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EDUCATIONAL ACTION RESEARCH

Discovering its applicability in Cambodian pre-
tertiary education

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Abstract

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Aim: In the case of Cambodia, whose educational system is in the critical stage of reconstruction and reform after emergence from its almost three decades of civil war, action research should be integrated into teaching profession to empower teachers in this educational reforming process. Therefore, this study is essentially aimed at discovering action research in Cambodian education in the three levels of schooling, primary, secondary and high schools to explore its applicability in the recent educational system.

Theory: As this research is attempting to understand facts in association with personal, social and institutional factors hiding behind a phenomena which only members in that particular context are most suitably able to construct; therefore, constructivist perspective with the guidance from theory of practice architectures and a complementary theory of motivation will lay a firm conceptual ground for this study.

Method: This research is conducted qualitatively, specifically operationalized in a form of multiple-case study. Semi-structured interview is chosen, for it ensures that all participants are given a wide room of expression with minimal pressure of formality from the researcher while it also prevents me from getting lost during interviewing as a list of open-ended questions with fairly specific topics is prepared as an interviewing guide.

Results: This research reveals the truth that action research has not been implemented by Cambodian teachers at pre-tertiary levels. This phenomenon is explained by the failure at establishing proper arrangements defined by the theory of practice architectures such as cultural-discursive, material-economic and social-political arrangement and the absence of fundamental motivational factors, both individual and institutional, such as proper living standard, research capacity enhancement, supporting mechanism and teacher-empowering educational system.

Foreword

This thesis is not achievable solely by my great effort. The contribution from a number of people is thus everlastingly remembered and highly appreciated.

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Abbreviations

ASEAN	: Association of South-East Asian Nations
CDRI	: Cambodia Development Resource Institute
INSET	: Institutionalized In-Service Training
MoEYS	: Ministry of Education, Youth and Sports
NIE	: National Institute of Education
TTCs	: Teacher Training Centers
UNESCO	: United Nation Education, Science and Culture Organization

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Introduction

Action research, long associated with the perspective of Kurt Lewin as a cyclical, dynamic, and collaborative methodology in nature through repeated cycles of planning, observing and reflecting with the engagement of individuals and groups in implementing changes (Hine, 2013), was developed in Europe and the USA in the first half of the twentieth century and has been spread out to every corner of the world as the approach of educational reform. Thank to what Appadurai calls "a world of flows" in which ' ideas and ideologies, people and goods, images and messages, technologies and techniques' are in constant mobility (Appadurai, 2001, p.5–7). Its prominent roles in helping educators conceptualize phenomena which matter the teaching-learning process and in building framework for action have drawn much attentions of governments, educational development partners and stakeholders over the last two decades across almost all the continents.

Recognizing the vital roles of teachers in bringing up changes to education through empirical studies from their schools and classes, a number of countries around the globe have been promoting the practices of action research among teachers and concerning stakeholders. In the USA, Stephen Corey, the head of the Horace Mann Lincoln Institute of School Experimentation at Columbia University in the 1950s, was a leading voice for promoting action research in American education by working actively with his colleagues in extensive collaboration with school districts and teachers across the countries in conducting action research studies on various school problems which resulted in a number of papers and a book on action research in education. In the UK, action research was aimed at transforming the nature of teaching (supported by universities) via curriculum reform, in order to solve broader social problems through looking at data from one's own practice as a basis for further actions and theorizing practice. In Australia in the 1980s, action research served as a more school-based and practitioner-centered approach for educational understandings and practice improvement (Hardy, Rönnerman, Edwards-Groves, 2017).

More remarkably, in the countries whose politics has been in rapid change, action research has been promoted to empower teachers in the reforming process of education. In Namibia, action research has been in a prominent role in educational reform since its independence in 1990, in which teachers have been encouraged to engage themselves critically with learning as professionals, and a local knowledge base was built by incorporating the theories and practices of action research in the national teacher education programs for basic education (Mayumbelo and Nyambe, 1999).

In Russia, preparing teachers from the former Soviet Union to work in an education system reoriented to humanistic and democratic value involved the process of reconstructing identities by changing from working with the collective to catering for the needs of the individual child (Michalova, Yusfin, and Polyakov, 2002). To overcome this transitional period in education, action research was introduced to support teachers in learning to become innovators who

supported learners in the process of self-discovery, rather than transmitters of certain knowledge and skill.

Similarly, action research in Spain took root from the Pedagogy Renovation Movements that grew up in the dictatorship of Franco. After the death of the regime, action research was formally introduced and built upon these radical grassroots movement and became a key players in developing new education system, and teachers were granted the role of independent professionals who developed by carrying out research into their own practice (Perez-Gomez et al., 2009).

In the case of Cambodia, for the last half of this century, it has been encountering dramatic social and political changes—from the so-called Year Zero of Khmer Rouge genocide regime in 1975 to 1979, in which the whole educational capital including both physical infrastructure and educators was almost demolished, to the period of democratization after the Paris Peace Agreement was reached in 1993. Therefore, its educational system is in a very critical stage of reconstruction and reform. In accordance with some cases of other countries aforementioned, action research should be serving prominent roles and should be integrated into teaching profession to empower teachers in educational reforming process. Therefore, it is a great essence for this research to be conducted, which is aimed at discovering action research in Cambodian education in the three levels of schooling, primary, secondary and high schools.

Problem Statement

The vitality of research in education is officially recognized in the Cambodian Education Law as elaborated in Article 28, paragraph 1 that “The state shall promote and support research, development, invention and production, which are scientific and technological for education to meet the needs of the labor markets and globalization to promote human resource capacity and to enhance the development of the country.” According to what is stated in the law, research in education is well treated as a catalyst for long term social development, and it emphasizes the commitment of Ministry of Education in particular and the Cambodian Government as a whole in promoting the roles of educational research to a maximal level as possible.

However, based on what was stated in the Policy on Research Development adopted by the Ministry of Education, Youth and Sports of Cambodia (MoEYS) on July 2010, the very first policy which directly addresses on educational research, research in education seems to be defined in a narrow term by conforming to just research in higher education as illustrated below:

The Policy on Research Development in the Education Sector introduces a new stage in the reformation and enhancement of the quality of higher education in Cambodia by paving the way for human resource development in the era of globalization and for the achievement of the Millennium Development Goals. (p. 1)

The narrow focus of educational research to just researches by higher education institutions is precisely echoed again in its purpose statement:

Policy on Research Development in the Education Sector has the following purposes:
1) To enhance the quality of higher education in Cambodia by transforming the institutions into research centers for developing and creating new knowledge. 2) To increase the opportunities for cooperation with national and international networks. 3) To advance human resource capacity, creativity and innovation. (p. 2)

The absence of implicit and explicit focus of research in this potential policy document for educational research casts my suspicion to some extent on whether action research bears any considerable status in Cambodian pre-tertiary education system.

Along with this, through my extensive reviewing of literature, I have observed that there is a serious lack of sound studies done to discover the role of action research at this critical moment of educational reform in Cambodia, which is seemingly in contradiction to what Noffke & Somekh (2010) claimed about a big increase of interest in this kind of research in Asia and Eastern Europe, where action research fits well in developing pedagogical base for fostering creativity, critical thinking, dependent learning.

Therefore, this research is of its particular essence in which it is driven to explore the action research in the Cambodian pre-tertiary education by taking into account the perspectives of teachers and members of school management board. The findings of this study will, optimistically, become conceptual inputs for policy makers, practitioners and stakeholders in education to take into account when constructing a mechanism in integrating action research into teaching career and promoting teachers as grass-root researchers of quality enhancement scheme in the national education.

Aims of the Study and Research Questions

The objective of the study is to investigate the current status of teachers' involvement in educational action research and to explore the factors which are influential in supporting or hindering their engagement in action research practice. Hence, the following questions will be addressed:

1. What is the current status of action research practice in each school?
2. What do the respondents describe as their main motivational and/or demotivational factors in their educational profession in conducting action research?
3. Is there any existing mechanism supporting the practice of action research in each school?

4. What have the respondents done so far to address their teaching problems (alternative coping mechanism beside action research)?

Research on the Field

Throughout critically reviewing the qualified literature, a number of themes have been emerged. Those themes are categorized into three key aspects: impacts of educational action research, main challenges to the practice, and capacity building mechanism for action research. These themes are in response to the research questions.

The Impacts of Educational Action Research

The number of research have found that educational action research has yielded great impacts on education in three key aspects: educational perspective changes (Grundy,1994; Kayaoglu,2015), professional development and growth (Zambo & Zambo, 2007; Hine & Lavery, 2014; Hine, 2013; Kember, 2002; Wang & Zhang, 2014; Kayaoglu, 2015; Peters, 2004; Li, 2008) and teacher autonomy (Grundy,1994; Zambo & Zambo, 2007; Hine and Lavery, 2014; Wang & Zhang, 2014; Kayaoglu, 2015; Peters, 2004; Li, 2008; Kember , Ha , Lam , Lee , NG , Yan & Yum, 1997; Sheridan-Thomas, 2006).

Educational Perspective Changes

Some traditional perspectives over how education has been managed are facing great challenges from practicality of action research (Grundy, 1994, & Kayaoglu, 2015). A qualitative study to examine some examples of whole school action research in Australia by Grundy (1994) found that action research offers a set of principles upon which the work of improving learning environment of a school can proceed. It argued that the ideology that as long as the work of each individual teacher can be improved then the quality of educational provision as a whole can also be improved is outmode, and it is replaced with the concept of the provision of quality education through a complex interaction between and among individual, organizational, social and political factors. By this way, action research provides a process by which school communities can explore those complex relationships (Grundy, 1994). This study also further found that action research challenges the separation of research from action. Traditional educational development adopts the approaches in which policy or curriculum directives are developed by experts or specialists in one side and implemented, on the other side, by teachers at school level, which privileges outside researchers, developer or policy makers and relegates practitioners to the technical role of carrying out those policies. In contrast, action research promotes role of teachers in bringing up reflective voices in educational changes, which challenges that long-standing perception.

In alignment with placing teachers in the core of educational change, the findings from a case study by Kayaoglu (2015) to examine whether the notion of action research by teachers was a viable option for in-service teacher development in a highly centralized education system in

Turkey indicated that teachers, being capable of carrying out action research, were quite positive about action research practice and hopeful for overcoming some inadequacies in their educational environment. Thus, action research becomes asset for personal professional development and challenges to traditional education despite a highly centralized education system. Kayaoglu (2015) concluded his study by emphasizing that ‘action research which places the teacher in the core of professional development, is quite new in the sense that it poses a radical change to the heavily centralized education system’ (p. 140).

Furthermore, being collaboratively involved in action research has changed the commonly isolated teaching culture. A study using pre-project and post-project questionnaires and interviews to senior secondary school English teachers in China by Wang & Zhang (2014) indicated that the teachers in the study were found discussing issues related with their research projects and sharing their success stories or progress with their colleagues, which increased their awareness and benefits of team work. This has opened up to a new professional learning culture.

Professional Development and Growth

Action research is serving a worthwhile means of professional development and growth of teachers (Zambo & Zambo, 2007; Hine & Lavery, 2014; Hine, 2013; Kember, 2002; Wang & Zhang, 2014; Kayaoglu, 2015; Peters, 2004; Li, 2008). In a case study which involved 2 stages of data collection—three 40-minute semi-structured interviews and follow-up written responses six months after the initial interviews to explore the experiences of three teacher-researchers who undertook an action research project in their respective schools in Australia, Hine & Lavery (2014) found that all three teacher-researchers recognized that action research equipped them with a valuable research methodology to examine what they considered to be a critical issue within their respective schools through multiple cycles to completely conceptualize the problem, gather adequate meaningful data, and to implement positive, school-wide change. A long with this, the finding proposes that action research can allow teachers to be innovative in their professional lives and provides them technical skills and specialized knowledge required to be transformative within their professional domain. The similar impact was also found in a qualitative study at two tertiary institutions (one in the United States, and one in Australia) by Hine (2013).

In a quantitative study of the CRESS Teacher Research Program, Brookmyer (2007) revealed that among a sample of 114 teachers who had conducted action research studies from 1985 to 2005, 85% indicated that teacher research is an important foundation on which to develop greater professionalism while 75% believed that teacher research provides a context for the transformation of practice.

Reflective skills as an integral part of the professional development were also enhanced through integrating action research into teaching. Based on a case study by Peters (2004), most of his participant felt they were more aware of their practice and thinking that informed the decisions they made and this, in turn, led to some changes in quality of their thinking and practice in their

profession. Teachers also deserve the long lasting benefits from conducting action research such as a lasting improvement to their teaching; a knowledge of how to conduct action research; development of their capacity to monitor and reflect upon their own teaching; and better teamwork skills (Kember, 2002). Kayaoglu (2015) in his case study with three Turkish teachers of English observed that ‘the shifts in roles from the teacher as operator to the teacher as problem-finder and solver boosted their self-confidence and inspired them to be more reflective, creative and to search for new ways and subsequently to make the situation better’ (p. 155).

Teacher Autonomy and Self-Esteem

Involving in teacher research enables teachers to gain more control in their professional life and inspire them to create and test their own pedagogy, which is seen as an act of raising autonomy of teachers. This concept has been disclosed in a number of previous studies (e.g. Grundy, 1994; Zambo & Zambo, 2007; Hine & Lavery, 2014; Wang & Zhang, 2014; Kayaoglu, 2015; Peters, 2004; Li, 2008; Kember, Ha, Lam, Lee, NG, Yan & Yum, 1997; Sheridan-Thomas, 2006).

In his case study with three Turkish teachers of English, Kayaoglu (2015) elaborated by engaging in action research the teachers felt endowed with potential power in suggesting solutions to practical problems in their own context and bringing about change in their daily teaching practice. As his study involved the teachers in the highly centralized education system (Turkey), he found a surprising finding that in spite of the structural system which narrows room for autonomous behavior, the teachers still felt empowered to control their professional status which confronted the top-down authoritarian vision of education, and viewed themselves as agents of change with evidence-based action.

A long with this, with action research, teachers can reflect on their own practices and others and generate their own theories of teaching, this drives them to be more independent and self-esteem practitioners in their educational context. A case study by Peters (2004) found that by being systematic in designing, collecting, and analyzing the data, teachers gained new knowledge about themselves and teaching, which, in effect, they were able to select, create or further refine practices for specific situations. He also indicated the role the action research plays in consolidating theoretical resources for practitioners to conceptualize during analyzing and developing practice. Additionally, a study using pre-project and post-project questionnaires and interview to senior secondary school English teachers in China by Wang & Zhang (2014) also indicated the same impact that by doing action research, teachers were able to move beyond their teaching routine as they became more autonomous and active in both teaching and research; their understanding of the educational context was enhanced, which pushed them to be more active participants of the reform.

Challenges to Action Research Practice

In addition to the numerous benefits of action research for educators, we should not overlook a

number of factors, personal, institutional and social, which hinder the practice of this research among them. A number of challenges to the practicality of this research at schools have been found by the prior researches thus far.

In a case study by Cochran-Smith & Lytle (1992), the obstacles to teacher research are deeply embedded in school structure, the culture of school and the traditions of research. The study identified these obstacles as follows: teacher isolation created by school structures that provide little time for teachers to learn together and by school cultures that value autonomy and privacy; school cultures that works against raising questions about their own practice; technical view of knowledge for teaching that is thought to be constructed by university researchers; and the negative views of educational research held by teachers. In relation with the negative perception of teachers of action research, Kayaoglu (2015) pointed out that this may relate with teachers' vision on what can be achievable with action research, or they may have their own reason to be skeptical about the feasibility of action research in a system where they are mostly viewed as practitioners of what they are traditionally and officially expected to do rather than inquirers of their practice in their own contextualized setting, while school structure and conditions were sometimes not compatible with the spirit of teachers as researcher.

Educational structure of a particular country is possibly a hindrance of action research practice as sometimes it is not compatible with the spirit of teachers as researcher. Kayaoglu (2015) noted in his study that transition from an educational system conventionally designed by central authority to a system in which teachers can control their profession is a quite challenging and devastating experience in a heavily centralized system of education, as in Turkey. There is also a dilemma in their professional life between being a good follower or a good innovator at schools. He found this as well in his case study that teachers have to encounter whether to align their acts with the norms and rules set by their school system, which restricts their autonomy, or to take initiative in critical and reflective review of classroom practices through action research to fulfil their professionalism.

Time of teaching and workload teachers are bearing also take some share of the challenge. Elliott (2015), in his research paper depicting a number of actual action research projects to explore the role of theory-informed action research in developing teaching as a virtuous form of action, found that 'many teachers say they are too busy teaching to do research...because they have learned to view all research as a mode of knowledge production that is external to their practice as teachers' (p. 18), and the view that their role is to apply findings of researchers into their teaching practice is often shaped in their teacher training programs. A long with this, a case study by Peters (2004) with ten teachers in a school in Australia found that teachers are under time and workload pressure that limits the extent to which they were able to involve in research project; with the rigid time structures in school and the heavy workload carried by them, they could only find time and energy to do action research by working longer and harder than normal. This study also highlighted a concern from some teachers over a reduction in the quality of their teaching or in the effort they put into other professional commitments as a result

of their attempts to accommodate the additional demands of the research project on top of a full workload. Seemingly, schools do not provide a conducive atmosphere for action research integration. This problematic aspect was raised in Peter's study (2004) that 'participants' workloads were not lightened to accommodate project processes, nor were their extraordinary efforts acknowledged by colleagues or within the reward structures of their organization' (p. 548).

Capacity Building for Action Research

To ensure that teachers are able to perform the role as researchers in their daily professional contexts, technical skills related with action research has to be built in them through various means. Through reviewing a number of selected studies (Grundy, 1994; Zambo & Zambo, 2007; Capobianco & Feldman, 2006; Wang & Zhang, 2014; Kayaoglu, 2015; Hardy, Rönnerman, & Edwards-Groves, 2017, Hine and Lavery, 2014; Hine, 2013; Perrett, 2002; Peters, 2004), capacity in action research has been built under two main schemes.

Teacher Education and Training

Building the capacity of research among teachers becomes part of key principle of the continuum of teaching profession in the Schools Policy set by European Commission's Directorate-General for Education and Culture (ET2020 Working Group on Schools Policy, 2015). It stressed on the roles of school leaders and teacher education providers in creating 'opportunities and environments for practice-oriented and research-based professional development that will strengthen the agency (capacity for action) of teachers for learner-oriented teaching and innovation' (p. 15). It also suggests member states to set up the support structure to assist in-service teachers and student teachers in their reflective practice and development based on reflection and inquiry, in which action research is named as an important methods.

This policy paper also pointed to some countries' taken actions to develop an inquiry mindset of student teachers. Norway, as it exemplified, has set up the Norwegian Graduate School in Teacher Education to run funded PhD programs for teacher educators, while in Estonia, the Estonian Lifelong Learning Strategy 2020 has set up competence centers in universities to provide initiative teacher education, and educational research; a long with this, the research-based Initial Teacher Education in Finland emphasizes reflection and problem solving, and educates teachers to have the capacity to utilize the most recent research.

Also, to enhance action research capacity among teachers, in the qualitative study by Hine (2013) at two tertiary institutions (one in the United States, and one in Australia) to discuss the place of action research within a master of education degree and within the teaching profession, he concluded by urging universities to 'include action research as a core unit in teacher preparation degree programs, either at the undergraduate or postgraduate level, as the action research sequence holds significant value to improving practice within classrooms,

schools, and communities' (p. 161).

Supporting Structures for Action Research

Some studies claimed that proving technical skill in doing action research to teachers is not adequate yet in sustaining this kind of research practice. A survey by Zambo & Zambo (2007) found that though student teachers have been taught action research, they will need scaffolding, nurturing and encouragement to continue using action research throughout their teaching careers by getting support from administrators and colleagues or from the rewards of using action research for advancing professional development. Kayaoglu (2015) in his case study also claimed similar finding that 'teachers need a higher degree of moral and institutional support and perhaps reward' to take initiative to achieve professional growth through action research (p. 158). He also found that by having a more rewarding experience through having chance to disseminate their findings to a wider audience in a regional event or a conference would have long-lasting effect on them to internalize their action research work and new role as researchers.

There is also an assertion of action research through collaboration as teachers join together in sharing, listening, questioning, responding to detailed accounts of their classroom experiences and research findings. Capobianco & Feldman (2006), in his qualitative study to explore concepts of quality teacher action research, elaborated on the generation collaborative action research group in schools through which teachers can exchange anecdotes revealed from the findings in their research, and by this, they begin to make meaning of their data and seek alternative perspective from their critical friends. Through this method, if collaborative action research group function effectively and productively, it will become 'a community of practice and an epistemic community' (Capobianco & Feldman, 2006, p. 510).

Conclusion

This review has indicated the three aspects of educational action research in pre-tertiary education such as the impacts, the challenges, and capacity building mechanism for action research, which respond well to the research questions of this systematic review. This review, inductively, shows that the status of action research by teachers differs from one place to another in various extents depending on the distinction of educational system of those nations, school cultures, research capacity building mechanism and supporting structures. It is also worth noting that this review is dominated by the studies conducted in educational system conducive to renovation through teachers as researchers, and only one of them was conducted in highly centralized educational system. A long with this, almost all of them were in the context of developed countries. Thus, there is, frankly, a lack of information about the status of educational action research in the global south and in the centralized educational system and a critical demand for further research in those contexts.

Context/ Setting

Cambodia was trapped in civil wars for nearly three decades and eventually shocked the whole world with its darkest period of history, the genocide regime known as Communist Khmer Rouge which led to the casualty of over two million people. Taking apart other social aspects, its education system was almost entirely devastated. Appraisingly, Cambodia lost almost three-quarters of its educated population under the regime when teachers, students, professionals and intellectuals were killed or managed to escape into exile between 1975 and 1979 (ADB, 1996; Prasertsri, 1996). This was a very drawback of Cambodian human development which have been left great impacts until now. After Paris Peace Agreement in 1991, to address this unfortunate situation, Cambodian government has implemented a number of education reforms which have been aimed at reconstructing and strengthening its holistic education process.

In spite of great efforts to re-establish a devastated education sector, enormous challenges and flaws remained, especially with regard to the quality of educational provision (Ayres, 2000). These included scarce materials and infrastructure, a chronic shortage of qualified staff in the national ministry and schools (partly due to the Khmer Rouge' purge of educated elites), which eventually impacted the effectiveness of the new decentralized structure.

Quality of teachers are still a main concern, which is resulted from several key factors. Firstly, deficiency in teacher education is detected. Formula for lower secondary teacher training is 12+2, meaning that a candidate has to complete grade 12 and two years of pedagogical training at a regional teacher training center, while upper secondary schoolteachers have to complete a bachelor's degree from any higher institution or university and then pass the entrance exam to get into the National Institute of Education for one year of pedagogical training. Despite efforts to reinforce teacher training, the qualifications of secondary teachers still vary (MoEYS, 2014). Some secondary schoolteachers completed only primary school, while some others only lower secondary school, and a minority of secondary schoolteachers hold master's or doctoral degrees (CDRI, 2015). Along with this, the availability of teacher education and training programs is limited, and the quality of pre-service training is low (World Bank, 2005). Teacher-training curriculum is of highly academic nature, meaning that a large proportion of time is spent on academic upgrading as opposed to teaching methodology and in-school teaching practice (UNESCO, 2011).

Secondly, teacher salary is seen as a big demotivator for educational development. The very low teacher salaries in Cambodia are barely sufficient to support living costs (CDRI, 2015). Teachers, therefore, have to turn to second jobs—as motor taxi drivers, farmers, workers and sellers—to supplement their income. This situation seriously affects the quality of teaching and learning as they do not have sufficient time to do more research, update lessons or monitor student performance.

Furthermore, excessive workload for primary school teachers is also one of the key concerns. This due to high student-teacher ratio in primary education. Based on UNESCO Institute for Statistics 2014 (as cited in CDRI, 2015), Cambodia's primary pupil-teacher ratio is indeed the highest among ASEAN countries. Generally, a primary schoolteacher in Cambodia is responsible for 46 students compared to around 17 in Singapore, 16 in Thailand and 19 in Vietnam. This situation leads to hard work and occupational pressure for teachers which hinder them from further teaching development.

To recap, scarce educational material and infrastructure, lack of qualified teachers due to deficient teacher education, low salary and excessive workload for teachers are still named as main obstacles in Cambodian educational reform. In this context, strong supporting network from national and international development partners is in need, teachers should be empowered, and voice of them is really significant in this critical reforming process.

Theoretical Framework

Stephen Kemmis and Peter Grootenboer's theory of practice architectures holds that practices are social phenomena and are located in circumstances and conditions that occur in particular locations in physical space-time and in history. A practice is understood as a socially established cooperative human activity involving utterances and forms of understanding (sayings), modes of action (doings), and ways in which people relate to one another and the world (relatings) that 'hang together' in characteristic ways in a distinctive 'project' (Kemmis and Brennan Kemmis, 2014). Practice, being social and situated, is not just determined by the experience, intentions, dispositions and action of individuals, but they also shaped and prefigured intersubjectively by arrangements "that exist beyond each person as an individual agent or actor", meaning that it extends beyond what the individual brings to a sits as a person such as beliefs, physical attributes, and abilities (Kemmis and Grootenboer 2008, p. 37).

The theory of practice architectures identifies three different kinds of arrangements that exist simultaneously for a practice to happen. These are cultural-discursive arrangements, material-economic arrangements and social-political arrangements:

- Cultural-discursive arrangements are the resources that prefigure and make possible particular sayings in a practice such as languages and discourses used in and about a practice, which can constrain and/or enable what it is relevant and appropriate to say (and think) in performing, describing, interpreting, or justifying the practice (Kemmis, 2014).
- Material-economic arrangements are resources such as aspects of the physical environment, financial resources and funding arrangements, human and non-human

entities, schedules, division of labour arrangements, which make possible, or shape the doings of a practice by affecting what, when, how and by whom something can be done.

- Social-political arrangements are the arrangements or resources that enable and constrain the relating of a practice such as organizational rules, social solidarities, hierarchies, community, familial and organizational relationships, which determine the relationship between people to people and human to non-human objects.

Cultural-discursive, material-economic and social-political arrangements, which together shape or prefigure a particular practice, are referred to as “the practice architectures” (Kemmis, & Grootenboer, 2008, p. 57) of that practice. Every practice has its own site-specific practice architectures which are the pre-conditions that make practice possible and hold it in place (Schatzki, 2002). In other words, they are mediating conditions necessary but not sufficient for the enactment of the practice.

So, while the practice architectures that enable and constrain a particular practice already exists in a site, there is still a possibility of new practice architectures being reconstituted in a site, which prefigures the practice in new, adapted, innovatory or otherwise transformed ways. Such a notion has implications for those wishing to change practices since it signals the role and importance of human agency in the transformation of practice conditions (Mahon, Kemmis, Francisco, & Lloyd, 2017). In order to change existing practices, it is necessary but not sufficient to change individual professional practitioners’ knowledge, rather the pre-existing cultural-discursive, material-economic and social-political set-ups or arrangements which prefigure the conditions for practice must be transformed, for ‘practices are not shaped solely by the intentional action and practice knowledge of participants but also by circumstances and conditions that are external to them’ (Kemmis, Edwards-Groves, Wilkinson, & Hardy, 2012, p. 34)

Stephen Kemmis and Peter Grootenboer’s theory of practice architectures will give socio-cultural lens in studying a phenomenon regarding with action research practice adoption. To discover how applicable educational action research is in the current professional practice of Cambodian teachers, we need to take into account the personal disposition and conducts, social structure and norm, and power relations. As such, theory of practice architectures is found practical in using it as a theoretical guidance for this study.

Theory of motivation will also be used as a complementary theoretical perspective to explain behavioral phenomena of the participants and to understand motivational drivers of their involvement and willingness in integrating action research into their profession. The most well-known and pioneering theory of motivation is Maslow's hierarchy of needs which states that people are motivated by five basic needs:

1. Physiological needs (food, clothing, shelter etc.,)

2. Need for safety and security (freedom from danger, job security, health-care etc.,)
3. Need to belong (Acceptance by the group, friendships, love etc.,)
4. Need for esteem (Recognition by others, feeling of achievement etc.,)
5. Need for self-actualization (fulfilment of capacities).

According to Abraham Maslow (1943), people try to satisfy their physiological needs first, then when their basic needs are ensured, they seek security, belongingness, esteem and finally self-actualization. Lower needs must be satisfied before reaching to higher-order needs, and behaviors will be centered on meeting the needs in the lowest order, and then will progress to higher orders as preceding needs are satisfied. Accordingly, how people perform their work or are willing to take any action is greatly determined by level of needs they have acquired and expect to acquire.

Along with this, to discover such phenomena, this research entailed the epistemology of constructivism with the application of the phenomenological approach. Based on constructivism, individuals seek understanding of the world in which they live and work, and they develop varied and multiple meanings of their experiences subjectively (Creswell, 2014). Standing on this epistemology, researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meanings, and instruments (Myers, 2008). Through phenomenological approach, any attempt to understand social reality has to be grounded in experience of the people of that society; therefore, researchers must prevent their pre-existing understanding of phenomena in attempt to avoid the prejudice of researchers bias the data and reconsider current experience of them so that new meanings may emerge (Gray, 2004). “Current understandings”, Gray argued, “have to be bracketed to the best of our ability to allow phenomena to speak for themselves, unadulterated by our preconceptions” (2004, p. 21).

In this case of study, accounts from the participants (teachers and school principals) will serve as the main input of analysis in forming the comprehensive understanding of the phenomena (current status of action research practice) as what Creswell (2014) emphasized that the studies built in constructivist perspective tend to rely as much as possible on the participants’ views of the phenomena. As the name of this perspective implies, social constructivism is bound with social and historical context to create the comprehensive image of the reality under the study as what Creswell (2014) elaborated as follows:

[Constructivist researchers] also focus on the specific contexts in which people live and work in order to understand the historical and cultural settings of the participants. Researchers recognize that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural and historical experiences. (p. 8)

Particular attention must be paid to how respondents understand and give meaning to their own experiences, and simultaneously, as constructionists, rather than suppressing personal feelings, we might explicitly and deliberately include them in the analysis (Marvasti, 2004). Within a constructionist model, subjective interpretations are not a source of bias, instead they are considered a piece of the empirical puzzle that helps us understand how people ‘accomplish’ social reality (Garfinkel, 1967).

The participants in this study will be granted enough room of expression in bring up their voice to interpret and reflect their reality of professional life in relation with action research involvement. Their subjective interpretations of their socioeconomic context and professional experience will be appreciated in framing understanding about the fact of the studied phenomena.

To wrap up, this research is attempting to understand facts in association with personal, social and institutional factors hiding behind a phenomena which only members in that particular context are most suitably able to construct; therefore, constructivist perspective with the guidance from the theory of practice architectures with a complementary theory of motivation will lay a firm conceptual ground for this study.

Methodology

This section presents the methodology employed in this study. It entails research design, sampling technique, methods of data collection and data analysis technique.

Research Design

This research is conducted qualitatively, specifically operationalized in a form of multiple-case study. Qualitative method is the most practical way of conducting research so that the reality constructed by people in a particular context will be uncovered. As what the objective of this research is presented in priori, by using case study, I will be able to produce a holistic and in-depth explanation of behavioral and social phenomena which helps conceptualize the current status of action research in their professional position from conceptual injection of teachers and school board members who are treated as participants in this case.

Lincoln, Lynham, and Guba (as cited in Mertens, 2015, p. 237) identify qualitative methods as the preferred methods for researchers working in the constructivist paradigm. Specifically, case study will be adopted as a research model, for it will enable the possibility of getting in-depth understanding from people of a particular case and context. According to Cohen (2011, p. 289), 'a case study provides a unique example of real people in real situations, enabling readers to

understand ideas more clearly than simply by presenting them with abstract theories or principles'.

As case study observed effects in real contexts with the recognition that context is a powerful determinant of both causes and effects (Cohen, 2011), it will serve as the most appropriate method for gathering data in this study.

Sampling Technique

As this research will seek to describe the experiences from respondents in a group of people who share similar characteristics, two-level purposive sampling techniques (of contexts/cases and of gentrifiers/participants) will be used. According to Collins (2010), researchers within the constructivist paradigm tend to use a theoretical or purposive approach to sampling which begins with an identification of groups settings and individuals where (and for whom) the processes being studied are most likely to occur.

Qualitative researchers, specifically ones basing their study on interviewing, rarely seek to generate random samples due to the fact that they typically want to ensure they are able to gain access to as wide a range of individuals relevant to their research questions as possible (Bryman, 2012).

Researchers of the constructivist paradigm typically select their samples with the goal of identifying information-rich cases that will allow them to study a case in depth. Although the goal is not generalization from a sample to the population, it is important that the researcher makes clear the sampling strategy and its associated logic to the readers. Purposive sampling is by Teddlie and Yu (2007) undertaken for several kinds of research including: to achieve representativeness, to enable comparisons to be made, to focus on specific, unique issues or cases and to generate theory through the gradual accumulation of data from different sources.

Therefore, it is the most applicable sampling technique to be employed for the research in this sort. By using this technique, three schools (one primary school, one secondary school and one high school) in Phnom Penh, the capital city of Cambodia, will be selected as the research fields, in which two teachers and one of management board members from each school will be interviewed. Totally, 9 teachers and school board members are selected as the participants of this research.

Creswell (2014) admitted that there is no specific answer to how many participants should be included for a qualitative study. Based on his review of many qualitative research studies, he has found number of participants differs due to which research design being applied. Narrative studies, he noted, include one or two individuals; phenomenology, from three to ten; grounded theory, twenty to thirty; ethnography to examine one single culture-sharing group with numerous artifacts, interviews, observations; and case studies to include about four to five. A

long with this, Bryman (2012) contended that rather than rely on others' impressions of suitable sample sizes in qualitative research, it is almost certainly better to be clear about the sampling method you employed, why you used it and why the sample size you achieved is appropriate.

The number of the participants of this research, subjectively, is suitable for this research due to some reasons. First, it will be done in a short time frame; thus, it will be too ambitious to include more than this. Second, it is aimed at studying a phenomena in depth and not attempt at generalizability, so it still sustains virtue as Crouch and McKenzie (2006) argue that samples of fewer than twenty increase the qualitative researcher's chances of getting close involvement with their participants in interview-based studies and generating fine-grained data, significant for their study.

Methods of Data Collection

This study will adopt semi-structured interview to get rich and in-depth information from the participants. Semi-structured interview is chosen, for it ensures that all participants are given wide room of expression with minimal pressure of formality from the researcher while it also prevents me from getting lost during interviewing as a list of open-ended questions with fairly specific topics is used as an interviewing guide.

Questions are raised in relation with the main themes emerging from the research questions and literature reviews which center on their existing knowledge of action research, what they view as motivators and demotivators in engaging in action research, existing supporting mechanism for action research practice and their alternative ways of addressing their teaching problems. Six teachers (2 from a primary school, 2 from a secondary school, and 2 from a high school) are asked to partake in the interview which is expected approximately 50 minutes each. Possibly, audio recording will be used (only if consents are given from each participant) to maintain complete account of conceptual exchanges in interviews, and it will be transcribed as soon as possible.

Data Analysis Technique

Data analysis in this research will be made through the technique of thematic analysis, in which core themes in consistence with the objectives of this research will be identified from the responses in the interview. Thematic analysis process will be made through coding.

Coding process in this study will be adopted from data coding technique of Grounded Theory, specifically from Charmaz's coding technique in which two phases of coding will be proceeded. First, initial coding is made by looking through the transcripts, conceptualizing, breaking down into parts and coding. Second, selective/focused coding 'requires decisions about which initial codes make the most analytic sense to categorize data incisively and

completely' (Charmaz, 2006, p.57–8) and some initial codes might be dropped out and new codes might be generated by grouping some initial codes. Thereafter, in-depth analysis will be finalized by identifying data from focused coding to appropriate main themes which respond to research objectives in term of existing knowledge of action research, internal and external challenges and alternative coping mechanism.

Ethical Considerations

This research will, with great efforts, adhere to commonly-practiced research ethics to ensure its research privilege. All steps of this research will be done with high self-cautiousness of ethical matters. First, letters of research admission will be submitted to each school to get approval. Informed consent will be sought and signed from all participants and significant others, meaning that the participation in this research will be done on a voluntary basis to maintain self-determination in which all participants have rights to withdraw themselves from this research at any time if they feel unsafe or under any inconvenient circumstances. Objectives, methods, significance and expected social contribution will be informed to all participants and concerning people in advance, so that all the agreed participants are well-informed of this research. A long with this, principle of no harm will be adopted in which confidentiality and anonymity will be seriously guaranteed.

Researcher's Position

Qualitative research is often viewed as the intersections of personal narratives in a way of making meanings (Glesne, 2006). Recognizing that I am an integral part of the meaning making process, I have to be cautious of how my paradigm shapes my role as a researcher. As I was born and have lived in the context being studied, I am, more or less, familiar with it. Thus, it is imperative for me to set my position clearly, so that my contextual familiarity and understanding will not downgrade this process of meaning making. I will use such prior understanding of the setting as an asset to help me conceptualize the constructs made by the participants rather than make self-assumption which may be influenced by personal bias.

To produce valid reporting, interviewers attempt to position themselves as friends, colleagues or confessor to encourage participants to speak openly, authentically or truthfully (Baker, 2004). Accordingly, I will take a roles as both insider and outsider. My role as an insider is in the way that I am sharing commonality with them due to the fact that I am familiar with the context and used to expose myself in that setting through years of my working experience as an educator. Holding this role is expected to build a mutual understanding between us in conceptual sharing. A long with this, I view myself as an outsider in the way that I am a researcher, whose main mission is to conduct a scientific study and, importantly, does not have

any authority in judging their working performance or conceptual quality; consequently, a comfort zone will be established for them in making interaction with me.

Researcher in qualitative study is “a primary instrument for data collection and analysis” (Merriam, 2009, p. 15). As a human instrument, we have our own internal biases and external constructs which more or less influence our study; however, it depends on how much effort we invest to keep them under control. My research employs a constructivist perspective which “assumes that reality is socially constructed” because there is “no single, observable reality” (Merriam, 2009, p. 8). Also, the understanding of the phenomenon is formed through interactions with others, and construction of meaning stems from historical and social structures that frame individual experiences. Bearing these perspectives in mind, I have to set a clear boundary which separates my own perception from the constructs produced by the participants, and minimize my intervention and maximize the room of expression for the participants so that their views on the phenomenon can be disclosed freely. Accumulation of concepts from the participants is a fundamental task for me to understand facts and to ascertain a full aspects of reality of the phenomena being studied emerge.

Findings

This section dedicates to the findings of the study. In responding to the objectives and research questions of the study, three main aspects, elaborated under related themes, are presented. Those aspects include current status of action research practice, main hindrance for action research involvement, supporting mechanism and alternative teaching quality enhancement mechanism.

In regarding with research ethics, to ensure anonymity of the participants, the identity of the participants and schools are not disclosed. Therefore, particular codes are assigned to each participants as follows:

- P. 01, T. 01 and T.02 denote the principal and the two teachers of a primary school;
- P. 02, T. 03 and T. 04 denote the principal and the two teachers of a secondary school;
- P. 03, T. 05 and T. 06 denote the principal and the two teachers of a high school.

The Current Status of Action Research Practice

This study discovers the current status of teachers’ involvement in research work at their schools. This also includes the discovering of how much they understand action research and their perspective on action research in their profession. The study found that action research is not integrated into teaching profession of the participating teachers.

Confusing Knowledge of Research

Knowledge of research was found confusing from the responses of the participating teachers. Before interview, the general concept of action research was presented to the teachers, so that they were familiar with the main focus of my research; however, the teachers participating in this study showed themselves in conceptual hardness and confusion. This confusing understanding of action research and research in general was seemingly due to lack of understanding and practice of research. For them, research is perceived in various terms as “searching more for lessons to teach their students”, “observing an experiment in a laboratory” or even “attending in some workshop”. In an interview with a primary school teacher (T.01), he perceived research course as life-skill training when asked whether he had ever involved in any research work:

For this school, I never, but ever in the other schools, honestly speaking... like they want us to know...like they teach us about...like the 7 habits (life skills). That was what I involved. That private school chose the outstanding teachers to attend and came back to teach what they got to the students at school. (T. 01)

Based on what he said, he viewed “involving in research work” as attending in other training or workshop to get new knowledge and come back to teach those gained knowledge to his students. This might be due to the fact that in such training, he was able to do some searching for new concepts or knowledge, which he thought is in alignment with the concept of the term “research” in this study.

A similar case was also faced in another interview with a teacher at a high school (T. 06). He perceived “action research” as an experiment in a laboratory on his subject of teaching. When asking about whether there was any research methodology course in his teacher education program, he replied as follows:

Hmmm... have (research methodology)... like making experiment and all student teachers were observing. (T. 06)

He confused himself with laboratory work on scientific subjects such as chemistry and biology where student teachers observe the ways chemical substances are interactive or the ways any part of a living being is functioning.

Such misunderstanding even happened during the interview with the principal of a primary school (P. 01) as she definitely defined “research” as “searching for new teaching materials”.

If we talk about research, all of the teachers do it, but not completely. But the research is just for the lesson s/he uses to teach the students, and what s/he does is to find what is new to add up to what s/he has to teach to achieve lesson’s objectives. (P. 01)

Such confusing views of research can be assumed that it is due to the lack of involvement or absence of practice in research activities in their professional life. Throughout the interviews,

they shown themselves lack of familiarity with research concepts, methodology and implementation. Some of them just responded based on their assumption rather than their experience, and it happened that their assumption was not well-related with real scientific research concepts, especially not the one of this research's focus.

Never Treat Themselves as Researchers

Teachers in this study never see themselves as researchers. To them, researchers refer to ones with expertise in research methodology, and whose main task is to study on any matter scientifically. With this perception, they perceive themselves as the outsiders of the research world.

Research sounds technical...needs more expertise on that. I think it is a task of professional researchers to study on any issue. (T. 03)

They are dividing teaching from researching career due to knowledge barrier and expertise differentiation. By this, they seemingly perceived that teachers are solely teaching professionals, and researchers are researching professionals. The concern of them in stepping into cross-profession is even more precise when they think of skill needed for research which, to them, is not correlated with their everyday teaching. A teacher in a secondary school revealed such concern as follows:

I am not sure I can do it because I just teach everyday...so no skill on that. But researchers who are working on researching have enough skill to do that. (T. 04)

Based on their comment, they are not confident in doing research as their main task is teaching, and their knowledge in that area is insufficient. This might be because they are working in an educational setting which provides tiny room (or almost none) for teachers to expose themselves in research work, and it seemingly sets an invisible boundary between teaching and researching.

Main Hindrance for Teachers in Action Research Involvement

In this part, some main demotivations which hinder teachers in involving in research work at their educational setting have been identified. Those facts are both internally and externally attributed.

School Workload

Workload assigned by schools becomes a main hindrance for teachers in research work. Those workload greatly intervene their teaching time and distract their attention in taking care of their students. A long with this, the ministry of education has even weighted down more responsibilities to teachers by requiring them to fulfill more tasks based on their work plan. In

the interview, the teachers are required by the school and the ministry of education to do so much work. The two teachers in a primary school (T. 01 & T. 02) raised the same concern about this matter:

Sometimes, the assignment from the ministry is so much... and we are so busy to fulfill them and don't have enough time to take care of teaching and students... (T. 01)

If we follow the plan of the school, we don't have any free time... So distractive... can't deal effectively when the attention was divided... for such often changes and workload at school. (T. 02)

From their comments, workload and assigned tasks from schools and the ministry of education are annoying and distracting. Such work takes away their off-duty time, which is supposed for lesson preparation and research. Some teachers, especially females, even find it more inconvenient as they have to take responsibility on taking care of their children and household. A female teacher in a primary school (T. 01) talked about this matter as follows:

I don't have extra job outside, but I have to do housework and take care of my kids at home...as my husband works full-time, I have to burden that household affairs...but with so much work from school and the ministry, it's hard for me to allocate my time. (T.01)

This inconvenient workload is blamed for discouraging teachers to take any initiatives in their professional development as what they have to do is trying as much as possible to complete what they have been assigned to do.

Living Standard

Their salary cannot ensure a proper living standard for their families as salary of teachers is among one of the lowest salary in intellectual work. To fulfil the promise of giving their families a better lives, they cannot solely depend on the salary from their teaching; they have to allocate their working time for generating extra incomes from other sources by taking dual jobs or multi-task.

Most of the teachers interviewed blamed low salary as a main obstacle to do research. Besides teaching, the teachers in this study have another job to generate more income. Those jobs are either related or not related to teaching. Some teachers run their private classes or work in a private school, while some others take non-teaching profession such as a motor-taxi driver and construction worker. A high school teacher (T. 05) raised as follows concerning with this matter:

If we get enough salary... we have enough time to do research. If our salary is such low like this, who are willing to take time to do research?... starving to death. (T. 05)

The same response from a primary teacher (T. 01) when asked if living condition can be a cause of lack of research.

Yes, it is. Like me, after teaching, I drive motor taxi. I teach in the morning shift and drive motor taxi in the afternoon. So...don't have time for that. (T. 01)

Because of the concern with living, their time and efforts for education are divided. They cannot concentrate well on their teaching task and teaching development. Instead, they shoulder a burden of duties as educators and a source of financial support for their family. Accordingly, they find themselves hard to involve in research work, added up on their assigned teaching duties.

Centralized Education System

Educational structure is also found challenging to the practice of action research at school. In an interview with a principal of a primary school (P. 01), he mentioned about the domination of the Ministry of Education on school's ways of providing educational services. This centralized form is applied in almost all aspects in educational system ranging from setting the way to teach to financing. Each school is required to follow the policy the ministry has enacted. Teachers and principals in this interview revealed how management in Cambodian educational system is centralized to the ministry. This centralization extends from financing to decision making. Amazingly, choices in teaching methodology cannot avoid from this controlling system. From this study, schools do not enjoy any freedom in adopting any teaching methods based on the effectiveness they experience. Rather, they are advised to accept the method the ministry of education perceives as the most applicable one.

In the interview with a principal of a primary school, when asked about teaching methodology the school and teachers are adopting, she said it is required by the ministry (of education) to use "Student-Center Method". This cannot be challenged regardless of its applicability.

The ministry requires (student-centered)... we (schools) cannot change. What we can do is to follow its directive. (P. 01)

Such centralization of teaching methodology was echoed by another principal of a high school as follows:

Schools are required to teach by using student-centered methodology, so we just follow the steps they suggested. (P. 03)

Furthermore, when asked if there was any problem like the matter of quality of teaching or the current kind of teaching methodology is not working well and so on, whether the school has ever done any research on that, the principals of the three schools voiced the same, "Never".

From the responses above, such centralized system even gives vacuum to teachers' participation in teaching quality enhancement. It is understandable from a response of a principal of a primary

school (P. 01) that if applied teaching methodology at school was not so effective, it is not even possible to do research and to suggest any changes based on its findings to the ministry or department of education.

The reaction over the complete control of the ministry over the teaching methodology has been raised by some teachers too. A teacher at a primary school (T. 02) has found it so annoying to him, especially when the ministry demands for changing the teaching methods so often.

Teaching methodology directed from the ministry keeps changing so often, which makes students confused. Previously, the teaching methodology was effective... the students at that time were clever. Recently, methodology is changed often every 2 or 3 years. This year, the methodology has been changed again. (T. 02)

The teacher above compared the effectiveness of the previous teaching methodology to the recently changed methods. To him, change suggested by the ministry of education has not resulted in any betterment of teaching quality. Instead, it has caused more inconvenience to some teachers, especially senior teachers like him. However, he refused to elaborate more on that matter.

Because of the centralized governance, teachers feel less autonomous in deciding on what they should do in their teaching profession. It seems they are waiting for any directive from the high level authority of education. It was understood from the interview with a principal of a high school (P. 03). When asked whether teachers will be able to integrate research task into their teaching profession under the current situation—current financial support, current living standard, and existing capacity. The respondent referred the possibility of it to whether it is the directive from the ministry of education.

I think if the ministry issues any directive, the teachers will do (research) ...unavoidably. And I believe they can do it. (P. 03)

When teachers do not have their own autonomy in profession, they become passive in their working lives. Based on except above, their decision in doing research is not directed by their curiosity in their teaching environment or consciousness in education development but rather by external authority who place order on them to do it.

Insufficient Research Capacity

Courses related with research methodology are normally included in teacher education or even in pre-service training in many developed countries and a number of developing countries. However, this is not particularly true for Cambodian teacher education based on the information gained from the interviews with some Cambodian teachers.

Almost all the teachers participating in the study were found lack of knowledge of research. This might be due to the fact that they have never exposed to such research courses in thier teacher education or in-service training. Many teachers in this study responded reluctantly to

the question of whether they used to study research methods course during their teacher education program. After clarifying with them of what is research methods this study refers to, some of them (T. 01, T. 02, T. 03, T.04) realized that there was no such research course in their teacher education curriculum or even in any in-service trainings so far. Although some teachers responded positively when asked whether they have done any research methodology course, their elaboration on this matter proved their confusions. Some teachers referred to the course which taught them how to do experiment in a laboratory in subjects of chemistry and biology or the practical techniques in searching for useful information for making extra teaching materials as an action research course we were discussing.

Fail to provide action research courses in teacher education program and/ or in-service training pushed them into the current situation in which the teachers have inadequate knowledge in doing research and tend to undervalue roles of research in teaching profession development.

Supporting mechanism for action research practice

To ensure the integration of research work into teaching profession, schools should establish an effective and sustainable mechanism which not only assists but also inspires teachers to seek answers to any challenges in their educational setting through scientific research.

However, this study has found that supporting mechanism in all forms for action research does not have any existence in all the schools targeted for this study. Although some principals claimed that their schools have adopted some actions to encourage teachers to do research, those actions have not worked effectively and sustainably.

A principal of a secondary school (P.02) raised about so-call supporting mechanism as follows:

We have done many ways to support them...if they have problems they can come to us for help...and some teachers came to complain about many things such as disruptive students, slow pace of teaching and so on. (P. 02)

Based on what the principal raised, the supporting actions from the school is not accurate. It seems like a normal work of management team who provides consultancy and technical supports to any teacher in trouble.

Along with this, there is no technical support on research found in the schools under this study. The teachers who do not have any knowledge of research methodology cannot seek any technical assistance from the school as there is absence of a research supporting team. A teacher in a secondary school (T. 04) talked about this matter as follows:

Although we want to learn how to do research, we don't know who can help us. There is no support on that...we can get help only when we have any problems with students or classroom materials. (T. 04)

Based on this teacher's comment, absence of an effective support from schools discourages teachers from doing research as they do not realize where they can access to the source of knowledge and assistance needed for carrying out research.

The shortage of annual budget set by the ministry of education for each school is blamed as one of the reasons for the schools not being able to support any research projects or take any specific actions to encourage research practice. That budget is not adequate as the amount of money the ministry provides to schools is always less than what schools requested. Accordingly, schools have to use that budget with the greatest care. A principal of a secondary school (P.02) elaborated on this issue as follows:

We never get as much as we want...the budget we get from the ministry is called program-based budget...so we use it mostly for operational cost such as electricity, water and so on. Sometimes we get less than 60% of what we requested, so how can we manage that for research funding. (P. 02)

Due to the shortage of funding from the government through the ministry of education, schools have to allocate that financial resource to only the prioritized programs such as beautifying the campus, fixing some facilities, expenses on utilities and security.

In term of using cooperation with any educational institutions or researchers as supporting network for teacher research capacity development, this study has found no information related with that. The schools and teachers were only used as research site and participants in several research projects so far, and they did not have any chance to learn such research knowledge from them.

A principal of a secondary school (P. 02) revealed that matter as follows:

I only used to be a participant...they interviewed me. I didn't involve in all process of that research. They came from an organization and chose this school as one of their research sites. (P. 02)

There is no networking being built with other research institutions, organizations, higher lever authority of education or stake holders as supporting partners in providing technical assistance in research.

Alternative Quality Enhancement Mechanism beside Action Research

The study has found that action research is not taking any important role in quality enhancement and professional development as the involvement of teachers in action research is almost none. To ensure the quality of teaching, the schools in this research turn to other ways such as class demo, class observation, and monthly technical meeting.

In an interview with a principal of a primary school, when asked about the mechanisms used to enhance the quality of teaching at school, the principal of a high school (P. 03) raised as follows:

By class demonstration and exchanged class observation, in which teachers take turn to observe teaching of one another to learn and exchange experience. (P. 02)

“Class Demo”, according to the explanation of that principal (P. 02), refers to class demonstration in which a teacher who has performed well his teaching career or who found any new techniques to engage his/her students into the lesson is assigned to teach for other teachers to observe as a lesson learnt. It normally lasts an hour and is followed by group discussion among those participating teachers to make reflection and give feedback. By this mean, teachers have chance to learn from each other by exchanging teaching aspects and techniques to embed existing deficiency in their profession.

Also, technical meeting is a common practice of quality enhancement and problem solving. It is done monthly in which all teachers who are in problems in teaching and learning can raise up and seek for solutions and comments. A principal in a high school (P.03) explained:

We have a technical meeting with all the teachers. They discuss with each other. The teachers are grouped based on subjects of teaching...such discussions were made based on their own experience. They don't have time to do research. (P. 03)

Based on this comments, what they shared in the meeting is solely from what they have known and learnt from their own practical experience rather that research. The main function of this meeting is to share what is found applicable in one's teaching context and find a possibility of application in others' teaching practices to fulfill the diagnosed weakness.

However, the study also found that technical meeting is not always effective in quality enhancement. A teacher in a secondary school (T. 05) emphasized:

Sometimes, I felt I got almost nothing from the meeting. They just came to show up their face for attendance records...they don't have anything to share because they don't find any new way of teaching. (T. 05)

From T. 05's comment, it is sometimes not practical as the involvement of the teachers is not highly efficient. Some teachers attend the meeting because they are required to do so, not because of their willingness in sharing and learning.

Summary

The study has found that action research is not taking any important role in quality enhancement and professional development as the involvement of teachers in action research is almost none. To ensure the quality of teaching, the schools in this research turn to other ways such as class demo, class observation, and monthly technical meeting.

The teachers participating in this study showed themselves lack of familiarity with research concepts, methodology and implementation of action research and research in general seemingly due to lack of understanding and involvement of research. Some of them just responded based on their assumption rather than their experience, and it happened that their assumption was not well-related with real scientific research concepts, especially not the one of this research's focus.

A long with this, they never see themselves as researchers. To them, researchers refer to ones with expertise in research methodology and whose main task is to study on any matter scientifically. With this perception, they perceive themselves as the outsiders of the research world.

This research also found some remarkable factors demotivating them in doing research. Workloads assigned by the school and the ministry of education is one of the main hindrances for teacher in research work. Those workloads greatly intervene their teaching time and distract their attention in taking care of their students, and it is blamed for discouraging teachers to take any initiatives in their professional development as what they have to do is to try as much as possible to complete what they have been assigned to do. Also, most of the teachers interviewed blamed low salary as a main obstacle for them to involve into research work. Besides teaching, the teachers in this study have another job, either related or not related to teaching, to generate more income. Some teachers run their private classes or work in a private school, while some others take non-teaching profession as a motor-taxi driver. A long with this, educational structure is found challenging to the possibility of practice of action research at schools as well. Because of the centralized governance, teachers feel less autonomous in deciding on what they should do in their teaching profession. It seems they are waiting for any directive from the high level authority of education. When teachers do not have their own autonomy in profession, they become passive in their working lives. Also, supporting mechanism in all forms for action research does not have any existence in all the schools targeted for this study. Absence of an effective support from schools even discourages teachers from doing research as they do not realize where they can access to technical assistance needed for carrying out research. The shortage of annual budget set by the ministry of education for each school is noted as one of the reasons for the schools not being able to support any research projects or take any specific actions to encourage research practice.

Discussion

The research questions guiding this study were initially stated in a neutral way to ensure that any bias from the researcher is minimized and to allow for the emergence of all kinds of facts regarding with the studied phenomenon. After the presentation of the findings, it seems precise that the answers to the questions are in one-sided trend. Accordingly, the discussion in this part

will be made based on that trend of findings emerging from this study with the supporting references from the findings of the previous researches. The discussion is presented thematically, meaning that it is made under a number of themes related back to the research questions, objectives and the previous literature and the applied theoretical framework.

Merely Followers!

The teachers in this interview seem to take role as followers rather than leaders in their teaching profession, in which what they have to do is to complete the plan the school and ministry of education have set for them. The impacts of such implementation not only take away the chance for teachers to expose themselves in research work, but also downgrade the quality of teaching as they find it hard to concentrate on their teaching while pile of assigned work is ready on their shoulders. This phenomenon can be explained by the fact that teachers have low control over the way they should teach and what students should learn. Consequently, they are expected to take role as implementers of a guidance produced by experts who are the outsiders of their educational setting. This finding is supported by a statement of Elliott (2008) that if teachers believe that they are mere functionaries in the educational system and have little control over what students learn and how they learn it, they will see themselves as technicians implementing a learning system prescribed by external authority. The curriculum implementation found in this study features a top-down approach by disseminating ideas through experts and teacher trainers rather than enabling teachers to take their own initiatives to solve problems at classroom level. This phenomenon will possibly lead to a culture of passiveness among teachers, in which teachers are told to teach.

Demotivation for Action Research Practice

The roles of research in improving the quality of teaching are almost unanimously agreed by all participants. However, its implication is unachievable due to some contextual facts related with financial insufficiency, heavily assigned workload, inadequate research knowledge and centralized educational system.

Institutional Barriers

School's administration and tradition itself can also be seen as obstacles for teachers in integrating action research into their teaching profession. Workloads assigned by the school become a main hindrance for teachers in allocating their time for research work. Those workloads greatly intervene their teaching time and distract their attention in taking care of their students. A long with this, the ministry of education has even weighted down more responsibilities to teachers by requiring them to fulfill more tasks based on their work plan. In the interview, the teachers are required by the school and the ministry of education to do so much additional work, including the adaptation of frequently changed teaching methods and teaching burden for their overloaded classes due to the high student-teacher ratio. Based on

UNESCO Institute for Statistics 2014 (as cited in CDRI, 2015), Cambodia's primary pupil-teacher ratio is indeed the highest among ASEAN countries. Generally, a primary schoolteacher in Cambodia is responsible for 46 students compared to around 17 in Singapore, 16 in Thailand and 19 in Vietnam. This situation leads to hard work and occupational pressure for teachers which hinder them from initiating further teaching development.

This workload issue is really in alignment with what Peters (2004) raised precisely in his case study related with the main hindrance for teachers in action research practice. He found that time and workload pressure limit the extent to which teachers are able to involve in research work, and they could only find time and energy to do action research by working longer and harder than normal. However, in the case of Cambodian teachers, investing more time and energy to action research after their working hours is hardly applicable as incentives to do so is very low, taking account of the low salary and absence of supporting mechanism which have also been found in this study. Thus, they have to take a serious consideration on opportunity cost between investing time on research and generating extra income to fulfill their socio-physical needs of their families.

Academic Barrier

Failing to involve in action research by teachers should be partly explained by limited knowledge of them in general and, particularly, in research. Academic level of Cambodian teachers might shock western countries and some advanced Asian nations. According to the indication of the UNESCO (2011), about a quarter of primary school teachers hold an upper secondary degree, while about two thirds hold a lower secondary school degree. Almost two thirds of secondary teachers have completed at least grade 12, while 18 per cent had some post-secondary education. These numbers appear astoundingly low. Furthermore, such limited academic capability is possibly due to the fact which was revealed by the World Bank that the availability and the quality of teacher education and training programs are limited, and the quality of pre-service training is low (World Bank, 2005). Teacher-training curriculum is of highly academic nature. Due to the low academic qualifications of trainee teachers, more time in teacher training is devoted to academic upgrading and less on teaching methodology and in-school teaching practices (UNESCO, 2010).

Although this situation has been getting better for the recent years, attracting competent people into teaching profession is confessed by MoEYS as a hard mission. Revealed in a report from MoEYS (2015), more than 80% of trainees who enter the Teacher Training Centers (TTCs) have Grade 12 exam scores of only D or E (on 5 scales: A, B, C, D and E). Teaching is simply not seen as a viable and rewarding career option for the best students.

Thus, there is no surprise when almost all the teachers in this study said they have never attended in any research course as it is not included in the teacher training program; merely, it is normally offered in tertiary education, in which most of them did not attend. Possessing low academic level and failing to be trained in research course undermine their confidence on research work, and they tend to perceive it as a sophisticated task that is more likely achieved

by non-teacher experts. From the perspective of the theory of practice architectures, action research is hardly practiced with this current discouraging condition due to the fact “prefigured by discursive regulations such as standards, qualification frameworks, curriculum, and syllabuses” (Green et al, 2017, p. 123).

Financial Barrier

Financial inadequacy for their living is also found as a reason for teachers not to involve in research work. According to a report of MoEYS, teachers currently earn salaries that are only 60% of what other professionals with similar education and skills qualifications in private sector earn (MoEYS, 2015). When salary which is the main financial source for most of the teachers is not supportive enough for their living, teachers turn to other sources of incomes by investing their off-duty time in doing extra jobs. This finding is reinforced by the result of a recent survey by UNESCO that 93 per cent of Cambodian teachers interviewed held second jobs, and 99 per cent claimed a teaching salary alone was not enough to survive (UNESCO, 2011). Amazingly, the secondary job they choose is not discriminated, meaning that although they are educated people, who should deserve a social privilege, some of them even take labor-intensive jobs such as motor-taxi drivers or construction workers to earn more income. This finding is in alignment with the report from MoEYS (2015) stating that many teachers were forced to take on additional, often low-paid, employment to support themselves, thus lowering both their effectiveness and overall status in the eyes of the surrounding community. By allocating their time for dual jobs, they become distracted and their concentration on teaching is fading away, and this results in deteriorating the quality of teaching service. Accordingly, their willingness in developing their teaching profession, especially through action research, is hardly ensured. This phenomenon can be explained by the application of Maslow’s theory of motivation called hierarchy of needs, in which people are motivated by 5 basic needs. According to Abraham Maslow (1943), people try to satisfy their physiological needs first; then, when their basic needs are ensured, they seek security, belongingness, esteem and finally self-actualization. Lower needs must be satisfied before reaching to higher-order needs, and behaviors will be centered on meeting the needs in the lowest order, and then will progress to higher orders as preceding needs are satisfied. Grounded in this theory, with such low salary, teachers are not able to satisfy their physiological needs which are the basic needs for living and a fundamental stepping stone to reach succeeding needs. Thus, it is hardly feasible that they are willing to invest their time on any task aimed at developing their teaching profession like action research to fulfill their own esteem and self-actualization by ignoring the physiological hardness of their family. Deficiency of material-economic arrangement pressures the time and space for engagement of teacher in practice, which reduces the scope for professional development and creativity and also the opportunity to engage teachers in school development with the support of action research (Tyrén, 2017).

Dilemma: followers or innovators?

Autonomy of the teachers in this study is not attained as their power in making decisions related with their teaching profession is not ensured. They have to teach what the ministry of education requires them to teach by using methodology and curriculum having been set by its taskforce. Based on what the teachers in this study raised, they cannot even challenge with those must-be-adopted methodologies and curriculum although the outcome of them is in question.

This context tends to contradict what Stenhouse (1975) raised that curriculum development depended on working with teachers as researchers in joint exploration of the processes of teacher–student interaction and learning. Based on his concept, teachers should be empowered as innovators who actively use research as a tool of exploration for curriculum development rather than just execute what the outside authority has commanded. Such centralized system even gives vacuum to teachers' participation in teaching quality enhancement. This phenomenon seems to unconsciously enact the culture of no confrontation in their educational community.

When teachers act as followers they miss the opportunity to control their professional life through creating and testing their own pedagogy, which, according to a number of previous studies (e.g. Grundy,1994; Zambo & Zambo, 2007; Hine & Lavery, 2014; Wang & Zhang, 2014), can be achieved when teachers involve in teacher research. For the teachers in this study, they unconsciously hand over that power to the ministry of education in deciding on what kind of teaching methods they should apply.

Such matter found in this research is really in line with what Kayaoglu (2015) found in his case study that teachers had to encounter whether to align their acts with the norms and rules set by their school system, which restricted their autonomy, or to take initiative in critical and reflective review of classroom practices through action research to fulfil their professionalism. Teachers in the context which their autonomy is oppressed must be in dilemma in choosing whether to be good followers or good innovators. Unfortunately, the teachers in this study decided to be good followers as they decide not to challenge with the system and willingly abide by the directives posted by schools and the ministry of education. This phenomenon can be explained by the Maslow (1968)'s theory of motivation in the way that the teachers are trying to secure their safety needs by following the existing norm and minimized their confrontation as much as possible, so that they will not commit any faults or risk being punished by their supervising authority. To ensure their safety need, specifically job security, they practically overlook what was found in a number of previous researches (e.g. Grundy,1994; Zambo & Zambo, 2007; Hine & Lavery, 2014; Wang & Zhang, 2014) that involving in teacher research enables teachers to gain more control in their professional life and inspire them to create and test their own pedagogy, which is seen as an act of raising autonomy of teachers. However, such implication is seemingly workable only in the system which autonomy of teachers is in a satisfactory condition already. In complete contrast, in the setting in which teachers' autonomy is, to some extent, restricted like in Cambodian context, action research is simply ignored. As

explained by the theory of practice architectures, social-political arrangement such as organizational rules or norm in that site (the schools in this research) becomes a main constrain for professional development in the way that it restricts saying, doing, and power relationships of the members of that site, thus narrows space-time of a new practice (Kemmis and Grootenboer, 2008).

Lack of Supporting Mechanism

To ensure that teachers are able to perform the role as researchers in their daily professional contexts, supporting mechanism for action research has to be built through various means. In a number of previous researches (Grundy, 1994; Zambo & Zambo, 2007; Capobianco & Feldman, 2006; Wang & Zhang, 2014), such supporting can be built under two main schemes: teacher education and training, and clear supporting structure network.

Unfortunately, this study has found that there is lack of proper supporting actions for teachers in research work that is why teachers fail to initiate their own study in their educational setting. Schools themselves fail to create an environment which endows power to teachers in suggesting solutions to practical problems in their own context and bringing about change in their daily teaching practice. For instance, the teachers in this study who do not have any knowledge of research methodology cannot seek any technical assistance from the schools as there is absence of such supporting mechanism. In term of using cooperation with any educational institutions or professional researchers as supporting resource for teacher research capacity development, this study has found no information related with that. The schools and teachers were only used as research site and participants in several research projects so far, and they did not have any chance to learn such research knowledge from them. A long with this, schools do not give any platform by which teachers can release their new findings or initiatives from their research work, so that their achievement will be recognized. Kayaoglu (2015) in his case study also claimed similar finding that ‘teachers need a higher degree of moral and institutional support and perhaps reward’ to take initiative to achieve professional growth through action research (p. 158). He also found that by having a more rewarding experience through having chance to disseminate their findings to a wider audience in a regional event or a conference would have long-lasting effect on them to internalize their action research work and new role as researchers.

Absence of such supporting mediation makes them feel being ignored and even drives them into perception that whatever innovation they are able to make does not contribute to the existing education structure. However, such a lack of supporting structure is blamed by the principals in this study on the lack of budget the government allocates for each school. Due to the shortage of funding from the government through the ministry of education, schools have to allocate that financial resource to only the prioritized programs such as beautifying the campus, fixing some facilities, expenses on utilities and security.

Seeing from the theoretical perspective of practice architectures, lack of supporting framework narrows down the social space or relating as termed in the theory, which is essential for building

network between insiders and outsiders for capital accumulation necessary for action research development. And, such narrowed social space is possibly interlinked with constraints of material-economic arrangement.

Professional Development: How practical?

Hargreaves argued that educators require new models of professional development if they are to meet the challenge of the rapid changes in roles, contexts, pedagogy, accountability demands and professional identity engendered by an increasingly diverse student population, and a highly technological and globalized future, and what are needed instead, according to Lambert, are opportunities to learn that (involve) collaboration, dialogue, reflection, inquiry and leadership (as cited in Phin, 2014). If what he suggested is a good model of professional development, teachers in this research are missing the opportunity of such as their working institutions may overlook a developmental concept which turns their schools to be learning-community. They seem to promote individualism rather than collectivism in teaching profession. Teachers are silently taken away ownership of their teaching profession as they are exercising top-down approach of education management. The relationship or relating, the terminology used in theory of practice architectures, between teachers and principals or teachers and professional researchers as the medium of technical exchange for action research development does not exist. Absence of such relating obstructs the practice.

While absence of research as a mean of professional development, the schools in this research tend to depend on some traditional means such as class demo, methodological training from technical officials of the ministry of education and monthly technical meeting as the main professional development. Although, to some extent, these practices are helpful in bringing changes, teachers are still passive in the process. The insufficiency and ineffectiveness of current profession development are officially recognized by the ministry of education as emphasized in its Teacher Policy Action Plan as follows:

Once into the teaching profession, teachers have almost no opportunities for continued professional growth. Although an institutionalized in-service training (INSET) and education arrangement has been discussed for many years, currently there exists only an on-site and irregular short-term INSET with limited effectiveness while the long-term systematic regular INSET has not yet been implemented. (MoEYS, 2015, p.7)

Teachers get less incentive in their profession and professional trainings do not match with their own needs and vision in promoting their long term growth in the profession. They absorb what is claimed as a new theory by outsiders of their teaching setting due to the fact that they miss the opportunity to discover their educational phenomena through empirical studies by themselves.

Conclusion

Although Cambodia is in the critical stage of reconstruction and reform, action research has not been chosen as one of the practical ways for teaching profession development and teacher empowerment. Along with this, although the vitality of research in education is officially recognized in Cambodian Education Law, it is, of course, not in practice due to the fact found in this study through in-depth interview with teachers and principals that they have never involved or conducted any action research thus far. This phenomenon is explained by the failure to establish proper arrangements defined in the theory of practice architectures such as cultural-discursive, material-economic and social-political arrangement and the absence of fundamental motivational factors, both individual and institutional, such as proper living standard, research capacity enhancement, supporting mechanism and teacher-empowering educational system.

Cambodian teachers have to work extra jobs besides teaching to survive, worsened by the workload assigned by their schools and the ministry of education; thus, they do not have any time and energy to initiate any research on their teaching. Along with this, low academic quality and research capacity of the teachers also contribute to that fact. Regretfully, such matter is not bettered. Supporting mechanism which is expected for assisting teachers to fulfill their technical needs in research is found nonexistent although there are some technical meetings and class demo. Along with this, teachers' autonomy is also found low due to the fact that they do not have any power to initiate and test their own methodology and to challenge the existing teaching methods demanded by the ministry of education. All in all, action research seems inapplicable if the current setting of Cambodian pre-tertiary educational system is not brought to any betterment. The voice of teachers should be heard so that the reality of the local context is disclosed and used as main asset for educational reform and policy making.

Limitations and Recommendation for Next Research

I recognize that this study is not yet perfectly developed to fully understand the applicability of action research in Cambodian education. Frankly, there are some limitations warranted. First, this research was done with Cambodian participants; thus, the language used during the interview was Khmer, the official language of Cambodia. So, some technical concepts of action research in English was hard to translate into Khmer, which sometimes made the conceptual exchange less comprehensive. Along with this, this research employed semi-structured interview as a sole data collection technique; therefore, the findings relied on the respondents being willing to give accurate and complete answers (Breakwell, Hammond & Fife-Schaw, 1995). The quality of data depends mainly on constructs produced by the participants. Unavoidably, those constructs were, more or less, influenced by their own internal and external factors such as nervousness, fear, institutional pressure and feeling of unsafety. Last, I do not have any attempt in making any generalization from this finding as it is a case study conducted

at only three schools. It is mainly aimed at disclosing the facts behind a phenomenon being studied. However, I have done my best to cope up with these issues to ensure the trustworthiness of this study. I have revealed my identity and stated the purpose of the study. This action was aimed at addressing ethical concerns by establishing no-harm atmosphere for all participants. Plus, to minimize the conceptual confusion about action research, I briefed them the introduction to educational action research concepts and gave them some time to question on it, so that they could create in their mind the image of it.

For any research in the future, it will be great if there is any possibility to engage Cambodian teachers into action research practice. Thus, researchers should launch an action research project with them and try to get them in all the processes of the study to discover whether action research will work as a practical and inspiring tool for them in making any change in their education setting. The next research should employ multiple techniques of data collection to create triangulation.

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DEPARTMENT OF EDUCATION AND SPECIAL EDUCATION

Appendix 1

Letter of Informed Consent

Research title: Discovering action research in Cambodian pre-tertiary education

Researcher: Phearom TY, Graduate Student in the International Master program in Educational Research, University of Gothenburg, Sweden

Description of the research project:

This research project is conducted as part of the Master's Thesis requirements for the International Master Program in Educational Research of the University of Gothenburg. In the case of Cambodia, whose educational system is in the critical stage of reconstruction and reform after emergence from its almost three decades of civil war, action research should be integrated into teaching profession to empower teachers in this educational reforming process. Therefore, this study is essentially aimed at discovering action research in Cambodian education in the three levels of schooling, primary, secondary and high schools to explore its applicability in the recent educational system.

Request for participation:

I would like to invite you to participate in this study because you are one of the teachers who are working in the educational setting targeted for this study. Your participation is in the form of interviewing which will last about 40-60 minutes.

Voluntary participation

Please understand that your participation is on voluntary base, meaning that decision on participation is your right. It is not a compulsory task demanded by law or any authority. Your refusal to participate will cause no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your participation at any time.

Confidentiality

Your detailed information of yourself will be strictly protected. There is no part of this study that your identity, name, voice and workplace, will be able to be identified by someone else. A

long with this your data you provide is used for this research purpose only; thus, no part of it will be disseminated publicly.

Participant’s Statement of Consent

(If you agree to participate, please write your name and sign below.)

I, _____, consent to participate in this research. I understand that my participation is voluntary and have the right to withdraw at any time with no consequence. I understand that all information gathered will be securely kept and remain confidential.

Signature of Participant

Date

Phone: _____

If you have any inquiry, please contact the researcher by the contact below.

Email: phearom.ty@gmail.com

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Appendix 2

(Research Brief Description in Khmer, attached with letter of inform consent, is given to the participants)

ព័ត៌មានសង្ខេបនៃកិច្ចការស្រាវជ្រាវ

ការស្រាវជ្រាវនេះគឺជាផ្នែកមួយនៃការបំពេញលក្ខខណ្ឌសំរាប់បញ្ចប់ថ្នាក់អនុបណ្ឌិតវិទ្យាសាស្ត្រ ផ្នែកស្រាវជ្រាវអប់រំនៃសាកលវិទ្យាល័យ Gothenburg នៃប្រទេសស៊ុយអែត។ ការស្រាវជ្រាវនេះ នឹងគោរពទៅតាមគោលការណ៍ស្រាវជ្រាវបែបវិទ្យាសាស្ត្រ និង ស្របតាមក្រមសីលធម៌នៃអ្នកស្រាវជ្រាវរបស់សហភាពអឺរ៉ុបនិងប្រទេសស៊ុយអែត។

អ្វីជាការស្រាវជ្រាវសកម្មសំរាប់គ្រូបង្រៀន (Educational Action Research)

ការស្រាវជ្រាវសកម្មសំរាប់គ្រូបង្រៀនជាវិធីសាស្ត្រនៃការស្រាវជ្រាវមួយប្រភេទដែលត្រូវដើរតួនាទីដោយផ្ទាល់ក្នុងនាមជាអ្នកស្រាវជ្រាវក្នុងមជ្ឈដ្ឋានអប់រំរបស់ខ្លួន លើបញ្ហាណាមួយដែលកើតមាននៅក្នុងដំណើរការបង្រៀននិងរៀនប្រចាំថ្ងៃ តាមរយៈការរៀបចំផែនការស្រាវជ្រាវ ការអង្កេត ការវិភាគទិន្នន័យ និង ការចុះបញ្ជីលទ្ធផលដែលទទួលបាន សំដៅឈានទៅរកវិធីកែលម្អវិធីសាស្ត្របង្រៀន។ វិធីសាស្ត្រស្រាវជ្រាវនេះត្រូវបានអនុវត្តយ៉ាងទូលំទូលាយក្នុងបណ្តាប្រទេសជឿនលឿននៅ អឺរ៉ុប អាមេរិក អូស្ត្រាលី និង កំពុងអនុវត្តក្នុងប្រទេសមួយចំនួននៅទ្វីបអាស៊ី និង អាហ្វ្រិកផងដែរ។

គោលបំណងនៃការស្រាវជ្រាវ

ការស្រាវជ្រាវនេះមានគោលបំណងស្វែងយល់ពីស្ថានភាពបច្ចុប្បន្ននៃការចូលរួមរបស់លោកគ្រូអ្នកគ្រូក្នុងកិច្ចការស្រាវជ្រាវដែលត្រូវដើរតួនាទីដោយផ្ទាល់ក្នុងនាមជាអ្នកស្រាវជ្រាវក្នុងមជ្ឈដ្ឋានអប់រំរបស់ខ្លួន និង ដើម្បីស្វែងយល់ពីកត្តាផ្សេងៗដែលជំរុញ និង បង្កាក់ការចូលរួមរបស់លោកគ្រូអ្នកគ្រូក្នុងកិច្ចការស្រាវជ្រាវបែបនេះ។

ដូច្នេះ ការសិក្សាស្រាវជ្រាវនេះនឹងធ្វើយតបទៅនឹងសំណួរគោល៤គឺ៖

១. តើការស្រាវជ្រាវដែលត្រូវដើរតួនាទីដោយផ្ទាល់ក្នុងនាមជាអ្នកស្រាវជ្រាវក្នុងមជ្ឈដ្ឋានអប់រំរបស់ខ្លួនស្ថិតក្នុងស្ថានភាពបែបណាក្នុងពេលបច្ចុប្បន្ន?

២. តើមានកត្តាអ្វីខ្លះក្នុងអាជីពជាគ្រូបង្រៀនដែលលើកទឹកចិត្ត និង រារាំងដល់ការចូលរួមក្នុងការអនុវត្តការស្រាវជ្រាវប្រភេទនេះ?

៣. តើមានយន្តការដែលមានស្រាប់ណាមួយដែលគាំទ្រដល់គ្រូក្នុងការអនុវត្តការស្រាវជ្រាវប្រភេទនេះដែរឬទេ?

៤. តើលោកគ្រូអ្នកគ្រូបានធ្វើអ្វីខ្លះក្នុងការឆ្លើយតបទៅនឹងបញ្ហាផ្សេងៗក្នុងអាជីពជាគ្រូបង្រៀន?

វិធីសាស្ត្រនៃការស្រាវជ្រាវ

ការសិក្សាស្រាវជ្រាវនេះនឹងធ្វើឡើងតាមរយៈការវិភាគទិន្នន័យដែលទទួលបានតាមរយៈការសម្ភាសជាមួយគ្រូបង្រៀន និង គណៈគ្រប់គ្រងសាលា ទាំង៣កំរិត (សាលាបឋមសិក្សា១ អនុវិទ្យាល័យ១ និង វិទ្យាល័យ១) ដែលរួមមាន គ្រូ២នាក់និងគណៈគ្រប់គ្រងម្នាក់ពីសាលានីមួយៗ

ក្រមសីលធម៌នៃការស្រាវជ្រាវ

ការសិក្សាស្រាវជ្រាវនេះនឹងអនុវត្តទៅតាមគោលការណ៍នៃក្រមសីលធម៌របស់សហភាពអឺរ៉ុប និង ប្រទេសស៊ុយអែត ដែលមានចំណុចគោលសំខាន់ៗដូចតទៅ៖

១. ត្រូវធានាថាអត្តសញ្ញាណរបស់បុគ្គលនិងស្ថាប័នដែលចូលរួមក្នុងការស្រាវជ្រាវមិនត្រូវបានបង្ហាញ

២. គ្មានផ្នែកណាមួយនៃលទ្ធផលស្រាវជ្រាវនេះអាចឲ្យអ្នកអានកំណត់បាននូវអត្តសញ្ញាណរបស់បុគ្គលនិងស្ថាប័នដែលចូលរួមក្នុងការស្រាវជ្រាវ

៣. ការចូលរួមរបស់បុគ្គលឬស្ថាប័នក្នុងការស្រាវជ្រាវនេះត្រូវផ្អែកទៅតាមគោលការណ៍ស្ម័គ្រចិត្ត

៤. គ្មានផ្នែកណាមួយនៃលទ្ធផលស្រាវជ្រាវនេះនឹងត្រូវបានយកទៅប្រើប្រាស់ក្នុងគោលដៅផ្សេងក្រៅពីអ្វីដែលត្រូវបានព្រមព្រៀងរវាងអ្នកស្រាវជ្រាវនិងអ្នកចូលរួម។

Appendix 3

Guiding Questions for Interview

For Teachers

1. How much do you know action research?
 2. Have you ever conducted or involved in any research related with your teaching so far?

 - Ever:

 1. What kind of the study was it?
 2. How challenging was it to you?
 3. Did you get any supports from school or others?

 - Never:

What factors challenge you for not doing research?

 3. Have you ever done any action research course or got any action research training before?

 - Ever:

 1. When did you done? During teacher education or in-service training?
 2. How effective was it to your career?

 - Never:

 1. Have you ever heard of it so far?
 2. Do you think it should be included for teacher education or in-service training?

 4. Do you think that teachers should conduct research relating with their teaching-learning? Why?
 5. Do you think that research on education should be done by professional researchers? Why?
 6. What are challenges you are facing in your teaching profession?
 7. Currently when you meet any problems concerning with teaching-learning, how can you deal with it? How effective is it?
 8. Has the school ever encourage teachers to initiate any action research?
 9. Has the school ever provided any professional development training? How was it? Is it helpful?
 10. Is it possible if action research is integrated into a part of your teaching profession? Why?
-

For Principal:

1. Has the school faced any challenges in teaching-learning process so far?
 2. How did the school to deal with that?
 3. Has the school ever launched or involved in any educational research so far?
 4. What has the school done so far as encouragement for teachers to do action research?
 5. Does the school has any requirement for teachers to conduct any research on their teaching?
 6. Has the school ever provided any training related with action research so far?
 7. Does the school has any supporting unit for research?
 8. Does the school has any research budget?
 9. To enhance teaching quality, what has the school done so far?
 10. Is it possible if action research is included as part of teaching profession?
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