offer feedback to each other about teaching and learning based on your observation?

### **The interview questions for the second research question:**

#### **2. How the Professional learning community influence on students learning outcomes?**

1. Do you think PLC effect your students learning? How?
2. What are the advantages of teacher collaboration in PLC on students learning based on your experiences?
3. How often does your PLC analyze student learning to guide instruction?
4. How often does your PLC discuss inventions for students?

5. How do PLC provide extra support for students who experience difficulty?
6. What are the characteristics of students after you find the solution with your team members?



APPENDIX B: CONSEN LETTER



**មជ្ឈមណ្ឌលស្រាវជ្រាវគរុកោសល្យជំនាន់ថ្មី**  
**NEW GENERATION PEDAGOGICAL RESEARCH CENTER**

ថ្ងៃព្រហស្បតិ៍ ៩រោច ខែចេត្រ ឆ្នាំកុរ ឯកស័ក ព.ស ២៥៦៣  
រាជធានីភ្នំពេញ ថ្ងៃទី១៦ ខែមេសា ឆ្នាំ ២០២០

**គោរពជូន**

**លោក សៀង វ៉ាន់ នាយកវិទ្យាល័យហ៊ុន សែន កំពង់ចាម សាលារៀនជំនាន់ថ្មី**

**កម្មវត្ថុ:** សំណើសុំអនុញ្ញាតឱ្យនិស្សិតឈ្មោះ **ឌី តូចនា** បានចុះប្រមូលទិន្នន័យស្រាវជ្រាវនៅ វិទ្យាល័យហ៊ុន សែន កំពង់ចាម សាលារៀនជំនាន់ថ្មី ក្នុងរយៈពេល ១ខែ ដោយគិតចាប់ពីថ្ងៃទី១៨ ខែមេសា ដល់ថ្ងៃទី១៩ ខែឧសភា ឆ្នាំ២០២០។

សេចក្តីដូចបានជម្រាបជូនក្នុងកម្មវត្ថុខាងលើ ខ្ញុំបាទសូមជម្រាបជូន លោកនាយកឱ្យបានជ្រាបថា កញ្ញា **ឌី តូចនា** ជានិស្សិតបរិញ្ញាបត្រជាន់ខ្ពស់អប់រំ ឯកទេសប្រឹក្សាគរុកោសល្យ ជំនាន់ទី១ នៃមជ្ឈមណ្ឌលស្រាវជ្រាវគរុកោសល្យជំនាន់ថ្មី វិទ្យាស្ថានជាតិអប់រំ។ កញ្ញា មានគម្រោងចុះស្រាវជ្រាវលើប្រធានបទ «**ការងារ កសិករលេបសំបកមត៌សិក្សាច្បាប់ចំពោះលើការសិក្សាលេបសំបកស្បែកក្រចកម្រិតទទួល ល័យៈ ករណីសិក្សាស្រាវជ្រាវជំនាន់ថ្មី**» ដើម្បីសរសេរសារណាបញ្ចប់ការសិក្សាថ្នាក់បរិញ្ញាបត្រ ជាន់ខ្ពស់អប់រំ។ គោលបំណងនៃការចុះប្រមូលទិន្នន័យនេះ គឺដើម្បីប្រមូលព័ត៌មានសំខាន់ៗ ដែលទាក់ទងទៅនឹង ប្រធានបទស្រាវជ្រាវខាងលើ។ បន្ថែមពីលើនេះ លទ្ធផលនៃការសិក្សាស្រាវជ្រាវនេះ ក៏អាចរួមចំណែកក្នុងការ ជំរុញឱ្យការរៀន និងការបង្រៀនកាន់តែប្រសើរឡើងផងដែរ។

អាស្រ័យហេតុនេះ សូមលោកនាយកមេត្តាអនុញ្ញាតជួយសម្រួលនិងសហការជាមួយនិស្សិតរូបនេះ បានប្រមូលទិន្នន័យដូចមានក្នុងកម្មវត្ថុខាងលើ ដោយក្តីអនុគ្រោះ។

សូមលោកនាយកទទួលនូវការគោរពរាប់អានដ៏ស្មោះអំពីខ្ញុំបាទ។

ឡាន វ៉ាន់  
លេខទូរស័ព្ទ ០៤/០៥/២០២០

**ប្រធានមជ្ឈមណ្ឌល**  
  
**មណ្ឌិត ច័ន្ទ កែត**

**សៀង វ៉ាន់**

អាសយដ្ឋាន៖ មហាវិថីព្រះនរោត្តម, វិទ្យាស្ថានជាតិអប់រំ, អគារ ៤, រាជធានីភ្នំពេញ, លេខទូរសព្ទ និងតេឡេក្រាម៖ ០១១៦៩៧០៣៨  
Address: #123, Preah Norodom Blvd, National Institute of Education, Building 4, Phnom Penh, Cambodia, www.nie.edu.kh

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Email: [ngprc.faculty@gmail.com](mailto:ngprc.faculty@gmail.com)

Website: [www.ngprc.edu.kh](http://www.ngprc.edu.kh)