

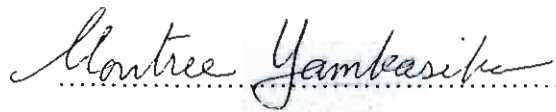
AN IMPLEMENTATION OF STRATEGIC MANAGEMENT SYSTEM PLANS
OF KAMPONG CHHEUTEAL HIGH SCHOOL UNDER HER ROYAL
HIGHNESS PRINCESS MAHA CHAKRI
SIRINDHORN'S SPONSORSHIP

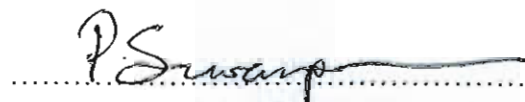
KIMCHEANG HONG

THIS DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN EDUCATIONAL ADMINISTRATION
THE FACULTY OF EDUCATION
BURAPHA UNIVERSITY
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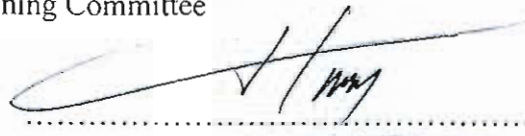
The dissertation of Kimcheang Hong has been approved by the examining committee to be partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Educational Administration of Burapha University


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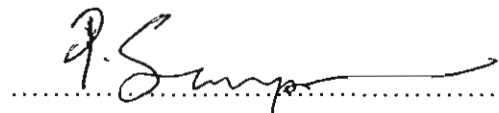
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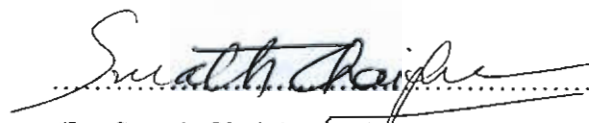
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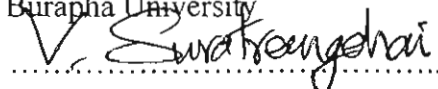
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KEYWORDS: STRATEGIC MANAGEMENT SYSTEM PLAN/BALANCED
SCORECARD/IMPLEMENTATION PROCESS/BARRIERS/
EFFECTIVENESS/ RECOMMENDATIONS

KIMCHEANG HONG: AN IMPLEMENTATION OF STRATEGIC
MANAGEMENT SYSTEM PLANS OF KAMPONG CHHEUTEAL HIGH
SCHOOL UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI
SIRINDHORN'S SPONSORSHIP; ADVISORY COMMITTEE: ASSOC.PROF.
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Increasing competitive education among ASEAN countries fosters schools to focus on strategy implementation. The objectives of this study were to investigate the implementation process, the barriers, effectiveness of the Strategic Management System Plans, and to propose recommendations for successful strategy implementation. The participants in this study included 55 teachers, 10 students, 9 community representatives, 3 officers from the Ministry of Education Youth and Sport, and 1 committee member of Her Royal Highness Princess Education Project. The study employed an embedded mixed-method research approach, and the data collection lasted for six months. The data were collected in both qualitatively through in-depth interviews, focus group discussions, and observations, and quantitatively through a questionnaire. Thematic analysis technique was used to analyze qualitative data, while descriptive statistics and interpretive technique were used to analyze the quantitative data.

The results of the study revealed that the implementation process of the Strategic Management System Plans adopted the Plan-Act-Observe-Reflect framework. Regarding the barriers to the strategy implementation, six potential barriers were found: financial resource allocation, leadership constraint, ineffective organizational structure, poor understanding of strategy, inflexible organizational culture, and poor communication. In spite of the limitation, the result revealed that the Strategic Management System Plans has gradually increased the school effectiveness in many aspects. The effectiveness on students/stakeholders perspective was found

the highest, while that of financial perspective needed more improvement. The study suggested that a few of the school strategies should be reviewed and a flexible guideline should be formulated in order to facilitate the implementation process of school strategy.

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ABBREVIATION

BSC	Balanced Scorecard
CIPP	Context-Input-Process-Product
H.E.	His Excellency
HRH	Her Royal Highness
MBNQA	The Malcolm Baldrige National Quality Award
MoEYS	Ministry of Education, Youth, and Sport
OPDC	The Public Sector Development Commission
PAOR	Plan-Act-Observe-Reflect
PAR	Participatory Action Research
PDCA	Plan-Do-Check-Act
PDSA	Plan-Do-Study-Act
SMSP	Strategic Management System Plans

CHAPTER 1

INTRODUCTION

Background and Statement of Problem

In the current world situation, globalization and regional integration makes an increasing dynamic and information-driven environment. Organizational operation has become increasingly uncertain in recent years. New economic challenges, rapid growth of information technology, the requirement of qualified human capital with multilingual proficiencies, and the needs of better quality service are increasing. To survive in this competitive world, both public and private organizations have placed the effectiveness and efficiency of their operational performances on high agenda.

Many researchers (e.g., Amstrong, 2000; Mittenthal, 2002; and Stufflebeam and Shinkfield, 2007) proposed that one of the meaningful ways to achieve high performance of both profit and non-profit organizations is to reflect their own practice through a thorough implementation of the Strategic Management System plans. The utilization of the Strategic Management System Plans and their regularly comprehensive assessment are significantly essential for quality improvement as a critical evaluation that can reflect the organization's strengths and limitations as well as, judge organizational performance against specific objectives in order to see whether objectives are achieved, and the outcomes are fruitful. Additionally, strategic thoughts and strategic actions enable organizations to deal with, successfully adapt and improve their future environment and performance. Furthermore, strategic management system plans structures the direction of an organization in order to achieve its desirable vision (Kraus, Harms, & Schwarz, 2006; Nayeri, Mashhadi, & Mohajeri, 2008).

In today's knowledge-based society, education is widely considered to be a foundation pillar and a vital catalyst for human development (MoEYS, 2010; UNESCO, 2010). This belief has resulted in a rapid increase in regional and global requirement for education quality (Belawati & Zuhairi, 2007). To produce good quality of education, school Strategic Management System Plans has been placed as one of the major concerns of educational policy makers and practitioners. The

evidence can be seen through the contemporary application of a number of evaluation and Strategic Management System Plans frameworks in a global educational setting such as Balanced Scorecard of Kaplan and Norton, Plan-Do-Check-Act (PDCA) of W. Edwards Deming, Plan-Do-Study-Act (PDSA) of Shewhart, Context-Input-Process-Product (CIPP) of Stufflebeam and his colleagues, SAR model of Office of the Public Sector Development Commission (OPDC), The Malcolm Baldrige National Quality Award (MBNQA) and so forth. The growth in Strategic Management System Plans implementation and its evaluation is due to several reasons.

To begin with, first school Strategic Management System Plans is widely acknowledged as a powerful means of improving the quality of education, deciding what the learners needs to learn and what the teachers need to teach in schools, promoting high levels of school improvement and student academic success (Agrawal, 2004). Second, school strategic management system plans focuses on the goal and obtains the commitment of all the stakeholders to the accomplishment of the goal set and consequently resulted in quality improvement (Rita & Laksmi, 2009). Third, school Strategic Management System Plans provides an opportunity for the whole school community, including students, parents and all staff members, to reflect on school's outcomes in light of their strategic goals, targets and key improvement strategies from the previous planning cycle. This includes examining teaching and learning strategies, the performance and development culture and other aspects of school operations. Thus, it can be said that effective schools consistently reflect on their strategic performance as a matter of course (The Australian Department of Education and Early Childhood Development, 2012). Fourth, the evaluation result of school Strategic Management System Plans provides the schools with vital roles in shaping the future of the nation through educating and equipping people with world knowledge, required skills, and good human attitude (Nayeri et al., 2008).

Realizing the importance of school Strategic Management System Plans, the Cambodian Ministry of Education, Youth, and Sport (MoEYS) has put this issue high priority on the agenda of education policy (Chea, 2012). Particularly, in 2010 the MoEYS adopted and released their policy plans entitled Education Strategic Plan 2009-2013 in which implementation and regular evaluation are strongly stressed in

order to ensure that the strategy implementation is on the right track. With education strategic plan, the MoEYS expects to promote a good quality of education so that graduates will be able to prepare and secure themselves in the ASEAN competitive sphere. Specifically, the MoEYS aims to achieve three major areas, ensuring equitable access to education service, improving quality and efficiency of education service, and developing institutional and capacity for educational staff for decentralization.

Despite a remarkable emphasis on the Strategic Management System Plans, the educational operation of most Cambodian schools practically follows short-term plans that mostly focus on activities to promote students' outcome. In other words, the school strategic plan has been overlooked. It is possible that the better school performance may be due to many supporting strategic plans. Accordingly to Kaplan and Norton (2004), the effectiveness of school performance relates to the execution of strategic plans covering four perspectives, namely customers (students/stakeholders), internal process, learning growth and financial. Similarly, the Office of the Public Sector Development Commission (OPDC) of Thailand (2008) suggests that effectiveness of school performance can be witnessed via four respective criteria, namely effectiveness of mission, quality of the service, efficiency of operations and organization development.

Kampong Chheuteal High School, the first Cambodian dual-system secondary school, offering both the general and vocational education, has been named as a sample of best practice school by the MoEYS. Recently, the school has experienced a significant increase in number of vocational student enrollments. The school has been currently under the support of HRH Princess Maha Chakri Sirindhorn of Thailand and is almost fully equipped with necessary materials and facilities.

Despite adequate facilities and materials, the school performance has been considered rather low. To elaborate based on annual school report of 2013, out of the 20 high schools in the province the national exam result of Kampong Chheuteal High School students ranked at 17th, 11th, and 12th in academic years 2012, 2013, and 2014 respectively. Likewise, many workplaces and higher education institutions questioned whether the school produces qualified graduates for their recruitment requirement. These concerns indicate the ineffective operation of school programs. To effectively deal with these potential matters, a series of workshops and study tours were

organized for Kampong Chheuteal High School administrators and teachers in order to find out causes of the problems and to strengthen the school effectiveness. Similar to what proposed by Amstrong (2000), Mittenthal (2002), and Stufflebeam and Shinkfield (2007), the result of the workshop suggested the best ways found to help the school to address these challenges is to develop and implement strategic management system plans.

With the assistance from HRH Princess Maha Chakri Sirindhorn Education Project in the Kingdom of Cambodia, the Faculty of Education, Burapha University, together with, MoEYS of Cambodia, a complete version of the Strategic Management System Plans of Kampong Chheuteal High School was created in 2012. However, the implementation of these plans has been extensively limited. In other words, no in-depth and full scale-implementation of strategic actions has been conducted (Kampong Chheuteal High School Report, 2012). According to Ornstein and Hunkins (1998), the implementation of the organizational Strategic Management System Plans could help the school to comprehend the success and failures. Furthermore, regular evaluation of strategic plan implementation could help the school cope with obstacles and improve their performance by obtaining data to determine whether to make changes, to make modifications, eliminations and/or accept something in the plan (Chen, Wang, & Yang, 2009; Sayareh, 2007; Stufflebeam & Shinkfield, 2007). Therefore, it can be said that a systematic and perpetual implementation of strategic management system plans is a must while determining future strategies.

As mentioned above, the implementation of the Strategic Management System Plans and their regular evaluation are powerful tools to reflect the past organizational performance. In addition, it is a useful tool for improving the performance and setting up future strategies of organization. As the Strategic Management System Plans of Kampong Chheuteal High School has not been fully implemented, therefore, it is necessary to conduct a study to examine the implementation process of the Strategic Management System Plans and to investigate whether those plans are positively effective and responsive to the school ultimate objectives.

Research Questions

The research questions for this study are as follows:

1. How is the implementation process of the Strategic Management System Plans conducted at Kampong Chheuteal High School?
2. What are the obstacles to the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School?
3. To what extent do the Strategic Management System Plans of Kampong Chheuteal High School be successfully implemented?
4. What are the recommendations for educators to effectively implement the Strategic management System Plans?

Research Objectives

There are four research objectives for this study:

1. To understand the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School.
2. To identify the constraints hindering in implementing the Strategic management System Plans of Kampong Chheuteal High School.
3. To assess the effectiveness of the Strategic Management System Plans of Kampong Chheuteal High School in Cambodia.
4. To propose recommendations for educators to effectively implement the Strategic Management System Plans.

Significance of the Study

The findings of this study are able to make a number of contributions. First, it provides an insight into the implementation phase of the Strategic Management System Plans of educational institutions; especially it helps Kampong Chheuteal High School; successfully increase their strategic operational efficiency. Second, it is used as a useful guideline for other dual-system schools to adapt for the sake of their best practice. Third, it creates opportunity to all related agencies and stakeholders to participate in troubleshooting school internal quality assurance standards. Finally, it is useful informative resource for researchers in similar fields as it adds up to the

existing literature relating to effective implementation of the Strategic Management System Plans.

Scope of the Study

This research study was conducted at Kampong Chheuteal High School which is located in Prasat Sambor District of Kampong Thom Province in the Kingdom of Cambodia. The school was purposively selected, as it is the first Cambodian dual-system secondary school providing both general and vocational education in the Kingdom of Cambodia. Recently, the school developed the Strategic management System Plans to be used to promote the effectiveness of its performance. Despite the completion of school document on the Strategic Management System Plans, these plans have been a seemingly new issue for schoolteachers and stakeholders. As a result, the practice of these plans has been challenging, as many aspect of these plans have not been thoroughly and systematically implemented.

To get in-depth and adequate needed data, this research study was conducted in the form of participatory action research (PAR) to investigate the implementation process of the Strategic Management System Plans in four perspectives of Balanced Scorecard of Kaplan and Norton (2004): financial, learning and growth, internal process and customer. During the study, a self-reflection cycle of Plan-Action-Observe-Reflect (Kemmis and McTaggart, 2007) was employed. To collect all related data, nine internal researchers, who are administrators and department heads of Kampong Chheuteal High School, were invited to participate in this study. All the internal researchers were provided with a training session on the overview of this research study, the process of the research, and the systematic data collection in order to ensure that they all would participate in this research study in the same manner.

Conceptual Framework

The conceptual foundation of this study applies the integration of three frameworks: the strategic plan process of Taylor and Miroiu (2002); the concept of Balance Scorecard proposed by Kaplan and Norton (2004); and the integration of a self-reflection cycle of Plan-Action-Observe-Reflect (PAOR) with Appreciation-

Influence-Control (AIC) techniques in participatory action proposed by Kemmis and Taggart (2007).

Toylor and Moiroiu (2002) described more inclusive framework of the strategic management planning process through four phases, planning, documentation and dissemination, implementation, and monitoring while the Balanced Scorecard of Kaplan and Norton is used as a management tool for analyzing, monitoring, and evaluating the work of the organization in four perspectives: students/stakeholder, internal process, learning and growth, and financial. The Balanced Scorecard is also used to create quality improvements in effectiveness and efficiency and to track the progress of implementation based on key performance indicators (KPIs), and to enable executives and practitioners to evaluate work processes and status in comparison with the overall objectives specified in the performance agreement. Moreover, a self-reflection cycle of Plan-Action-Observe-Reflect (PAOR) is used in a participatory action research studies to allow researchers to visit a phenomenon at a higher level; to understand a particular issue within an educational context; and to make decision through enhance understanding. In addition, the technique of Appreciation- Influence-Control (AIC) is the process of communication when a group of people have a willing to listen to other participants' opinions (Appreciation) via conversation (Influence) and responsible for work (Control) by brainstorming and presenting the information to a group for developing the community and action plans. The summary of the research framework is shown in figure I as follows:

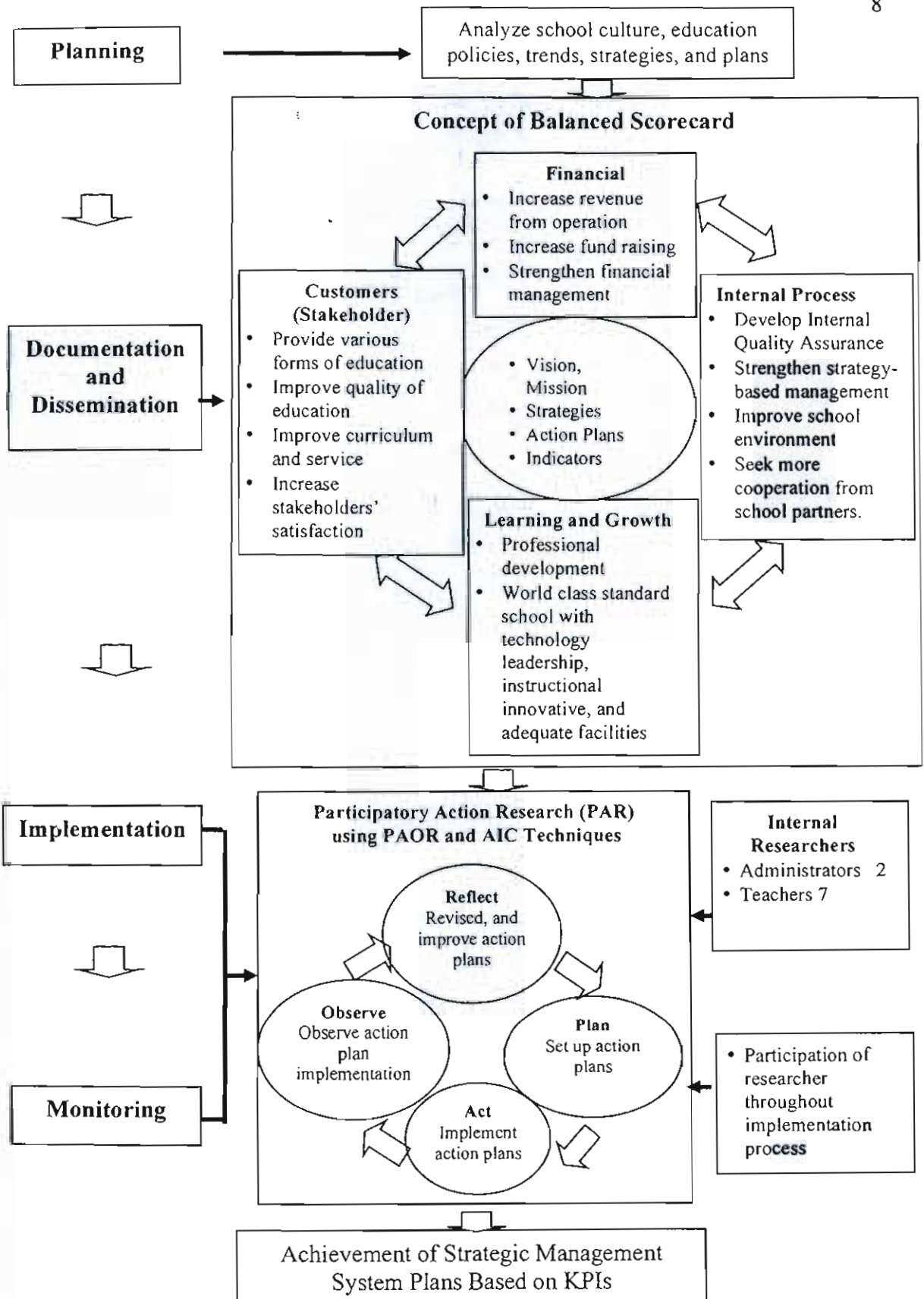


Figure 1 Foundation of Conceptual Framework

Operational Definition of Terms

To clearly understand the terms used in this study, and to avoid misunderstanding from different audiences of the report, the meanings of particular terms are provided as follows.

1. *Implementation* is an execution of action plans and projects of Kampong Chheuteal High School. It is an ongoing process of gathering and discussing information from multiple and diverse sources: documents, internal researchers, school administrators, teachers, students, and stakeholders. The implementation collects data through a number of means, interviews, questionnaire, field notes, observation, and checklist, in order to understand and improve the school performance. The implementation also employs a self-reflection cycle of Plan-Action-Observe-Reflect in making expectations explicit and public; setting appropriate criteria and high standards for educational quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards, and using the resulting information to document, explain, and improve performance.

2. *Strategic Management System Plans (SMSP)* refers to Kampong Chheuteal High School's Strategic Management System Plans which were jointly formulated by all levels of Kampong Chheuteal High School's staff members together with related agencies, HRH Princess Education Project, the Faculty of Education of Burapha University, and the departments under the supervision of the MoEYS. The plans consist of 12 strategies and 24 indicators. Each indicator is supported by a number of projects or action plans. These plans were developed based on four perspectives of Balanced Scorecard, students/stakeholders, learning, growth, internal process, and financial. All the four perspectives are utilized as a mechanism to promote school performance. The explanation of each perspective is provided as follows:

2.1 Students/stakeholders Perspective: Providing a various educational services to all stakeholders based on the needs of community and labor market. At the same time, equipping them with knowledge, skills, good ethic and learning happiness so that the graduates will become complete persons and be able to independently run their own business as well as to collaboratively work in a competitive work sphere.

2.2 Learning and Growth Perspective: Providing additional professional expertise to school administrators and teachers so that you will have adequate ability to promote the school to meet an international quality standard.

2.3 Internal Process Perspective: Developing Internal Quality Assurance, using five management systems to strengthen the school effectiveness, and turning school to be an effective learning resource.

2.4 Financial Perspective: Maximizing school revenue by effectively using existing resources; and strengthening school financial system based on a good governance basis.

3. Effectiveness of School Strategic Management System Plans refers to the degree to which objectives of the school indicated in the Strategic Management System Plans are achieved and the extent to which targeted problems are solved. The effectiveness is observed based on the achievement of strategic action plans and projects. The effectiveness is quantitatively and qualitatively evaluated using KIPs checklist, questionnaire, field note and in-depth interview.

4. Kampong Chheuteal High School refers to the first dual-system secondary school, located in Sambor Commune, Prasat Sambo District, Kampong Thom Province of Cambodia. The school offers students with both general and vocational education. The general education consists of three grade levels ranging from grade 10 to 12 while the vocational education provides post-grade nine students with three years vocational and technical training programs in four majors: Electricity, Electronic, Agronomy, and Animal Husbandry. The school has a clear mission, which states that "*Kampong Chheuteal High School is an excellent school for community and national development*". To achieve this vision, the school has a mission to provide a quality secondary education with excellent academic knowledge, vocational competencies and integrity.

5. HRH Princess Maha Chakri Sirindhorn Sponsorship is the support under Her Royal Highness Princess Maha Chakri Sirindhorn's project in education in the Kingdom of Cambodia. The project has started since 2000 and resulted in the establishment and continuing development of Kampong Chheuteal High School.

Limitation of the Study

There are a few limitations in this study. First, the period of time is constraint as the implementation of the Strategic Management System Plans only lasted for six months. Therefore, most of the projects had not evaluated yet when the researcher collected the data. To obtain completed data on both progress and end-year result, the implementation of the Strategic Management System Plans should at least last for one academic year. Second, the low number of the participants could affect the result of the study. As this study selected the participants based on voluntary basis, only 55 out of the 84 teachers and 13 stakeholders participated in this study. Therefore, the collected data may not be adequately insightful. Third, the context in which this study was conducted may limit its generalizability. Because the study only conducted within Kampong Chheuteal High School, its immediate application may only be appropriate for other schools with similar structures, culture, operation, and environments.

Outline of the Study

This study consists of five main separate chapters. These chapters are outlined as below:

Chapter 1, the introduction chapter, describes the background of the present study. It includes the statement of the problem, research questions, research objectives, significance of the study, scope of the study, research framework and operational definitions of terms.

Chapter 2, the review of literature chapter, reviews the underlying theoretical frameworks and previous research studies that are considered relevant to and form the basis of this study. The concepts presented in this chapter are categorized into seven sections. First, concept of the Strategic Management System Plans is discussed. In this section, the formation process and the implementation of the Strategic Management System Plans are identified. Second, the Balanced Scorecard approach to assess the effectiveness of the Strategic Management System Plans is elaborated. This section includes the principles of the Balanced Scorecard, and the concepts of Balanced Scorecard in general and that in education. Third, the

concept of participatory action research is explained. Fourth, the model of Appreciation- Influence- Control (AIC) is addressed where the techniques of PAOR is explained. Fifth, the overview of Cambodian education is presented in order to provide readers with an understanding of the system, policies, and strategies of Cambodian education. Sixth, the background, current status, and the Strategic Management System Plans of Kampong Chheuteal High School are provided. Last, a review of previous research studies on Balanced Scorecard and the Strategic Management System Plans is illustrated.

Chapter 3 deals with the research methodology of the study. It covers the research design, population and participants, research procedures, research instruments, and the methods of data collection and data analysis.

Chapter 4 presents the findings of the study. Data obtained from the primary and secondary sources are analyzed and presented in accordance with the research questions. This chapter also presents additional findings.

Chapter 5 includes the summary and discussions of the study. This includes the comparison of the findings of this study with those of previous studies as well as related concepts and literature. This chapter also includes limitations of the study, implications for policy and operational level. Furthermore, it ends up with recommendations for further research studies.

CHAPTER 2

REVIEW OF LITERATURE

This research study applies steps of participatory action research with the integration of Appreciation-Influence-Control technique (AIC) for the implementation and evaluation process of the school Strategic Management System Plans based on four perspectives of Balanced Scorecard. To provide background for this study, the following topics are respectively addressed; concepts of strategic management system plans, Balanced Scorecard approach to the Strategic Management System Plans, concept of participatory action research, Appreciation-Influence-Control Model, Cambodian educational background, Kampong Chheuteal High School and its Strategic Management System Plans, and previous related studies on both the application of Balanced Scorecard and the Strategic Management System Plans.

Concept of Strategic Management System Plans

In this study, the Strategic Management System Plans of Kampong Chheuteal High School are implemented. To address more insight about the Strategic Management System Plans, this section addresses the definition and a process of the Strategic Management System Plans.

Definition of Strategic Management System Plans

Many researchers have defined the definition of the Strategic Management System Plans. However, their perspectives are commonly found similar. Yelder (1999) defined the Strategic Management System Plans as an essential process in preparing to carry out the organization's mission. An effective strategic management system plans provides a framework to make decisions on how to allocate organizational resources, address challenges and take advantage of opportunities that arise along the way. Similarly, the Strategic Management System Plans are defined as a long-term, future-oriented process of assessment, goal setting, and strategy building that maps an explicit path between the present and a vision of the future, that relies on careful consideration of an organization's capabilities and environment, and leads to priority-based resource allocation and other decisions. The Strategic Management

System Plans can also be defined as a tool that provides guidance in fulfilling a mission with maximum efficiency and impact. Furthermore, Thomas (2005) defined that strategic management system plans are disciplined efforts to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it.

Therefore, it can be concluded that the Strategic Management System Plans are tools or road maps to lead the organization to the future desire. They are dynamic process of continuously looking at the current situation and plotting the next move of the organization. The Strategic Management System Plans consist of a process of defining their strategies, or directions, and making decisions on allocating resources to pursue these strategies, including financial and human capitals.

Process of Strategic Management System Plans

Many public and private institutions develop their own strategic management system plans in different ways. They use them as guidelines to improve their organizational performance. This study, however, adapts a model of the Strategic Management System Plans process of Taylor and Miroiu (2002) in which four main phases are respectively discussed: Planning, Documentation and Dissemination, Implementation, and Monitoring.

Phase One: Planning

The Strategic Management System Plans begin with planning process which refers to gathering information, conducting research on and analyzing strategy and plans, and creating ideas and choices. Taylor and Miroiu (2002) suggested four elements within this process, namely “scanning” or information collation, “analyzing”, “generating ideas”, and “enabling”.

Scanning, or the accumulation of information, is the process of identifying and observing characteristics and changes, which will have an impact on the organization. The scanning mostly focuses on both analyzing the external and internal environment. With external environment scanning, several factors that may have a positive or negative impact on organization’s ability to achieve the vision, such as government policy changes, economic and political changes, technological changes, societal expectations, and competitive forces are emphasized. On the other hand, the internal environment scanning mainly includes inventory, staff, resources,

student enrollment; pass rates, available physical resources, programs, culture, and politics (Hayward & Ncayiyana, 2003; Taylor & Miroiu, 2002; Tromp & Ruben, 2004; Wilcoxson, 2012). At the same time, the organization must also assess internal strengths and weakness. This type of assessment is referred as a SWOT analysis (Sherman, Rowley, & Armandi, 2007).

Upon completion of SWOT analysis, a thorough analysis of the compiled information must be performed (Taylor & Miroiu, 2002; Tromp & Ruben, 2004; Wilcoxson, 2012). The analysis aims at identifying the organization's strategic issues such as policy problems, critical challenges affecting mandates, mission, vision or goals and so forth. Particularly, the analysis help identify issue of success and difficulties. Conclusions drawn from the analysis should be reflected in the final strategic management plans.

Another element of the planning phase is generating ideas in which three categories are taken into consideration: undertaking new ideas, making improvements to existing activities, and withdrawing from existing activities. To address this matter, ideas from all levels within the organization as well as from external parties are required (Taylor & Miroiu, 2002; Wilcoxson, 2012).

The last element "enabling" described by Taylor and Miroiu (2002) is conditions will lead to successful strategic management plans. These conditions are divided into three categories: personal qualities, resource required to support changes, and information for manager. Personal qualities refer to positive attitudes toward new ideas, willingness to change and learn from mistakes, incentives to encourage people to make contributions, determination, ability to enthuse and motivate others, vision, creativity, imagination, leadership, flexible teaching and research personnel, planning and monitoring, and counseling. Resources required to support change are incentives to cut costs and generate income, time to prepare and consult, financing to invest in change, and estate and other physical assets. The information for managers refers to data for analysis, monitoring reports on return plans, and project progress reports.

Phase Two: Documentation and Dissemination

Documentation

In this study, the pattern of the Strategic Management System Plans document consists of five key components: (1) mission, vision, activities and values,

(2) SWOT analysis, (3) strategic goals and objectives, and (5) the establishment of strategies, indicators, and implementation plans.

First, the foundation and the key component of the Strategic Management System Plans document are the vision, mission, activities and values of the organization (Iowa State University, 2011). A vision statement is a portrayal of what an institution aspires to become. It describes the type of the organization envisions for its constituency as a result of the work of the organization. Also, it should challenge the institution and its members and help drive it in the right direction. Vision statements should also be easy to remember and easily understood (Hayward & Ncayiyana, 2003). At the same time, the mission statement helps an organization identify strategies that will ultimately result in a more effective and higher quality institution (Morzinski, 2010). A good mission statement describes what the organization will do, who it will do it for, and how it will achieve the vision. The mission statement is often the only statement many people will read about an organization while an activities statement describes the business or general activities the organization will use to achieve its vision. The value statement describes the principles and beliefs that guide the operations of the organization. It provides guidance when tough decisions must be made, for example in allocating scarce resources, or when presented with a donation from a group which may be incompatible with the organization's mission

Second component of the Strategic Management System Plans is a SWOT analysis (Sherman et al., 2007; Taylor & Miroiu, 2002). SWOT typically stands for strengths, weaknesses, opportunities and threats. A SWOT analysis seeks out ideas from all staff levels within the institution as well as from external parties. It may consist of a combination of individual interviews, surveys, focus groups, research of relevant socioeconomic trends, and an internal organizational assessment of the administrative and program-related capacities of the organization. The methods used by the organization to gather the information required for the SWOT analysis will be based on the financial and human resources available. The result from SWOT analysis help identify the priority of the strategic issues by deciding which of these conditions or situations are having the greatest impact on its ability to fulfill the organization

vision and which opportunities must be capitalized upon immediately to achieve the organizational vision.

Third, the identification of the strategic issues usually goes along with strategic goals (Iowa State University, 2011). Strategic issues resulted in desired strategic goals which are directly related to the organization's mission statement. The final component of strategic management system plans is formulation of strategies, indicators, and operational action plans (Taylor & Miroiu, 2002) which describe the resources required to achieve the objectives, and identifying existing organizational resources to be allocated. Moreover, the schedule to periodically monitor and evaluate the progress of the action plans is made. If internal or external conditions have changed, it may be necessary to revisit the planning process and assess the validity of the strategic goals and objectives.

Dissemination

Having completed development of the Strategic Management System Plans together with their operational plans, it is essential to fully disseminate among involved parties. A successful process of strategic management system plans is heavily dependent on support, participation, and communication from the entire campus community and stakeholders (Goho & Webb, 2003; Welsh, Nunez, & Petrosko, 2005).

Because the Strategic Management System Plans are organization document, it should disseminated throughout the organization and also be available outside of the organization, either in full or in an abridged form or both (Wilcoxson, 2012). Moreover, it should be written in a form that is readily understood by non-education experts (Taylor & Miroiu, 2002). Internally, the full Strategic Management System Plans may be made available to all staff, either in hard or electronic copy. Sometimes summary publications are helpful where further internal or external dissemination is appropriate.

Phase Three: Implementation

The process of strategy execution requires implementation after the Strategic Management System Plans has been completely formulated, and this subsection focuses on transforming a strategy into action or practice. In order to achieve a successful implementation of the Strategic Management System Plans,

Taylor and Miroiu (2002) suggested a number of important issues to keep in mind as follows:

First, the organizational structure of the organization should be in line with the Strategic Management System Plans. The structure includes the number and size of academic units, the structure of academic and administrative support services, and the responsibilities of administrators. Challenges in implementing a strategy have changed over time and mostly related to inappropriate organizational structure and lack of top management support (Atkinson, 2006). Second, it is imperative that the institutional arrangements for resource allocation support the planning process and are not in conflict with it. It will negatively result if a resource allocation model runs counter to planning objectives. To avoid this constraint, Taylor and Miroiu (2002) proposed a number of ways: (1) same people should involve in both planning and resource allocation; (2) the various processes should be scheduled to follow a logical progression; (3) resource allocation is ensured to be conducted in a transparent way; and (4) all plans should be prepared in recognition of resource requirement. Third, it is obvious that planning may lead to radical change within an organization. Therefore, organizational management requires a shared vision, a clear strategy, supportive resource allocation, and effective monitoring. In particular, it requires strong management of human resources including communication, counseling, consultation, training, staff development, recruitment, and rewarding. Fourth, a strategic management plans result in a number of new projects. Therefore, it is necessary to use more formal methods of project management. A committee may be appointed to take forwards particular tasks. Finally, effective communication of the progress across the institution should be created (Noble, 1999).

Overall, the implementation of the Strategic Management System Plans is a demanding and multi-phased process for organizations, which is dependent upon the capability and delivery of individual members of staff. They must be equipped through appropriate resourcing and training, and motivated, through effective leadership, incentives, and rewards.

Phase Four: Monitoring

The final phase in the Strategic Management System Plans is monitoring or evaluating. It is a very crucial phase as it primarily aims to assess ongoing progress made towards achievement of the targets. It also enables an organization to determine whether the Strategic Management System Plans are working. Ongoing and regular monitoring will help determine whether or not specific strategies and action plans should be maintained, adjusted, revised, or deleted from the plan entirely (Taylor & Miroiu, 2002; Wilcoxson, 2012). Monitoring will also take into account changing circumstances and environment. Both the overall strategic management system plans and the various operational strategies need to be monitored.

Effective monitoring process should be thorough and precise. To help ensure continued progress and support for the strategic management plans, the monitoring process should provide constructive feedback and inspire creativity. Also, the monitoring process should not be threatening as this may lead to a lack of support or even individual conflict against the whole plans. An effective monitoring process should allow for corrections and modifications that will have a positive impact on future planning activities (Wilcoxson, 2012).

A variety of methods can be used to monitor progress including checklists, audits, and key performance indicators such as student data, measures of research activity, and financial information (Taylor & Miroiu, 2002).

Overall responsibility for monitoring must rest with the governing body. However, in practice, it is necessary to develop a structure for monitoring at all levels within the institution. Again, a key role will be exercised by the main planning and resources who are administrators, and heads of the departments.

Approaches to Strategic Management System Plans: Balanced Scorecard

A number of approaches have been used as a foundation concept to formulate the Strategic Management System Plans. Although, there are other models and approaches that could be highlighted, this section only addresses the Balanced Scorecard approach as it is mainly used as a core framework in this study.

Concept of Balanced Scorecard

The Balanced Scorecard is a strategic planning and management evaluation system that is used extensively in business and industry, government, and non-profit organizations worldwide to monitor organizational performance against its strategic goals.

The Balanced Scorecard serves as a tool for defining strategic objectives and communicating them throughout the organization, identifying initiatives to achieve those objectives, and evaluating whether those objectives have been achieved (Buytendijk, Wood, & Geishecker, 2004; Kaplan & Norton, 2000, 2001; Niven, 2002). The Balanced Scorecard is also linked to organizational strategies through a strategy map which translates expected results into testable hypotheses to enhance the process of using the strategically aligned scorecard measures as a way of measuring the success of strategy (Kaplan & Norton, 2001; Matthews, 2011).

Early writings on the Balanced Scorecard focused on the ability of multiple measures to provide a more balanced perspective of private business sectors or companies' performance (Kaplan & Norton 1992). With this regard, managers solely focused on financial performance measures. On contrary, Kaplan and Norton (1992) suggested that there should be a balance between internal and external measures, between outcome measures and drivers of success, and between objective and subjective measures of performance.

With this belief, the current Balanced Scorecard measurement has been proposed focusing on four perspectives as a center of organizational performance control system. Figure 2 illustrated in the outline of the Balanced Scorecard perspectives.

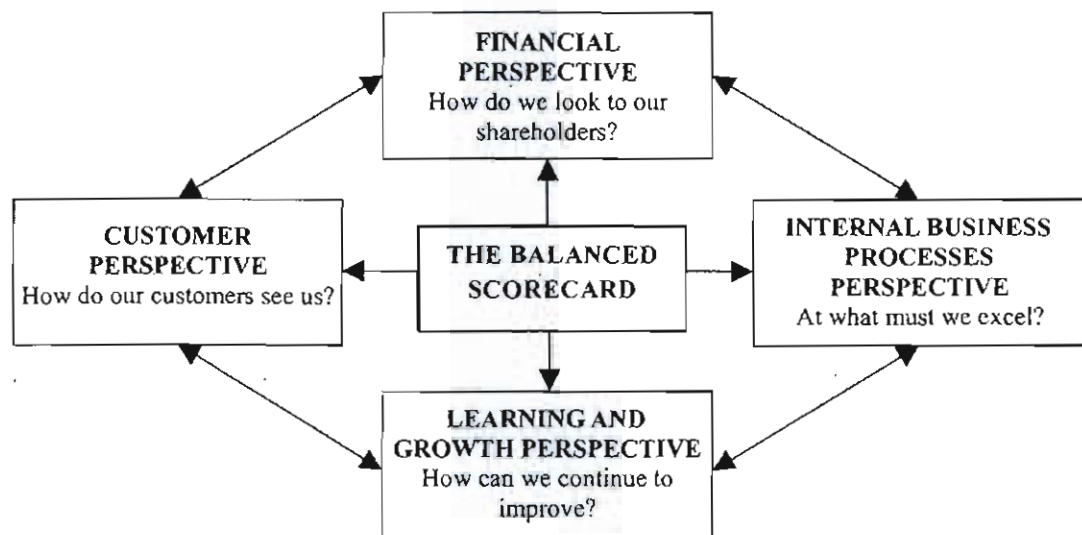


Figure 2 Four Perspectives of Balanced Scorecard (Kaplan & Norton, 2004)

The financial and customer perspectives describe the desired outcomes sought by the organization. While the internal processes and internal growth perspectives show how the organization creates these desired outcomes (Farid, Nejati, & Mirfakhredini, 2008). All the four perspectives need to be inter-supported. According to Kaplan and Norton (2004) aligning objectives in these four perspectives are the key to value creation, and, hence, to a focused and internal consistent strategy. In this way, managers can identify a causal chain from the performance drivers to financial outcomes. From the top of the chain on down, desired financial outcomes can only be accomplished only if customers are satisfied. To realize the customer value propositions, internal processes must be created and delivered. Finally, the internal processes must be supported by an organization's learning and growth.

Principles of Balanced Scorecard

The Balanced Scorecard was initially considered as an organizational performance measurement tool that included non-financial as well as financial measures. By ensuring that all of the objectives and measures inherent to it are derived from an organization's vision and its resulting strategy, Kaplan and Norton (2001) suggested that strategy-focused organizations need to transform the Balanced Scorecard from a performance management tool into a strategic tool by adhering to the five key principles as follows:

Principle 1: Translate Strategy into Operational Terms

In order to be a strategy-focused organization, it is necessary that the organization put strategy at the center of its management process. Strategy cannot be executed if it cannot be understood by the stakeholders. Likewise, the strategy cannot be understood if it cannot be described. In the past, however, there has been no generally accepted framework for describing strategy and the value created from intangible assets.

Therefore, the first step in creating management processes for the implementation of strategy must be to construct a reliable and consistent framework for describing strategy. The best framework, suggested by Kaplan and Norton (2001), for describing strategy is the use of a strategy map outlining all the relationships and the establishment of Balanced Scorecards performance measures.

Principle 2: Align the Organization to the Strategy

The Balanced Scorecard provides a powerful framework for organizations to describe and implement their strategies. A strategy-focused organization, however, require more than just having each unit use its own Balanced Scorecard to manage a great strategy, the strategies and scorecards for all such units should aligned and linked with one another. Synergies can then develop from efficient interactions between those units interaction, which must be explicitly recognized in the strategies and scorecards of each unit. On contrary, Kaplan and Norton conceived that units working individually could not achieve additional benefits.

Many units have their own specialist knowledge and language, making it difficult for communication to occur. Strategy-focused organizations can break through this barrier and create an environment where synergy can grow by linking units to the organization's strategy and anchoring shared services units in the strategy.

Principle 3: Make Strategy Everyone's Job

In the past, aligning all employees to a strategy was not critical. Employees did not have to understand or implement strategy. They simply had to perform the narrow tasks management assigned them and trained them to do.

In the current modern working environment, this type of work virtually obsolete, replaced by knowledge-based work. Every employee of a strategy-focused organization must understand the strategy and is expected to find improved ways to

conduct their day-to-day business so they contribute to the success of that strategy. To do it, Kaplan and Norton proposed three ways: (1) creating strategic awareness at every level of the organization, (2) setting aligned personal and team objectives, and (3) linking a compensation scheme to the Balanced Scorecard or strategic objectives.

Principle 4: Make Strategy Continual Process

One reason so many organizations have difficulties in implementing strategy is that these organization have at least one disconnects between how they manage strategy and how they manage operations.

The Balanced Scorecard strategy-focused organization creates a reporting system that allows the progress against the strategy to be monitored and corrective actions to be taken as required. The feedback loops allows organizational strategy to be updated and managed continuously. That way, strategy becomes an integral part of the progress of the organizational performance. Kaplan and Norton illustrated the two key feedback loops to make strategy continual process: linking strategy to the budgeting process and learning and adapting processes.

Principle 5: Mobilize Change through Effective Leadership

Implementing new strategies requires large-scale change. Leaders of strategy-focused organizations need to work hard to get this transformation started. To make this happen, Kaplan and Norton advise that executive leadership is the effective mechanism to mobilize this change. They point out that without the active personal involvement of the organization's executive team, no strategy will ever succeed, particularly because strategy implementation always means change somewhere in the organization.

Therefore, it is a must for effective organizational leaders to do at least three important things. First, the leaders should start out focusing on mobilization, where a momentum is created. Second, they should focus on governance issues. This requires attention of the organizational leaders to guide the transition. Third, it is crucial to consolidate with a strategic management system. Typically, this involves aligning executive compensation and the Balanced Scorecard, linking planning/ budgeting to the Balanced Scorecard, and creating strategic management.

Overall, the five principles of Balanced Scorecard provide strategy-focused organizations a sound foundation for building and maintaining a world class strategic management system when properly implemented.

Balanced Scorecard in Education

It is evident that Balanced Scorecard has been widely adopted in many private sector enterprises. While initially developed for those enterprises, the Balanced Scorecard was soon extended to nonprofit and public sector enterprises.

In education, as a non-profit and public sector enterprise, the use of Balanced Scorecard focuses in a different way from that of the private or business sectors. According to Kaplan (2010), the private or business sectors mainly focus on financial measures, such as budgets, funds appropriated, donations, expenditures, and operating expense ratios. Clearly, on the other hand, the performance of education sectors cannot be measured by financial indicators. Their success has to be measured by their effectiveness in providing benefits to constituents such as school dropout rates and the improvement of academic and education quality. The Balanced Scorecard helps education sectors select a coherent use of non-financial measures to assess their performance with constituents.

As explained by Ruben (1999) modified by Umashankar and Dutta (2007), rather than emphasizing financial performance, education sector has emphasized academic measures. Measurement in education has generally emphasized those academic variables that are most easily quantifiable. These measures are usually built on and around such aspects as faculty/student numbers (ratios), demographics; student pass percentages and dispersion of scores; class rank, percentile scores; graduation rates; percentage graduates employed on graduation; faculty teaching load; faculty research/publications; statistics on physical. More importantly, MoEYS (2010) indicated that the area deserving greater attention in this process of measurement is the students' achievement in terms of academic knowledge, vocational skills, integrity, and learning enthusiasm, as well as the faculty and staff expectations and satisfaction levels on their duties.

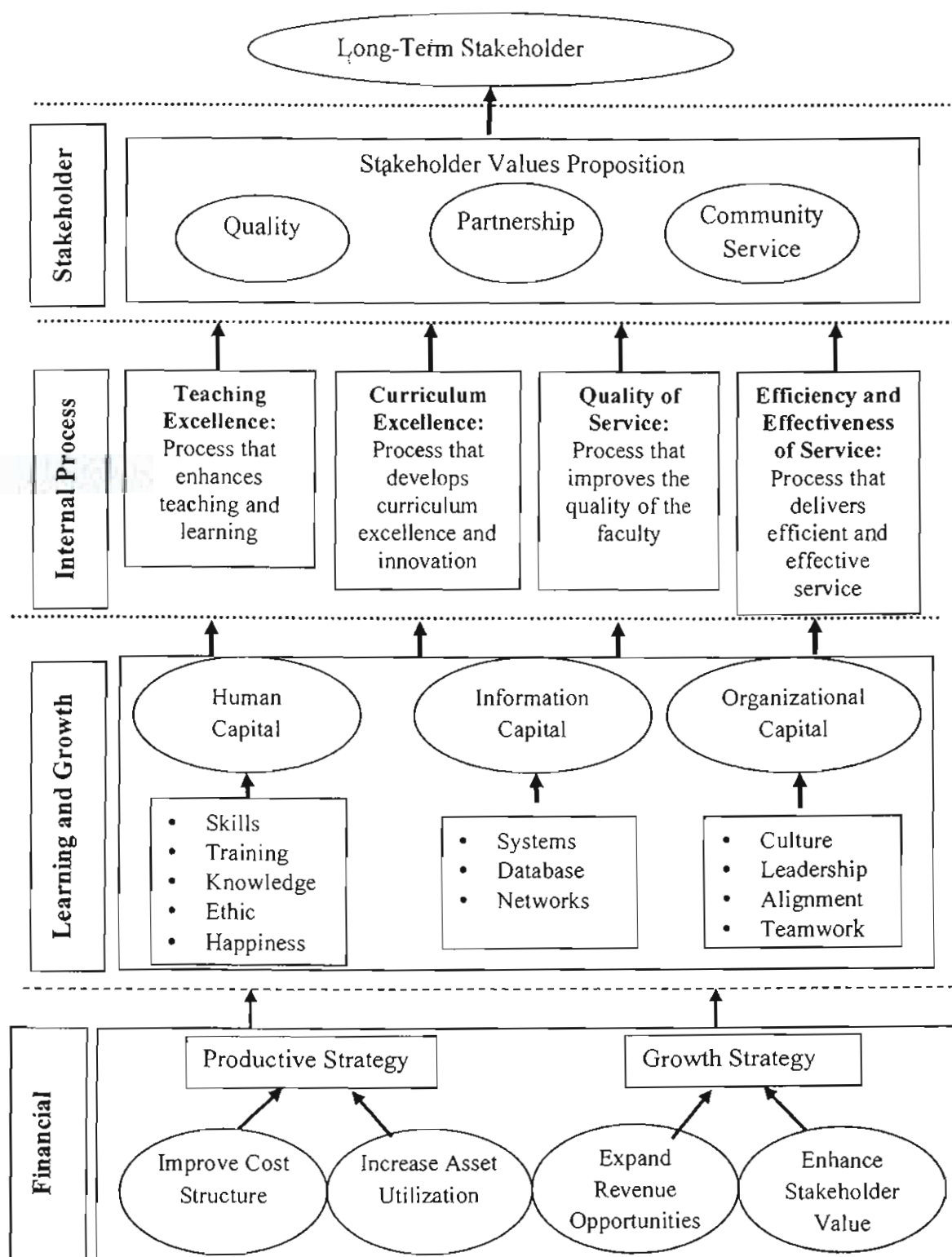


Figure 3 Strategy Map of Balanced Scorecard in Education Sectors (Kaplan & Norton, 2004)

Since financial success is not their primary objective, education sectors cannot use the standard architecture of the Balanced Scorecard strategy map where financial objective are the ultimate, high-level outcomes to be achieved. Instead, providing maximum benefits to students and stakeholders should be prioritized in the context. The figure 3 on page 24 indicates the strategic map to be used in education sector adapted from that of Norton and Kaplan (2004).

Participatory Action Research (PAR)

Participatory Action Research (PAR) is a technique originated in 1970s from the sociological, organizational, educational, and evaluation research literature. It is defined as a systematic and collaborative project between the academic and marginalized member in collecting evidence on which to base group reflection and in planning change (McTaggart, 1991). PAR attempts to partner the researcher and participants in a collaborative effort to address issues in specific practical contexts. It is a collaborative, cyclical, reflective inquiry design that focuses on a social problem and carries out a process of fact finding, conceptualization, planning, implementation and evaluation to simultaneously solve problems; improve work practice; and generate new knowledge (Brydon-Miller, 2001).

Within PAR, the research begins with building a basis for participation by developing relationships and negotiating roles and responsibilities. Unlike other research methods, PAR is conducted through the subjectivity of the researcher and the relationships that form between the researcher and the researched (Blake, 2007). The process of conducting PAR involves regular interaction and participation in the activities of the community with which the researcher is doing work. PAR process must be democratic, equitable, liberating and life enhancing. As mentioned by Kemmis and McTaggart (2007), PAR methodology is dedicated to ensure that both researcher and researched remain partners throughout the research process. The researchers and the stakeholders work together in the designing and conducting of all phases of the research process, which includes formulation of questions, design, data collection and analysis, dissemination, utilization (McTaggart, 1991; Whyte, 1991). Likewise, Chevalier and Buckles (2013) noted PAR practitioners attempt to integrate

three basic aspects of their work, namely participation which focus on life in society and democracy; action which engages with experience and history; and research which seek the growth of knowledge. All the actions integrate organically, with research and collective processes of self-investigation (Rahman, 2008). During PAR process, the researcher and partners learn through action leading to personal or professional development; and communities of inquiry and action evolve and address questions and issues that are significant for those who participate as co-researchers (Reason & Bradbury, 2008). By working with community members in collaboration, PAR researchers engage with a subject position that identifies them as simultaneously researcher and community member (Smith, 2005). However, PAR methodology should remain flexible and responsive toward the participants and the research process (Chambers, 2008).

To be flexible, PAR, in many contexts, applies the method of a self-reflective spiral of planning, acting, observing, reflecting and re-planning (Davison, 2001; Kemmis & McTaggart, 2007). In the planning stage, the researcher first examines the situation and plans activities to address identified problems. In the action or intervention stage, the researcher endeavors to solve the problem or manage the change process. In the observation stage, data pertaining to the situation or phenomenon are recorded. Finally, the reflection stage involves interpreting the data and the consequences of action. This feeds forward into the next planning stage and initiates the next cycle in the methodological process. The reflective stage is considered by some to be the most critical part of the cycle. Figure 4 illustrates the process of PAR using a self-reflective spiral method of planning, acting, observing, reflecting and re-planning.

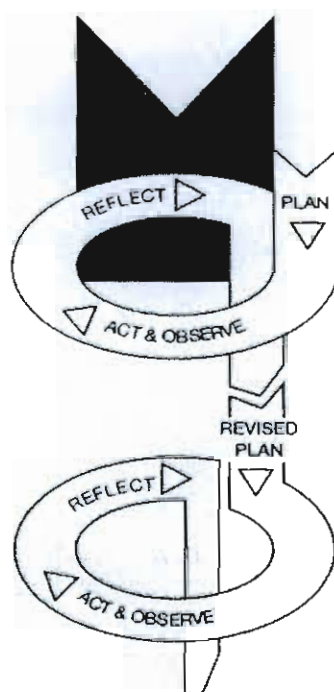


Figure 4 Participatory Action Research Spiral (Kemmis & McTaggart, 2007)

Although the image of the spiral cycles of self-reflection: planning, acting and observing, reflecting, re-planning has become the dominant feature of action research as an approach, Kemmis and McTaggart (2007) address seven other key features for PAR that are at least as important as the self-reflective spiral.

1. *Participatory action research is a social process.* PAR deliberately explores the relationship between the realms of the individual and the social. Individuation and socialization is possible depending on one another. PAR is conducted in a setting where people individually and collectively try to understand how they are formed and reformed as individuals, and in relation to one another in a variety of settings.

2. *Participatory action research is participatory.* PAR is a process in which all individuals in a group try to get a handle on the ways in which their knowledge shapes their sense of identity and agency and to reflect critically on how their current knowledge frames and constrains their action. It is also participatory in the sense that people can only do action research “on” themselves, either individually or collectively. It is not research done “on” others.

3. *Participatory action research is practical and collaborative.* PAR engages people in examining the social practices, which connected them with others through social interaction. It is a process in which participatory researchers aim to work together in reconstructing their social interactions by reconstructing the acts that constitute them.

4. *Participatory action research is emancipatory.* PAR assists people to recover and to be free from the constraints of irrational, unproductive, unjust, and unsatisfying social structures that limit their self-development and self-determination. It is a process in which people explore the ways to deal with their practices which are shaped and constrained by wider social structures and consider whether they can intervene to release themselves from or to minimize these constraints.

5. *Participatory action research is critical.* PAR attempts to help people recover, and release themselves from, the constraints embedded in the social media through which they interact their language, their modes of work, and the social relationships of power. It is a process in which people deliberately set out to contest and reconstitute irrational, unproductive, unjust, and unsatisfying ways of interpreting and describing their world.

6. *Participatory action research is reflexive.* PAR aims to help people to investigate reality in order to change it. In particular, it is a deliberate process through which people aim to transform their practices through a spiral of cycles of critical and self-critical action and reflection.

7. *Participatory action research aims to transform both theory and practice.* PAR does not regard either theory or practice as the most important in the relationship between theory and practice; rather, it aims to articulate and develop each in relation to the other through critical reasoning about both theory and practice and their consequences. Thus, participatory action research aims to transform both practitioners' theories and practices and the theories and practices of others whose perspectives and practices may help to shape the conditions of life and work in particular local settings.

In summary, participative action research (PAR) refers to the process through which the researchers and the stakeholders, who potentially benefit from research results, work collaboratively in the designing and conducting of all phases of

the research process, which includes formulation of questions, design, data collection and analysis, dissemination, utilization. The PAR approach involves a continuous action/reflection spiral of planning, action, observing, reflecting and then re-planning and so forth.

Appreciation-Influence-Control Model

Appreciation-Influence-Control (AIC) is both a philosophy and a model for action. Originally, William E. Smith translated the philosophy, anchored by the principle that power relationships are central to the process of organizing, into a model for organizing development work in the late 1970s and early 1980s (Smith, 2004). Historically, the foundation for AIC as an organizing process in international development emerged as a critique of the failures of the conventional project approach of the World Bank, where a control-centered model derived from engineering had been carried over into the field of rural development, effectively ignoring the dispersed and contested dynamics of power. A crisis in the energy sector in Colombia in 1985 provided the opportunity for the first large-scale application of the AIC organizing process, and helped legitimize the notion of stakeholder engagement to produce solutions that are contextualized within the broader constraints and opportunities afforded by cultural, societal, and political factors (World Bank, 1996). The approach was recently applied in many fields such as community-driven development planning in rural Thai villages by Furugganan and Lopez (2002), school administration by Onme (2009), leadership skill by Sriboonruang, Rodponthong, and Natakuanthong (2010), and natural resource by Ratner, Halpern, and Kosal (2011) to name a few.

Practically, the AIC model is regarded as a workshop-based techniques that recognizes the centrality of power relationships in development projects and policies and encourages stakeholders to consider social, political, and cultural factors along with technical and economic aspects that influence a given project or policy. It is also considered as a whole-systems approach to stakeholder interaction, analysis, and collaborative planning which is applicable in both small and large groups and in all levels ranging from individual to organizational or community level (Ratner et al., 2011).

In the development context, the application of AIC model aims to help participants identify a common purpose; encourage participants to recognize the range of stakeholders relevant to that purpose; and create an enabling forum for stakeholders to pursue that purpose collaboratively (Smith, 2001). AIC approach proceeds along the following course: identifying the purpose to be served by a particular plan or intervention, recognizing the range of stakeholders whose needs are addressed by that purpose, selecting those with the most influence relative to the purpose, facilitating creation of a forum that empowers stakeholders to pursue that purpose collaboratively.

The application of this approach includes holding a meeting/conference and brainstorming ideas to develop and solve problems of the organization. The meeting/conference provides the opportunity for all participants to communicate and exchange knowledge, information and experience, thus enabling them to understand the root of the problem, constraints, solution to problems, and determine the mechanism to carry out creative development (Makpun, 2005). Moreover, the meeting/conference allows participants to share vision that emerges from the intersection of personal visions, which can encourage a sense of commitment in long term. However, shared vision is more than just an amalgamation of personal visions. Vision is only truly shared when people are committed to one another. There needs to be a sense of connection and community with respect to the vision that provides the focus and energy for learning in learning organizations. It is the commitment to support each other in realizing the shared vision that vision power

Through the AIC process of meetings/conference, workshops, and activities, stakeholders are encouraged to do the following:

1. Appreciate through listening. Appreciate the realities and possibilities of the situation by taking a step back to gain perspective on the stakeholders and situation.
2. Influence through dialogue. Explore the logical and strategic options for action as well as the subjective feelings and values that influence selection of strategies.

3. Control through action. Enable the stakeholders to take responsibility for choosing a course of action freely, based on information brought to light in workshops, meetings, and activities.

By distinguishing factors that can be appreciated, influenced, and controlled, the model makes explicit recognition of the whole context for action and the power of different actors who are either directly engaged or who have influence on the outcomes (Smith, 2009).

In conclusion, AIC is technique to stakeholder interaction, analysis, and collaborative planning process. To do so, it requires developing a shared appreciation of the context for the issue at hand, sharing experience with the aim of influencing others' perspectives and preferences for potential courses of action, and finally narrowing in on the particular realm of actions within an individual's or group's control.

Cambodian Education

Cambodian education has been through many reforms and currently the MoEYS put an emphasis on strengthening the quality of education and building human capital to develop the country. To give detailed view of Cambodian education, this section addresses two major aspects: the Cambodian educational system and the national education strategies.

Cambodian Educational System

Traditionally, education in Cambodia was conducted by the local Buddhist temples, and the bonzes were the teachers. The girls were not allowed to study and the education was limited to memorizing Buddhist chants in Pali. During the period of the French protectorate, an educational system based on the French model was inaugurated alongside the traditional system. From the early twentieth century until 1975, the system of mass education operated on the French model. The educational system was divided into primary, secondary, higher, and specialized technical and vocational levels (Seng, 2007). Primary education, divided into two cycles of three years each, was carried out in state-run and Buddhist temple-run schools. Successful completion of a final state examination led to the award of a certificate after each cycle. French language instruction began in the second year. Khmer was the language

of instruction in the first cycle, but French was used in the second cycle and thereafter. By the early 1970s, Khmer was used more widely in primary education (ADB, 2003).

During the dark age of Pol Pot's communist regime between 1975 and 1979, all schools and universities were closed and there was no education in any form. School buildings were utilized for non-educational purpose such as storehouse for grain and livestock or as prisons (Seng, 2007). After 1979, Cambodian education system changed three times. First, a ten-year education system (4+3+3) was employed in which students respectively spend four years in primary school, three years in lower secondary school, and three years in upper secondary school. Then in 1986, the system was expanded to eleven years (5+3+3). From 1996 to the present, education system is a 12 year-education system (6+3+3) which consists of six years of primary school ranging from grades 1-6 where pupils should be enrolled at the age of six, three years of lower-secondary school ranging from grades 7-9 and three years of upper secondary school ranging from grades 10-12. However, three-step system of pre-school education or kindergarten is also provided to pupils before they enter primary education.

After completing lower secondary education, students have the option of continuing to upper-secondary education or of entering secondary-level vocational training program offered by MoEYS or the Ministry of Labour and Vocational Training (MoLVT). After completing upper-secondary education, students enter vocational training or tertiary education. For those who have dropped out of school without completing the basic education level (grades 1-9), there are opportunities to attend literacy and life-skill program as well as short-term vocational training program offered by the MoEYS, Ministry of Women Affairs (MoWA) and NGOs.

Cambodian Education Policies and Strategies

Strengthening the quality of education has been and remains a high priority of the rectangular strategic of the Cambodian government. It is recognized as a necessary and critical element for human development and poverty reduction. To effectively tackle the enormous challenges in the education sector, the education reform framework of the MoEYS focuses on four broad policies. The MoEYS is working to universalize nine years of basic education and develop opportunities for

functional literacy; improve the quality of education through effective reform; link education/training with the labor market and society; and rehabilitate and develop the youth and sport sub-sectors.

With assistance from the international communities, Cambodia is on its way to achieving some of the Education For All (EFA) goals by 2015. The improved sector performance has not only acted as a self-reinforcing agent to change the management process but also as a catalyst to achieve national priorities on human capital development. Ensuring equitable access to education, improving education quality and efficiency, capacity building, decentralization, good governance, and pro-poor education strategies continue to be priorities in educational development and reform in Cambodia.

To achieve the objectives noted above, the government has formulated and implemented several policies. First, Education for All National Plan 2003- 2015 spells out comprehensive technical and financial plans which focus on gender responsive strategies; early childhood care and development; and formal and non-formal basic education and adult literacy. The central theme of this plan is to provide universal access to nine years of quality basic education. Second are Education Sector Plan (ESP) 2006- 2010 and Education Sector Support Programs (ESSP) 2006-2010. ESP spells out strategies to implement targets in the National EFA Plan 2003-2015 whereas the aim of the ESSP 2006-2010 was to outline how the policies and strategies laid out in the ESP 2006-2010 will be put into practice. The ESSP identifies the necessary program activities and funds needed to achieve these plans. Third, the Education Law 2007 situates the reform of the education system in conformity with the Constitution and relevant international laws, and it governs academic programs of all kinds and levels. Fourth, education sub-sector policies and programs focus on many policies and plans such as curriculum development for general education (Grades 1-12); policy and strategies for ICT in Education 2005 which is a step towards joining the global dialogue in order to expand the use of ICT in education; non-formal education; and so forth.

In summary, the MoEYS has launched a number of education policies, strategies, and programs in order to reach the new millennium goal of education in

which equal access to education and enhancing quality of education for capacity building and human resource development are the core pillars.

Kampong Chheuteal High School

Kampong Chheuteal High School is an extraordinary school in Cambodia due to its background, management, and education services are different from those of other schools in the country. To provide more insight information about the school, the background of Kampong Chheuteal High School and its Strategic Management System Plans are mentioned in this section.

Background of Kampong Chheuteal High School

Kampong Chheuteal High School is a state secondary school under the supervision of the Ministry of Education, Youth, and Sport. It is located in Sambor village, Prasat Sambor District, Kampong Thom Province, Cambodia, about 35 Kilometers to the northeast of the provincial town. Historically, the school was established within an area of 21 hectares in Cambodian architectural style in 2000 with the financial grant from HRH Princess Maha Chakri Sirindhorn of Thailand as a lasting gift bestowed to the people of the Kingdom of Cambodia in recognition to their kind hospitality and in celebration of the felicitous relationship of the peoples of the two nations (The Committee of the School under the Royal Sponsorship Project in the Kingdom of Cambodia, 2006).

At the same time the Royal Government of Cambodia, particularly the MoEYS, was responsible for providing the site for the school, assisting, supporting and coordinating for the constructional techniques. The royal sponsorship of HRH Princess Maha Chakri Sirindhorn consists of an integrated whole system beginning with the survey for the requirements of local community, the planning for buildings and grounds, the teachers housing, the student dormitories, the curricular development, the personnel recruitment, the teaching and learning development, the management development, the equipment supplies and the educational supervision and other special activities as well as the royal scholarships for the teachers and students. There are also a number of projects for developing the quality of life and school environment.

In response to one pillar of the national rectangular strategies of Cambodia, which centers on strengthening the quality of education, the school has set up its vision to shape itself to be an excellent educational institution for community and national development. Accordingly, the school has its mission to provide a quality secondary education with excellent academic knowledge, vocational competencies, and integrity. To respond to its vision and mission, the MoEYS has put much effort to turn the school to be a best sample of dual-system school in the country. With a full support from HRH Princess Maha Chakri Sirindhorn Education project and MoEYS, the school was consequently able to offer a curricular in a dual-system, the general and vocational education.

Before 2011 academic year, the school provided a general education which consisted of six grade levels ranging from grade seven to twelve while the vocational education provided post-grade nine students with three years training programs (Certificate of Vocational Education) in four majors: Electricity, Electronic, Agronomy, and Animal Husbandry. However, the current need to fulfill the local labor market as well as the strategy of the MoEYS has resulted in a rapid increase of vocational enrollment. This matter makes the school encounter an inadequate number of classrooms. To deal with this problem, the school with an approval from MoEYS decided to reduce the number of grade levels of general education to three levels ranging from grade ten to grade twelve while the vocational education will be expanded to associate and bachelor degree in academic year 2015- 2016. The programs to be offered will consist of seven areas: Electricity, Electronics, Agronomy, Animal Husbandry, Information Technology, Tourism, and Teacher Education.

From the academic year 2001 to 2011, the school was able to enroll approximately 1200 students each academic year. Due to the reduction of the number of classroom in general education, the number of students decreased to around 900 students from the academic year 2012 to 2014. The students are mostly from the rural communities and minority group. Currently, a total of 94 teachers are working at the school. Of all number of the teachers, 12 were administrative staff members; 45 teachers were general education teachers, and 37 were vocational education teachers.

Kampong Chheuteal Strategic Management System Plans

The current Cambodian educational reform stressed the importance of the necessity of strategic plan. Since 2004, the MoEYS has urged every educational institution to develop all types of strategic plans (short term, medium term, and long term) to be utilized as a mechanism to promote the quality of education (MoEYS, 2005). The strategic plans aim to provide equal opportunity to all Cambodian students at all grade levels to access the education regardless their races, family status, and religions. Also, the strategic plans attempt to promote the vocational education to post-lower secondary students so that they could become skillful workers to fulfill the labor market.

Realizing MoYES's policy in improving the efficiency of education and the demand of companies and workplaces in terms of students' quality and integrity, Kampong Chheuteal High School together with the Faculty of Education, Burapha University jointly developed long-term Strategic Management System Plans in which their development process was participated by a number of related institutions and agencies, namely the administrative and teaching staff of Kampong Chheuteal High School, school administrators and other officers from other provincial educational departments, and officers from curriculum development and vocational orientation department of the MoEYS, Kingdom of Cambodia. The strategic management system plans were developed based on the principles of Balanced Scorecard and were validated by experienced experts from both Thailand and Cambodia to ensure its quality and applicability.

To follow the vision of Kampong Chheuteal High School, which is to turn the school to be an excellent school for community and national development, the strategic management system plan aims to educate students with all the expected qualifications. Particularly, students who graduate from this school should be academically well-educated with ethical manner, good health, international skills, and social mind. Also, the strategic management system plans attempt to turn the school to be a school-based management (SMB) which could act itself as a crucial center providing students and community with a considerable learning resources.

To achieve these goals, the strategic management system plans mainly focus on three dimensions. First dimension is to provide students with the best quality of

education. To make it possible, Kampong Chheuteal High School aims at equipping students with particular knowledge, vocational skills, ethical manners, as well as learning enthusiasm so that they will become complete citizens. At the same time, the school operates their work with their best efforts to ensure that the management of the dual-system education reaches the expected standards. Second dimension is to improve the school management system through employing a number of means such as locating skillful administrators and qualified teachers in all departments and subject areas; promoting the use of ICT for education; being independent and self-reliant in managing the instruction of dual-education system; and having a good working culture. Third dimension is to provide educational services for the sake of community and national development. With this regard, Kampong Chheuteal High School attempts to accomplish its work with outstanding achievement and innovation, which are widely recognized from all levels of the society. In addition, the school strives to conduct as many academic research studies as possible; and to preserve local priceless arts, culture, as well as environment. It also acts itself as a learning center for those in the community who wish to broaden their knowledge.

The Strategic Management System Plans of Kampong Chheuteal High School apply the concept of Balanced Scorecard (Norton & Kaplan, 2004) as an instrument to reflect their operational achievement. Therefore, the four perspectives of Balanced Scorecard, namely students/stakeholders, internal process, learning and growth, and financial, are used as a core principle to formulate the strategies and indicators. All the strategies are in line with school vision, mission and strategic needs. Strategies are also reasonably interrelated in order to accomplish the school ultimate goals. The relationship of strategies is indicated in a strategic map as shown in Figure 4.

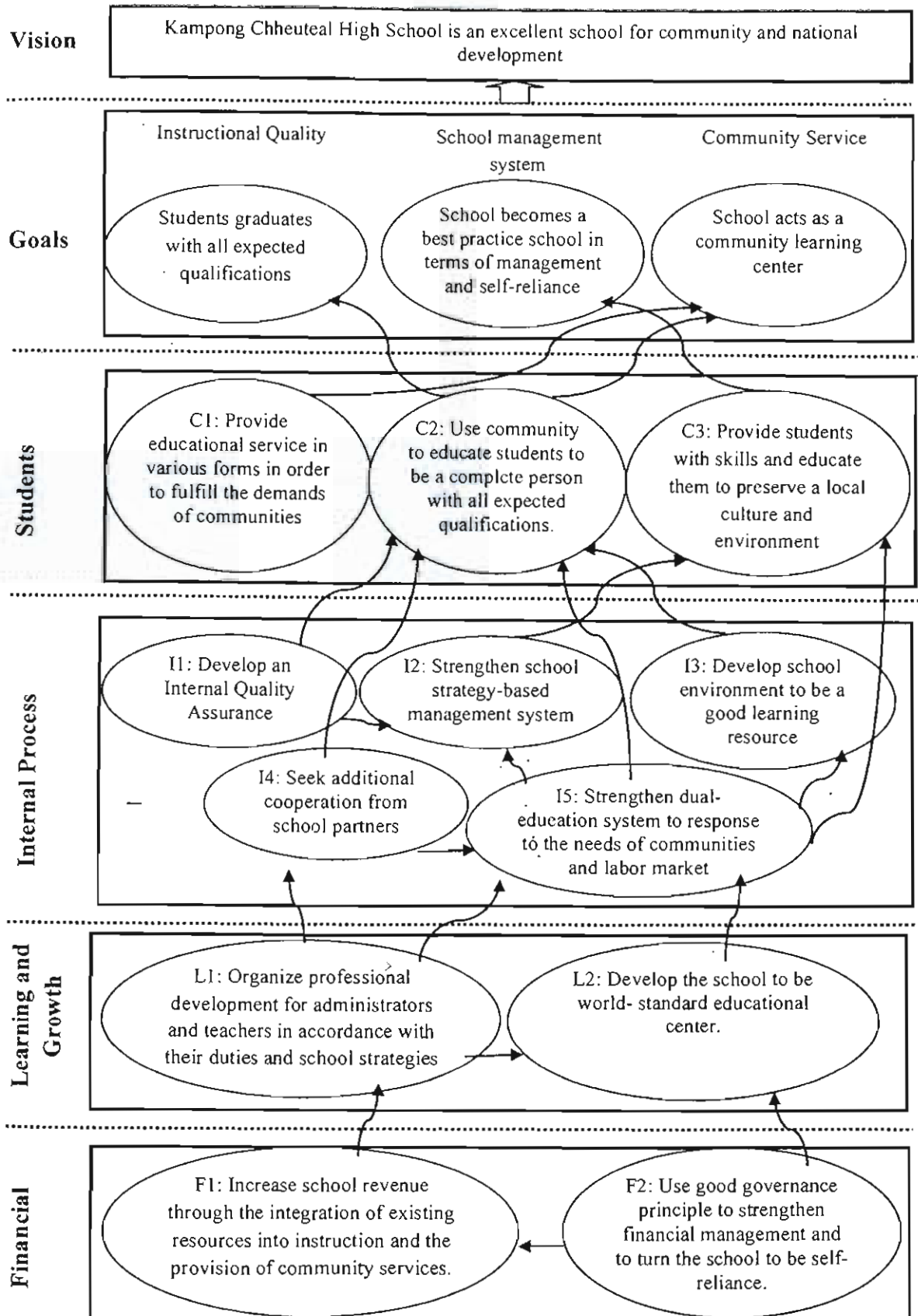


Figure 4 Strategy Map of Kampong Chheuteal Strategic Management System Plans

Together with strategies, the indicators are then created to measure whether strategies are accomplished and the goals are achieved. Consequently, the final version of the Kampong Chheuteal High School Strategic Management System Plans was developed and consisted of 12 strategies and 24 indicators.

Table 1 Strategies and Indicators of Strategic Management System Plans

Perspectives	Number of Strategies	Number of Indicators
Students/Stakeholders	3	8
Internal Process	5	8
Learning and Growth	2	3
Financial	2	5
Total	12	24

Table 2 Strategies and Indicators of Strategic Management System Plans
(Students/ Stakeholders Perspective)

Strategies	Indicators
C1: Provide educational service in various forms in order to fulfill the demands of communities	1. Number of vocational programs offered 2. Percentage of students and people who are satisfied with school educational services.
C2: Use community to educate students to be complete persons with all expected qualification of particular academic knowledge, vocational skills, ethical manner, as well as learning enthusiasm	1. Percentage of students who successfully pass the national exam. 2. Percentage of students who successfully pass the national exam with good academic grades (A and B). 3. Percentage of students who are able to accomplish their studies based on school criteria (knowledge, skills, integrity, and learning enthusiasm). 4. Number of students who have outstanding achievements in developing the country.

Table 2 Strategies and Indicators of Strategic Management System Plans
(Students/ Stakeholders Perspective)

C3: Provide students with a profit-earning skill and at the same time educate them to care for a local culture and environment.	1. Percentage of vocational students who are employed with one year after their graduation.
	2. Number of subject areas which are taught with the integration of local culture and environment.

Table 3 Strategies and Indicators of Strategic Management System Plans
(Internal Process Perspective)

Strategies	Indicators
I1: Develop an Internal Quality Assurance	1. The degree of achievement in developing internal quality assurance.
I2: Strengthen school strategy-based management	1. Number of school systems, which employ strategy-based approach.
I3: Develop school environment to be a good learning resource	1. Percentage of students and people who are satisfied with school environment at high level.
	2. Number of subject areas, which are taught using appropriate and effective instructional materials.

Table 3 Strategies and Indicators of Strategic Management System Plans
(Internal Process Perspective)

Strategies	Indicators
I4: Seek additional cooperation from school partners	1. Number of projects implemented with cooperation from school partners.
I5: Strengthen dual-system education to response to the needs of communities and labor market	1. Number of well qualified academic curriculums. 2. Number of academic curriculums which are jointly managed school and stakeholders. 3. Proportion between teachers and students in each vocational department.

Table 4 Strategies and Indicators of Strategic Management System Plans
(Learning and Growth Perspective)

Perspective	Indicators
L1: Organize professional development for administrators and teachers in accordance with their duties and school strategies.	1. Percentage of administrators, teachers, and supporting staff who receive additional professional development.
L2: Develop the school to world- standard educational center.	1. Percentage of teachers and staff who are satisfied with school learning environment at high level. 2. Number of knowledge-management projects

Table 5 Strategies and Indicators of Strategic Management System Plans
(Financial Perspective)

Strategies	Indicators
F1: Increase school revenue through the integration of existing resources into academic instruction and the provision of community services.	1. Number of projects seeking for additional school income. 2. Proportion between school revenue and budget provided by the MoEYS
F2: Use good governance principle to strengthen financial management and to turn the school to be self-reliance.	1. Degree of achievement resulted from systematic budget distribution mechanism. 2. Number of errors occurred in financial audit. 3. Proportion between school income and outcome

Previous Research Studies

This research study utilities Balanced Scorecard as a framework to examine and evaluate the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School. Therefore, two research areas, the Balanced Scorecard and the implementation of the Strategic Management System Plans are reviewed in this section.

Research Studies on Balanced Scorecard

The application of Balanced Scorecard to evaluate the effectiveness of strategic management plans and organizational performance has been the most extensive researched issues and attracted attention from researchers and evaluators. As a result, multiple research studies on these topics have been recently validated and conducted in various organizations and work places. Despite the variation of study contexts and samples, the findings all pointed to similar conclusion that the Balanced Scorecard was a useful tool for evaluating strategic management plan in order to promote the quality of organizational performance.

To begin with, Al- Zwyalif (2012) studied the Jordanian Private Universities' awareness of implementing the BSC in performance evaluation and the availability of the basic requirements (financial resources and staff) to implement the BSC. The results of this study indicated that private universities in Jordan realized the importance of BSC in the evaluation of performance due to it is used as a strategic tool to assess and improve the performance and rationalize the decisions. The study also stressed the needs of organizing workshops and training programs for employees to gain the necessary skills to effectively apply the BSC in order to meet the work requirements in the new environment.

Seppala (2010) investigated whether a Balanced Scorecard promotes strategy participation and examined how a Balanced Scorecard could be used as strategic management system tools to increase employee participation in a strategy process and implementation. The findings of this study showed that strategy participation is related to the willingness of an organization to promote or hinder strategy participation, and if an organization has decided to support strategy participation, using a Balanced Scorecard does not impede that. Indeed, using the Balanced Scorecard as strategic management system tools facilitates strategy implementation, but it does not provide tools for promoting participation.

Yahaya (2009), who applied Balanced Scorecard as a strategic tool to assess the performance of the banks in Ghana, suggested that the Balanced Scorecard give a more holistic view than using just the financials. The findings were clear that the well performing banks financially may not necessarily be the best banks in the industry when other perspectives or dimensions are taking into consideration. The sustainability of such performance may largely be dependent on certain practices that are not geared towards customer satisfaction and efficient business processes or practices in order to create superior returns and long-term growth based on customer satisfaction and lower transaction cost. It is therefore very clear from the study that the customer perspective, learning and growth perspective, and internal business processes perspective affect the assessment of the performance of banks to a very large extent in Ghana.

Pineno (2008) studied the Business School Strategy through the implementation of the Balanced Scorecard concept. The findings confirmed that the

balanced scorecard served as a means of measuring performance and modifying business school strategies within a changing environment including relationships and challenges. The findings also suggested that the implementation of a strategy on the mission statement required communication and active participation by not only the business school faculty but the faculty and administrators across the campus. Through continuous improvement, each faculty member would gain a thorough understanding and appreciation for the strategy, implementation of planning, and results achieved. A successful BSC could provide feedback to the administration and faculty that can lead to a long-term process that would foster individual and collective growth resulting in improved organizational performance.

As mentioned above, the various application of BSC in strategic management planning become increasingly popular and the significance of BSC was obvious that it could be utilized in term of assessing strategic management plans and promoting organizational performance.

Research Studies on the Strategy Implementation

The Strategic Management System Plans is designed to give organization the opportunity to avoid or minimize the impact of unforeseen or sudden events. The implementation of the Strategic Management System Plans is considered to be a crucial mechanism to achieve the organizational goals and objectives. Therefore, a number of studies have been conducted to examine the implementation process of strategic management system plan.

Recently, Ngannga and Ombui (2013) conducted a quantitative study on the factors influencing the implementation of strategic plans in public secondary schools. Findings found that organizational leadership contributed the most to the implementation of strategic plans; followed by resource allocation, communication and organizational structure respectively. Findings further recommended that for public secondary schools to improve on the implementation of their strategic plans it is necessary to enhance teamwork, communication and transparency. Resources need to be adequately availed to capacity building, implementation activities and tasks based on the organizational structure. Decision making process should also be made broadly open and more participatory to increase teachers and other employees' ownership of the implementation process.

Wilcoxson (2012) conducted a case study on strategic planning practices at California community college. Although this study focuses mainly on the implementation phase of the strategic planning process, all phases of the strategic planning process were investigated. The findings of this study revealed that strategic planning of California community college placed a strong emphasis on planning for organizational effectiveness. To implement the strategic planning smoothly, departments were assigned to submit and reported on strategic objectives. And strategic decisions were based on the strategic plan. The resource allocation was tied closely to the strategic plan and strategic planning practices at this college utilized both a top-down and a bottom-up approach. Challenges to implementing the strategic plan was found related to the large size of the institution, resistance to the planning process, integration of other planning processes with the strategic plan, conducting the strategic planning process annually and having too many college goals.

Ofori and Atiogbe (2011) carried out a comparative evaluation of strategic planning in three public universities in Ghana and to examine the flexibility of the resulting strategic plans in the face of emerging challenges. The findings from 100 self-administered questionnaires indicated that the nature, form, and sophistication of information and the use of communication technology (ICT) influenced successful implementation of strategic plans for two public universities. Additional results suggested that members of staff perceived strategic planning to be the responsibility of top management; thus, there is little ownership and commitment by academic and other stakeholders.

Drivas (2006), who conducted a survey on strategic planning at the Chippewa Falls, Wisconsin area unified school district, suggested that the implementation of strategic planning can be effective to date unless all the strategy practitioners have prior experiences and are provided additional training in terms strategy implementation. Drivas further pointed out that barriers to the effectiveness of strategic planning implementation can be sum up into four categories namely, too slow process, lack of meeting among teammates, being unclear or misunderstanding of strategic goals, and strong resistance from the involved individuals.

Alashloo, Castka, and Sharp (2005) conducted a quantitative study on understanding the impeters of strategy implementation in Iran higher education. The

data collected through a structured questionnaire using a Likert-type scale which consisted of 32 potential implementation impellers and two open-ended questions. The questionnaire was distributed to participants who had knowledge and experience with strategy implementation, such as lecturers, senior lecturers or research deputy, and teaching deputy in various faculties. The findings identified impellers having the most significant influence on strategic implementation, listed in order of greatest to least impact: lack of exact strategic planning, unsuitable training programs, insufficient resource allocation, insufficient distribution of power due to political factors, incompatibility with the organizational culture, lack of preparation for problems that could arise during the implementation, lack of suitable communication in the university, inadequate number of employees connected to the vision, and unsuitable personnel management for developing incentives. However, these impellers were grouped into five main areas: planning consequences, organizational, individual, managerial and environmental.

Okumus (2003) analyzed articles that focused on strategic planning in business related organizations. As a result, Okumus identified 11 key implementation factors which impact the strategy plan implementation. These factors are strategy development, environmental uncertainty, organizational structure, organizational culture, leadership, operational planning, resource allocation, communication, people, control, and outcome. These factors, however, were divided into four groups: (a) strategy content including strategy development; (b) strategic context, external and internal, including organizational structure, culture and leadership; (c) operational process focusing on operational planning, resource allocation, people, communication and control; and (d) outcome including results of the implementation process.

Aaltonen and Ikävalko (2002) studied on strategy implementation in 12 service organizations. The qualitative data collected from 298 interviews pointed out that top-down communication causes problems in implementation phase, and highlighted the two-way communication as an effective mean to make a strategy understandable among employees. To make a strategy understandable, employees are requested to comment, query and question it. Related to communicational issues, Aaltonen and Ikävalko (2002) suggested the role of middle managers to deliver a strategic message between their subordinates and superiors, for instance to filter

strategic messages suitable for their subordinates. Middle managers play a significant role in ensuring the continuation of information flow and understanding of the strategy.

Chapter Summary

This section mainly reviews the concept of the Strategic Management System Plans, the Strategic Management System Plans of Kampong Chheuteal High School as well as the previous related research studies.

The Strategic Management System Plans is designed to promote the effectiveness of the organization. One of the most popular approaches to strategy implementation is to apply Balanced Scorecard framework into the formation and implementation of strategy. There are five principles for strategy-focused organization to adhere in order to transform the Balanced Scorecard from a performance management tool into strategic tool. Those principles are translating strategy into operational terms, aligning the organization to the strategy, making strategy everyone's job, making strategy continual process, and mobilizing change through effective leadership.

The Strategic Management System Plans of Kampong Chheuteal High School was formulated with the support from Her Royal Highness Education Project, the Faculty of Education of Burapha University, and the MoEYS. The strategic management system plans was constructed based on the Balanced Scorecard framework in which four main perspectives are highlighted: students/stakeholder, internal process, learning and growth, and financial. The complete version of strategic management system plans consists of 12 strategies and 24 indicators. The implementation of these plans applied the techniques of participatory action research spiral of PAOR in which four steps of Plan-Act-Observe-Reflect are conducted.

To successfully implement the Strategic Management System Plans, all departments and staff members should be aware of strategy development, environmental uncertainty, organizational structure, culture and leadership, operational planning, resource allocation, communication, people, control, and outcome as they have some impacts on strategic plan implementation process. Moreover, all the staff member should be jointly responsible to achieve the plans.

However, the studies also indicated some challenges to implementing the strategic plans which mostly concern the organizational structure, planning process, insufficient of resource allocation, lack of preparation for ongoing problem solution, too many strategic goals, and poor communication between leader and followers.

CHAPTER 3

RESEARCH METHODOLOGY

This section presents overview methodological perspective of the study and describes how the research study was conducted. To give more details, the following topics are discussed: research design, population and participants, research procedure, research instruments, data collection, and data analysis.

Research Design

This research study examines the implementation process and evaluates the effectiveness of the Strategic Management System Plans of Kampong Chheuteal High School. In addition, it proposes the strategic recommendations for educators to effectively implement the Strategic Management System Plans. The study employed a triangulation technique using survey, in-depth interview, observation, and focus group discussion. To answer these objectives, an embedded or a nested mixed method design was employed in this study (Creswell & Plano Clark, 2011).

The embedded or nested mixed method design is one of the research designs where the researcher combines the collection and analysis of both quantitative and qualitative data within a traditional quantitative research design or qualitative research design (Creswell & Plano Clark, 2011). The premises of this design are that a single data set is not adequate to answer different research question. The researchers adopted an embedded mixed methods design when they need to include qualitative data to answer a secondary research question within the primarily quantitative study. Even both types of data are collected greater weight is given to one kind of data, in the sense that one kind of data is typically embedded in the other.

The embedded design is appropriate when the researcher has different questions that require different types of data in order to enhance the application of a quantitative or qualitative design to address the primary purpose of the study, particularly when the researcher has the expertise necessary to implement the planned quantitative or qualitative design in a thorough way (Creswell & Plano Clark, 2011).

Since this study involved both quantitative and qualitative data and the collection of qualitative data was embedded in the implementation phase of the Strategic Management System Plans, the utilization of the embedded mixed method design was most appropriate in this context. The details of the design are illustrated as follows:

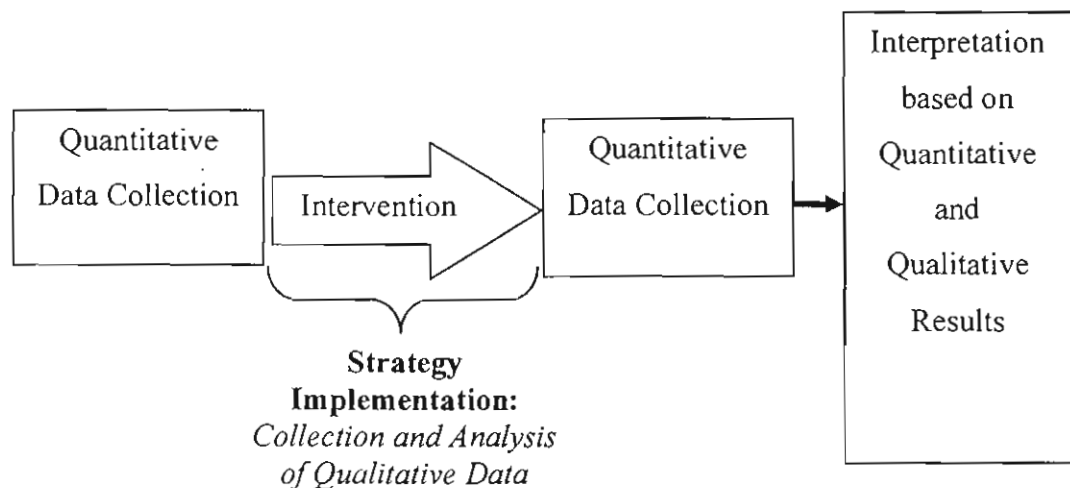


Figure 6 Research Design

Population and Participants

The target population of this study was divided into two groups. The first group was those who are the students, teachers, staff and administrative team of Kampong Chheuteal High School. The second group was stakeholders who were community representatives; officers of the provincial department and the vocational department of the Cambodian Ministry of Education, Youth, and Sport; steering committee of HRH Princess Maha Chakri Sirindhorn Education project.

The participants were selected from those two groups: Kampong Chheuteal High School and stakeholders. All the participants were mixed in terms of ages, educational background, professional profile, and socioeconomic standing. Since this study is designed using a mixed-method approach and triangulation technique to do cross data examination, the participants of this study were selected based on the type of required data. The number of participants chosen for quantitative data collection consisted of 55 teachers. They were purposively selected based on three criteria: (1)

they were involved in the development and implementation of the strategic management system plans; (2) they were beneficiaries of the strategic management system plans; and (3) they were accessible and voluntary to participate in this research. Likewise, the participants chosen to inquire for qualitative data consisted of 45 people. The participants were continuously interviewed and observed in order to explore related data until a point of data saturation is reached. The participants of this study are summarized as follows.

Table 6 Participants of the Study

Participants		n (Quantitative)	n (Qualitative)
Kampong Chheuteal High School	Administrators	4	4
	Teachers	46	16
	Supporting Staff	5	2
	Students	0	10
Stakeholders	Community representatives	0	9
	Thai steering committee members	0	1
	Officers from MoEYS	0	3
Total		55	45

Research Procedure

This section briefly presents five phases of the research procedure. It began with review of the conceptual foundation of the Strategic Management System Plans. Then, it followed by the construction of the research instruments, the implementation of the Strategic Management System Plans, and the proposal of strategic recommendations. Finally, it ended up with the conclusion and publication of the study report. The details of the research procedure are presented in the following figure.

Phase 1: Concept of the Strategic Management System Plans

- 1.1 Explore the basic concepts of Balanced Scorecard
- 1.2 Explore the basic concepts of the Strategic Management System Plans.
- 1.3 Review the MoEYS's policy and Kampong Chheuteal strategic management system plans.
- 1.4 Review previous related research studies on school Strategic Management System Plans.
- 1.5 Construct a conceptual framework

Phase 2: Construction of Instruments for Data Collection

- 2.1 Construct drafted version of instruments
- 2.2 Validate the content and translation accuracy of instruments
- 2.3 Try-out instruments

Phase 3: Implementation of Strategic Management System Plans

Pre-Implementation

- 3.1 Conduct an orientation on how to implement the Strategic Management System Plans.
- 3.2 Form a team of internal researchers
- 3.3 Conduct a baseline study to find out the state, and problem of School performance prior to the implementation of Strategic Management System Plans.

During Implementation

- 3.3 Create and implement the school action plans using self-reflection cycle of Plan-Action-Observe-Reflect with an integration of AIC technique.

Post Implementation

- 3.4 Carry out field study to investigate the effectiveness of strategic management system plans and challenges or constraints after six-month of the implementation.
- 3.5 Quantitatively and qualitatively analyzed the effectiveness of and constraints to the implementation of the Strategic Management System Plans.

Phase 4: Proposal of the Strategic Recommendations

- 4.1 Propose a strategic recommendation for educators to effectively establish and implement the Strategic Management System Plans.
- 4.2 Study the feasibility of recommendations with experts and stakeholders.

Phase 5: Conclusion and Publication of Study Report

Figure 7 Research Procedure

Phase 1: Concept of the Strategic Management System Plans

The first phase involved the study of conceptual foundation of the implementation process and evaluation of the Strategic Management System Plans. To do this, the concepts and principles of Balanced Scorecard in both profit and non-profit educational organizations were reviewed. Meanwhile, the current strategic policy of Cambodian Ministry of Education, Youth, and Sport; and the strategic management system plans of Kampong Chheuteal High School were addressed. In this phase, the previous related research studies were also reviewed. This review led to the establishment of conceptual framework. The detail of this review was presented in Chapter 2 of the study.

Phase 2: Construction of Research Instruments for Data Collection

The second phase dealt with the construction of instruments for implementing and evaluating the school strategic management system plans. To begin with, a preliminary version of research instruments for implementation and evaluation of the Kampong Chheuteal High School Strategic Management System Plans were developed by the researcher. The instruments attempted to collect both quantitative and qualitative data. They were constructed in the forms of questionnaires, interview questions, checklists, and field notes. In order to ensure their validity, the instruments were evaluated by seven experts in the field of the Strategic Management System Plans in education. Likewise, to provide clear understanding of the language for participants, the instruments were translated into Khmer language and validated by three Cambodian university lecturers of English. The instruments were, then, tried-out with 34 teachers at Hun Sen ROTA Vocational High School in order to ensure that they are highly reliable for the present study. Further details of the research instruments were described in the Instrument Section in Chapter 3.

Phase 3: Implementation of Strategic Management System Plans

The third phase is the implementation of the Strategic Management System Plans of Kampong Chheuteal High School. This phase was divided into three steps. The first step, prior to the implementation of the strategic management system plans, two rounds of the orientation on the Strategic Management System Plans were conducted in order to promote teachers and staff members' better understanding on the implementation and evaluation process of the Strategic Management System

Plans. All the teachers were invited to participate in this orientation. Following the orientation, a team of 9 internal researchers was formed. The team of internal researchers consisted of two administrators, four department heads and three ordinary teachers of Kampong Chheuteal High School. They were all selected based on their interests, voluntary, involvement in the formation and implementation of strategic management system plans. Meanwhile, the baseline study on the Strategic Management System Plans were carried out in order to find out the state and problems of Kampong Chheuteal High School performance prior to the employment of strategic management system plans. To obtain the information of school performance, the school document, report and statistics of previous academic years were analyzed. Furthermore, the interview with school administrators was conducted in order to confirm the accuracy and reliability of the information. The obtained information was then recorded in the KPIs checklist and calculated into scores.

The second step, during the implementation period of the Strategic Management System Plans, responsibilities to set up and accomplish all operational action plans were distributed to all teachers and staff members. Then, two rounds of follow up sessions of every three-month strategic operational action plans were conducted. In each round, a self-reflection cycle of Plan-Action-Observe-Reflect with the integration of AIC technique was employed to ensure that all the action plans were operating on the right track with participation from all individual stakeholders. Also, the follow up session attempted to ensure that occurred problems were effectively tackled in time. To do this, the instruments such as checklist and the interview as well as the field notes were utilized.

The third step, following a period of a six-month implementation, the evaluation of the Strategic Management System Plans was carried out in order to find out its effectiveness, improvement of the operational action plans, as well as the challenges hindering the implementation process. In this stage, the triangular technique of survey, in-depth interview, focus group discussion, observation, and document study were applied to collect all relevant data and information using a KPIs checklist, a questionnaire, interview questions, and field notes. The KIPs checklist was used collect the data on operational action plan achievement which presented in five-Likert rating scale. In addition, the questionnaires were distributed to all school

teachers to find out their perception of teachers on the school performance and challenges in the implementation of the Strategic Management System Plans. At the same time, in-depth interviews and focus group discussion were conducted with key informants, to confirm whether the data collected indicated in the KPIs checklist and the questionnaire are accurate and consistent. The detail of the implementation of the Strategic Management System Plans is explained in the Data Collection section in Chapter 3.

Phase 4: Proposal of Recommendations on Strategy Implementation

The fourth phase is the proposal of the strategic recommendations for educators to effectively implement the Strategic Management System Plans. The strategic recommendations were crafted and proposed based on the data collected during the implementation of the Strategic Management System Plans. To ensure its feasibility and generalizability, the strategic recommendations were consulted with 27 education experts from both Cambodia and Thailand through focus group discussion. The comments from the experts were used for recommendation alteration. The recommendations are insightfully explained in Recommendation to Effective Strategy Implementation section in Chapter 4.

Phase 5: Conclusion and Publication of Study Report

The final phase is the conclusion and publication of the study report. With the approval from the advisors and dissertation committee members, the report was finalized and presented in five chapters based on the official format of university publication.

Research Instruments

This research study employed multiple types of instruments to collect the data including the questionnaire, two versions of interview questions and KPIs checklist. All the instruments were translated into Khmer language to avoid language barrier and to provide respondents with insight understanding of the content of instruments. In order to ensure the accuracy of the translation, three Cambodians who taught English at university level, were invited to do proofreading. The names of those experts are presented in Appendix M.

Questionnaires

The questionnaire was used to collect data regarding teachers evaluation perception on the effectiveness of the Strategic Management System Plans; particularly it investigated the state, problems, and recommendations associated with the implementation of Kampong Chheuteal High School Strategic Management System Plans.

The structure of the questionnaire was designed based on Bourke (2005) and Burns (1994). Bourke (2005) simply mentioned that the construction of questionnaires were to seek two different types of information: (1) background information on students, teachers, or other issues, such as age, gender, amount of schooling, etc., and (2) attitudinal information about some specific events, way of behaving, quality of life, etc. The first type of information could be obtained from questionnaire or institutional records while the second one was gathered through a number of items listed to ask about each attitude or opinion in an attempt to tap various aspects underlying beliefs or feelings which gives rise to the attitudes. In addition, Burns (1994) explained that three kinds of items, which were commonly used in the construction of questionnaires, were closed items, open-ended items, and scale items. The closed items allowed the respondents to choose from fixed alternatives, for instance, the dichotomous items such as "yes" or "no". The open-ended items additionally provided a frame of reference for respondents' answer with their own expressions. The scale was a set of items to which the respondents respond by indicating degrees of agreement or disagreement in the format of a Likert scale.

The contents of questionnaires were designed based on the indicators of the Strategic Management System Plans and the concepts of Balanced Scorecard of Kaplan and Norton (2004). This questionnaire collected both qualitative and quantitative data and consisted of four parts. The first part asked the respondents for the information regarding their demographic data. For example, gender, education, working experience, certification currently held, primary responsibility and so forth. The second part investigated the effectiveness of the Strategic Management System Plans. It contained four major aspects, namely financial perspectives, learning and growth perspective, internal process perspective and customer perspective. The third part explored the major barriers to implementation process of the Strategic

Management System Plans. This part addressed six aspects, namely strategy formulation, environmental change, organizational structure, organizational culture, communication, and resource allocation. The last part of the questionnaire elicited recommendations for effectively implementing strategic management system plans. The sample of the questionnaire in English version is illustrated in Appendix G while the questionnaire in Khmer version is presented in Appendix H.

Responses to the questionnaire items were provided on a 5-point Likert scale of strongly disagree, disagree, neutral, agree, and strongly agree.

1	means	strongly disagree
2	means	disagree
3	means	neutral
4	means	agree
5	means	strongly agree

Content Validity and Reliability of the Questionnaire

The content validity of the questionnaire items were checked by seven experts in the field of strategic management system plans in education. The experts consist of three Thai university professors, two committee members of HRH's project in education in Cambodia, one English native professor, and one Cambodian official of MoEYS (See Appendix L). The experts were asked to give comments on the appropriateness of the questionnaire as well as to rate its items as to whether it is congruent with the objectives using the questionnaire evaluation form constructed by the researcher. The items to be evaluated in the evaluation form were the Item-Objective Congruence (IOC) Index which is scored ranging from -1 to 1.

Congruent	=	1
Questionable	=	0
Incongruent	=	-1

The items that have an index equal or lower than .5 were revised. On the other hand, the items having an index higher than .5 were reserved (Tirakanant, 2003). Results indicated that 99.15% of the items in the first set of questionnaire were rated higher than 0.5 of the IOC index while 100% of the items in the second set of questionnaire were rated higher than 0.5 of the IOC index. These results signify that items were acceptably congruent with research objectives and the aspects of the

Strategic Management System Plans. Only two items in the first set of questionnaire needed alteration. Comments from the experts centered on the language used, for example, they expert suggested to modify the term "solo" and adjusted some languages. In conclusion, overall questionnaires appear to be well-designed and consistent with standards and cover all aspects of the Strategic Management System Plans.

The evaluation and the comments from the experts were used as a basis for the questionnaire alteration. After the alteration, the questionnaires were piloted with 34 teachers who are currently working at Hun Sen-ROTA Vocational High School in Kandal Province. The reliability of the overall questionnaire was then calculated using the Cronbach's Alpha formula. The findings showed that the test reliability in the try-out study was 0.81, which can be interpreted that the test had high reliability and definitely applicable for the main study.

Interview Guide

In this study, two versions of interview questions or interview guide are constructed based on the interview guide technique of Patton (2002) in which four categories are included: (1) Behavior/Experience Questions, (2) Opinion/Value Questions, (3) Feeling Questions, and (4) Sensory Questions. The first version is created in order to seek more insight information regarding ongoing states and problems teachers encounter during the implementation of the projects and operational action plans. This interview consists of a number of questions concerning the participants' background and information, participants' involvement in the implementation of the Strategic Management System Plans, barriers to the strategy implementation process, and the ways to overcome the challenges. The sample of these questions is described in Appendix D.

Another version of interview questions is constructed to ask participants' understanding on the Strategic Management System Plans after six months of implementation. Particularly, the interview questions address the formulation process of the Strategic Management System Plans. Moreover, the questions investigate the implementation process and the effectiveness of the Strategic Management System Plans, constraints and solution to the implementation of the Strategic Management System Plans, and to elicit future recommendation for effectively establishing and

implementing the Strategic Management System Plans. The sample of these questions is illustrated in Appendix E.

KPIs Checklist

KPIs checklist is developed to investigate the effectiveness of the Strategic Management System Plans. The items to be included in this checklist are designed into four Balanced Scorecard perspectives based on the existing 12 strategies and 24 key performance indicators. The checklist employs 5-point Likert scale, and the meaning of each scale varies depending on the strategies and indicators. The detail of the KPIs checklist is presented in Appendix I.

Field Note

Field notes refer to transcribed notes or the written account derived from data collected during observations and interviews. In this study, two versions of field notes are used. First, field note for in-depth interview, as seen in Appendix J, records the data throughout the interview process and during the intervals between interviews. Particularly, the field note mainly accounts the description of the interview, the informant's reaction, and researcher's reaction as well as assumption. It also serves as reminders for follow-up questions inspired during the interviews, a guide for monitoring the interview process, and a data collection method.

Another field note is designed to record the minutes of meeting among internal researchers. This field note consists of two parts. The first part records the date, the time, the place, the number of participants, and the agenda of the meeting while the second part keeps the written account on the progress and achievement of the operational action plans based on Balanced Scorecard perspectives and PAOR self-reflection circle. The detail of internal researchers' meeting field note is presented in Appendix K.

Data Collection

The data collection for this study was carried out in three phases: before, during, and after the field study. The whole study of an implementation the Kampong Chheuteal High School Strategic Management System Plans is described as follows.

Prior to the Study

The researcher made a formal request for granting permission to conduct a data collection from the Graduate School of Burapha University. After receiving the approval from Burapha University, the researcher sent a permission letter to Kampong Chheuteal High school and related organizations for approaching their educational staff in order to collect the data.

During the Study

As mentioned earlier in the research procedure, there were three phases for the implementation period of the Strategic Management System Plans: Pre-Implementation, During Implementation, and Post-Implementation. In each phase, several different methods were utilized to collect the data.

Pre-Implementation

Prior to the implementation of the Strategic Management System Plans, the analysis of current school situation was undertaken. To attain all the data, the document review and baseline study was conducted.

Document Review

To better understand the implementation process of the school Strategic Management System Plans, and insights relevant to the research questions, the researcher reviewed and analyzed a number of related document, such as strategic planning implementation, the MoEYS's strategic policy, the school Strategic Management System Plans documents, school statistic record, and school reports.

Baseline Study

The researcher conducted a baseline study using the KPIs checklist to record the data before the implementation of the Strategic Management System Plans. All the required data was obtained through the existing school documents and the interview of several key informants. The results of the baseline study is illustrated in Appendix Q.

During Implementation

The implementation period of the Strategic Management System Plans lasted for 6 months and divided into two rounds. During the implementation period, operational action plans together with various activities were put into practice. Following the completion of the first round of the implementation, the in-depth

interview and the focus group discussion was conducted. They were conducted in Khmer language, as the participants' English proficiency is limited.

The in-depth interview was conducted with three of the four administrative teams while the focus group discussion was done with project holders, 11 ordinary teachers and seven heads of the departments, in order to track the progress of the action plans, find out challenges they had encountered in implementing the action plans, and elicit the way they had used to overcome those challenges. To record all the data, the field notes were utilized. The responses from the in-depth interview and focus group discussion were concluded and reported to the school principal as a foundation guideline to help tackle the problems and adjust the action plans for the next round.

Post-Implementation

An evaluation to investigate the effectiveness of the Strategic Management System Plans was undertaken following six months of their implementation. The evaluation employed KPIs checklist, questionnaire, and in-depth interview.

Evaluation Success Level of KPIs

The researcher together with school evaluation committee evaluated the success level of the KPIs following six months of the strategy implementation. The KIPs profile was used to judge degree of achievement of each indicator. All the judgment data were report in scores of 5-Likert rating scale on the KPIs checklist. The result of the evaluation is presented in Appendix R.

Survey

The researcher conducted a survey using the questionnaire to investigate the participants' perception on success, problems, and recommendations associated with the implementation of Kampong Chheuteal High School Strategic Management System Plans. The questionnaire was delivered to the administrative board, heads of the departments, teachers, and staff members of Kampong Chheuteal High School. Before delivering the questionnaire, the researcher insisted the respondents to provide true responses and asked them whether they have any concerns on the questionnaire. The researcher also confirmed the respondents that the data obtained from the questionnaire would be kept confidential and used only for the

present study (see Appendix A for questionnaire and interview protocol). The questionnaire was collected right away after the respondents completed them.

In-depth Interview

The second round of the in-depth interview was conducted following the employment of questionnaire. The researcher conducted this interview with four school administrative team, two officials from department of vocation orientation of the MoEYS, one official from provincial department of Education, Youth and Sport, and one member from HRH princess education project. The interview attempted to confirm that the data collected were accurate and consistent. To collect all relevant information, the audio recording and field notes were used.

Focus Group Discussion

The researcher conducted the focus group discussion with two target groups: the sample and the experts. After the second round of the implementation of strategic management system plans, the researcher organized a focus group discussion with four group of participants: 11 ordinary teachers, 7 head of the departments, 10 students, and 9 community representatives. The data collected from these participants were synthesized into recommendations for strategy implementation. In order to ensure that the proposed recommendations provide school and educators with maximum benefits, the focus group discussion in which participated by 27 experts was held to analyze whether the strategic recommendations were feasible in the authentic situation. The invited experts for this validation are specialized in strategic management in education and are from both Cambodia and Thailand as indicated in Appendix N.

Table 7 Summary of Data Collection

Phases	Needed Information	Sources of Information	Triangular Data Collection	Instruments
Pre-Implementation	State and problems of Kampong Chheuteal High School	- School Strategic Management System Plans	- Document analysis	- School document
		- School statistic record	- Baseline Study	- KIPs checklist
		- School report		
During Implementation	Progress of action plans implementation (Achievement and Problems)	- Teachers	- Focus group discussion	- Field note
		- Administrators	- In-depth interview	- Field note
		- Internal researchers	- Focus group discussion	- Field note
Post-Implementation	Process and effectiveness of strategic management system plans	- Project reports	- KIP Evaluation	- KIPs checklist
		- Teachers	- Survey	- Questionnaire
		- Internal researchers	- Focus group discussion	- Field note
		- Administrators	- Survey	- Questionnaire
			- In-depth interview	- Field note
		- HRH Education Project committee	- In-depth interview	- Field note
		- MoEYS officers		
Recommendations		- Students	- Focus group discussion	- Field note
		- Community representatives		
		- Experts	- Focus group discussion	- Field note

After the Study

Following the study, the researcher analyzed the data obtaining from triangular sources. The researcher then drew a conclusion of the findings, wrote up a completed report of the dissertation.

Data Analysis

Several analysis techniques including descriptive statistics, interpretive technique, and thematic techniques were employed to analyze the data in this present study. The use of different techniques was conducted based on the research objectives, and types of data. The details of the data analysis are explained in table 8.

Table 8 Summary of Data Analysis

Research Questions	Means of Data Collection	Means of Analysis
1. How is the implementation process of Strategic Management System Plans conducted at Kampong Chheuteal High School?	- Document Analysis - Field note	- Thematic Analysis
2. What are the obstacles to the implementation process of Strategic Management System Plans of Kampong Chheuteal High School?	- Questionnaire - Interview guide	- Descriptive statistics - Thematic Analysis - Thematic Analysis
3. To what extent do the Strategic Management System Plans of Kampong Chheuteal High School be successfully implemented?	- Questionnaire - Interview guide - KPIs Checklist	- Descriptive statistics - Thematic Analysis - Interpretive
4. What are the recommendations for educators to effectively formulate and implement Strategic Management System Plans?	- Questionnaire - Interview - Focus group	- Thematic Analysis

Chapter Summary

The methodological perspective of this study was related to research design, population and participants, research procedure, research instruments, data collection, and data analysis

The study employed an embedded mixed-method research approach. The participants of the study included 55 teachers, 10 students, 9 community representatives, 3 officers from the ministry of Education Youth and Sport, and 1 committee member of Her Royal Highness Education Project. All the participants were mixed in terms of ages, educational background, professional profile, and socioeconomic standing.

There were five phases in this present study. The first phase involved the study of conceptual foundation and the establishment of the framework for the implementation process and evaluation of the Strategic Management System Plans. The second phase dealt with the construction of instruments for school strategic Management System Plans implementation and evaluation. The instruments included questionnaires, interview questions, checklists, and field notes. The third phase was the implementation of the Strategic Management System Plans of Kampong Chheuteal High School. The fourth phase was the proposal of strategic recommendations for educators to effectively implement the Strategic Management System Plans. The final phase was the conclusion and publication of the study report.

The data collection lasted for six months. The data were collected in both qualitatively through in-depth interview, focus group discussion, and observation, and quantitatively through a questionnaire. Thematic analysis technique was used to report qualitative data while interpretive technique and descriptive statistics were used to report the results.

CHAPTER 4

RESULTS

This chapter reports the results of this study. It is organized around the four research questions and presents the results from analysis of the in-depth interviews, focus group discussion, survey, observation, as well as documents. The presentation of the findings is divided into four sections in accordance with the research questions. The first section deals with an examination of the implementation process of the strategic management system plans of Kampong Chheuteal High School. The second section addresses constraints hindering in implementing the Strategic Management System Plans. The third section reports the effectiveness of the Strategic Management System Plans. The last section suggests recommendations for educators to effectively implement the Strategic Management System plans.

Implementation Process of Strategic Management System Plans

Research Question 1: How is the implementation process of the strategic management plan conducted at Kampong Chheuteal High School?

In this research question, the researcher investigated the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School. To answer this question, the primary strategic planning, termed as Strategic Management System Plans by the researcher, was extensively reviewed. In addition, field notes were used to record the implementation progress. Meanwhile, three groups of participants, namely administrators, internal researchers, and teachers were asked to provide information about the implementation process of strategic management system plans via an in-depth interview form and focus group discussion. The responses from the participants can be summarized into three main stages: pre-implementation, during implementation, post-implementation.

Pre- Implementation (Plan)

Pre-implementation is the plan stage of PAOR, where the school prepares its readiness for the implementation of the Strategic Management System Plans. Responses from the participants on this phase were varied and related to multiple

aspects. However, they commonly yielded insight information regarding methods to implementing school projects. The data analysis revealed three main themes: (1) training was provided to facilitate the implementation of SMSP, (2) departments were assigned to submit project proposals, and (3) recommendations to and approvals on proposals were provided by administrators.

For training, administrators invited all teachers across the school and community representatives to attend two rounds of orientation on the Strategic Management System Plans. The first round was conducted in late August 2013 and was attended by a total of 40 teachers and 6 community representatives. The low number of participants was because some teachers were on a long vacation while others were studying in Thailand. The second round was organized on 28 September 2013, a few days before the new academic year started. There were 45 out of 80 teachers participated in the orientation session. They all came from every department in the school. The orientations aimed to provide the orientation participants with background knowledge of the Strategic Management System Plans on several aspects as follows: the importance of the Strategic Management System Plans, an overview of the Strategic Management System Plans, strategies, and indicators. The orientation participants were also presented with a sample of detailed initiatives supporting each strategy and indicator. The participants were invited to brainstorm possible projects to support all the four perspectives and strategic goals of the Strategic Management System Plans.

In terms of the proposal submission, administrators directly contacted every department via face-to-face, letter, and phone call, to encourage and assign them to develop project proposals, which align with one or more school strategic goals. To ensure all proposed projects address school strategic goals and are feasibly operational, all heads of the departments, who were also internal researchers, were assigned to explain and facilitate those projects. As a result of this process, 57 project proposals were submitted to administrators. Of these project proposals, 36 were related to students/stakeholder perspective, 14 focused on internal process perspectives, 10 supported learning and growth perspective, and 7 concerned financial perspective.

Following the proposal submission, administrators reviewed the submitted proposals. Proposals, which were **not aligned** with school strategies or not completed, were sent back to the teachers with **directive** comments for revision. On the other hand, projects, which were precise, **reasonable**, well-written and responsive to school strategic goals, were approved. However, the approval process would take time up to several months as the principal needed to ensure that all the required resources for project implementation were available. Consequently, 34 projects was approved and put into an operation.

During Implementation (Act and Observe)

During implementation, two stages took place, Act and Observe as they were identified in PAOR. The implementation period of the Strategic Management System Plans lasted for six months and was divided into two rounds. The first round started from November 2013 to January 2014, and the second round immediately began from February to April 2014. Because the school suffered from a shortage and delay of financial supports, a numerous projects were terminated or postponed. Therefore, the participants' responses associated with the implementation process were not insightful. Despite the limitation of information obtained, the data from in-depth interviews, focus group discussions, and observations could generate the results as follows:

Act

As soon as the requested budget was allocated, some of the approved projects were gradually implemented. According to the school record, the number of projects to be implemented during the first round was 32. Most of those projects were identified as small projects, which implemented short-term or/and and did not need much financial support. For example, red-cross project, computer training for poor students project, seminar on Cambodian education strategies project, and so forth. Meanwhile, some newly-approved projects as well as the revised projects were implemented in the second round of the implementation period. Noticeably, there were also a number of projects terminated half way due to the limitation of financial and technical supports. The list of successfully implemented projects is illustrated in Appendix P.

Each of the projects had a leader who was for implementing the project together with two or three subordinates. The heads of the departments were assigned to facilitate the project implementation. Their main accountability was to enable all of project holders to work collaboratively. The project holders were allowed to run their projects independently. They were required to make instant decision and practical judgment to deal with real constraints. Meanwhile, the three vice-principals were also assigned to oversee projects and provide teachers assistance as requested.

Observe

In both rounds of implementation period, administrators as well as heads of the departments observed, monitored, and controlled the projects. They particularly followed up the progress of the projects over time by documenting the success of action; carefully observing the implementation process, note taking the intended and unintended effects of action; and recording circumstances and constraints that limited the planned actions. Furthermore, administrators, heads of the departments together with the researcher held a regular monthly meeting to discuss what they recorded, to ensure that the projects were implemented on the right track, and to find ways to minimize obstacles to the implementation.

Post-Implementation (Reflect)

Post-Implementation is the Reflect stage of PAOR, where the participants got together for feedback to improve the implementation. There were two times of reflections. At the end of first round of the implementation, administrators, heads of the departments, teachers and researcher recalled the reflection of the action as it has been recorded in observation. The reflection was done via the forms of focus group discussion and in-depth interview. Two separate groups of 11 teachers and 6 of the department heads were invited to a group discussion while 3 administrators were asked for in-depth interview. Similar to the first round, four groups of 11 teachers, 6 heads of departments, 10 students, and 9 community representatives were invited to focus group discussion while 4 administrators, three 3 MoEYS officers, and one HRH Education Project Committee were in-depth interviewed. The first round of reflection was conducted between 28 January to 03 February 2014 and the second round was conducted between 01 – 10 May 2014.

Participants were asked to report the progress of the projects, the potential issues, and constraints they encountered during the project implementation. They were also asked to provide recommendations to overcome barriers and a variety of perspectives possible in the situation leading to a revised plan. Tape-recorded was used and data obtained from the interview, and the focus group discussion was coded, categorized into themes and translated into English. The detailed of reflection is presented as in the following sections.

Obstacles to Implementation of Strategic Management System Plan

Research Question 2: What are the obstacles to the implementation process of strategic management plans of Kampong Chheuteal High School?

This research question deals with the biggest challenges the school experienced and must overcome to successfully implement the Strategic Management System Plans. To address this question, in-depth interviews, focus group discussion, and survey were conducted in order to trace challenges hindering in the implementation of the Strategic Management System Plans.

For the data from the interview, the key words that appeared most frequently in responses during the interviews and focus group discussion were coded, recorded, and translated into English. The responses were, then, summarized, and categorized into six themes as presented in Table 9.

Table 9 Summary of Obstacles to Implementation Process of Strategic Management System Plans

Themes	Summary of Responses
1. Resource Allocation	Financial challenges included insufficient amount of budget; delay of budget allocation, and mismatch between budgeting policy and school's needs

Table 9 Summary of Obstacles to Implementation Process of Strategic Management System Plans (Continued)

Themes	Summary of Responses
2. Leadership	Leadership problems concerned irresponsibility of administrative team, including ignorance of duties, poor facilitation, and lack of evaluation
3. Structure	Organizational structure was ambiguous, ineffective and non-functional. It allowed more centralized working style and made it difficult for teachers to work across the departments.
4. Understanding	Teachers did not insightfully understand the school the Strategic Management System Plans. They were less knowledgeable in terms of project formation and implementation. Also, they were lack of practical experience in project management.
5. Culture	Old-generation teachers were strongly resistant to strategic management system plans by demonstrating lack of participation, poor cooperation, low commitment, and discouragement.
6. Communication	The school had poor communication in both contexts, inside and outside the school. Internal meeting among management team and teachers were seen very rare while the connection with community, development partners, and workplaces was not widely strengthened.

To support the data obtained from the interviews, the perception of teachers on obstacles to implementation process, was explored through a questionnaire,

developed from the literature. The data gathered was analyzed by using the descriptive statistics (maximum, minimum, mean, and standard deviation) as briefly illustrated in Table 10. The detailed of the teachers' perception on obstacles to implementation process is indicated in Appendix O.

Table 10 Summary of Obstacles Obtained from the Questionnaire

Obstacles	n	Min	Max	\bar{X}	SD
Organizational Structure	55	1.00	5.00	3.24	.89
Organizational Culture	55	1.33	5.00	3.68	.84
Communication	53	2.00	5.00	3.54	.68
Resource Allocation	54	1.33	5.00	3.52	.80

Resource Allocation

The data collected from in-depth interviews, focus group discussions, and survey revealed that one of the key factors that hindered the process of the strategic management system plans was financially oriented. According to Table 10, the participants viewed the resource allocation as a potential problem ($\bar{X}=3.52$, $SD=0.80$). With this value, it can be interpreted that participants perceived lack of resource allocation was more than moderately problematic to strategy implementation. Insightfully, the qualitative data from most of the participants confirmed that resource allocation problem concerned three aspects, namely inadequate amount of school budget, delay of budget allocation, and mismatch between school strategy and MoEYS's guideline on budgetary spending.

Respondents including teachers, administrative team, and MoEYS officers similarly reported that the school experienced a hardship of insufficient budget during the first semester of 2013-2014 academic year. They additionally reported that even the budget for vocational education gradually increased, the budget for supporting general education as well as extra-curricular activities remained extremely restricted. According to the administrative team, the school was unable to request for an increase in the amount of the annual budget. They reported that the amount of budget

allocation was firmly fixed by the regulation of the Ministry of Education, Youth and Sport (MoEYS). For instance, Administrator #4 commented:

"For general education, ...the money we received from the Ministry of Education, Youth, and Sport is very little. We almost can't do anything with it."

With this financial limitation, administrators, heads of the departments, and teachers were concerned about negative impacts on the success of the Strategic Management System Plans as a whole. They pointed out that without concrete financial supports, most of the proposed projects could be terminated.

Additionally, the participants mentioned that the school suffered from the delay of budget allocation. They revealed that the school needed to wait for two or three months to get the budget. As the school operation largely depended on the budget provided by the MoEYS and development partners, the participants believed that tardy budget allocation caused a major trouble for school operation and improvement. Particularly, it decelerated the process of a number of school projects. Regarding this constraint; Administrator #1 stated:

"The projects under the SIG budget is supposed to be run six months ago, but now we haven't been able to implement any of them due to they don't provide us the budget."

Moreover, the data revealed that the delay of budget allocation resulted in inadequate time for school to utilize its budget effectively. With the time constraint, some teachers claimed that it would be difficult for them to run long-term projects while some others complained that they could not manage to spend up the budget in time. This was because the fiscal account of the school needs to be finalized every three months. In this case, a head of the department # 5 complained that,

"Some of the instruments to be used in my department are not available in our province and probably in Cambodia. So I ask my former teacher to help me buy them in Thailand. So it takes time."

Furthermore, the participants complained that the budgeting guideline did not match with the real needs of the school. This barrier restricted the school administrators' authority to allocate the budget into the school projects. Both administrators and MoEYS officers admitted that the distribution and allocation of the school budget should align with the budgetary guideline of the MoEYS. Reallocating the budget, administrators would probably face a punishment or a blame from the MoEYS for failing to follow the ministry's guideline otherwise they needed to seek for approval from the MoEYS. With this strict rule, the school was unable to use some amount of its annual budget. With this regard, MoEYS #2 revealed that,

".....the one who wrote the budgeting guideline doesn't study well about the school's need. Therefore, the guideline and the actual needs don't go together. However, the school can request for the adjustment of the guideline."

As mentioned above, the majority of participants believed that financial problem negatively impact the success of school strategy implementation. Because the finance is one of the most important remedies to push all the school operational plans possibly run forwards, this problem needed to be tackled urgently.

Leadership

Based on data from in-depth interviews, most of the participants reported that one of the obvious obstacles in implementing school strategies was an ineffective leadership. Particularly, they pointed out that some members of administrative team were irresponsible towards their duties, poor facilitation, and lack of systematic evaluation.

Participants including administrators, heads of department, teachers, officers of MoEYS, and stakeholders viewed that some members of administrative team seemed to ignore most of their assigned responsibilities. In other words, they did not

perform their assigned duties with full potential and capacity. Even there was a formal nomination from the MoEYS and the school principal; they attempted to find an excuse to overlook their obligations. Specifically, they distanced themselves from and did not pay full attention to their work. For example, Administrator #1 stated that,

"Some of the administrators didn't work well. They are assigned to be accountable for a number of projects. But they didn't want to work on additional school initiatives."

Likewise, heads of the department and teachers similarly mentioned that there was no explicit and effective mechanism of managing the change. A number of school operational plans came into halt immediately and unexpectedly as none of the administrators fully oversaw and facilitated current projects. They also reported that teachers, who were project holders, considerably needed a directive guidance and cooperation from administrators. On the other hand, without administrators' recommendations, teachers were likely to abandon their projects half way. As mentioned by head of department #2,

"Some of my projects are very well-planned, but they could not go forwards and finally failed to progress, because no one monitors and push them forwards."

In addition, the participants admitted that there was no systematic evaluation on the school initiatives where both internal and external committee could work to assess the success of the initiatives. Practically, the school was reported to evaluate its initiatives by the judgment of a group of internal researchers or heads of the departments. Moreover, the participants suggested that the mechanism of proper management should be in line with the guideline documented in the Strategic Management System Plans. To do so, the school was supposed to manage their work through the four-step working circle of Plan-Action-Observe-Reflect. However, the data revealed that school appeared to work better on Plan and Action stages while

Observe and Reflect remained noticeably questionable. As mentioned by MoEYS officer # 3,

"Evaluation is the problem. We formulate strategic management plans, we implement it, but we didn't have a systematic evaluation. There should be evaluation committees both internal and external. The external committee should consist of officers from district or provincial office or Thai experts. We have implemented our plans for almost one year, but we don't formally form the committees."

As previously described, leadership of the administrative team was seen to be one of the potential barriers to strategy implementation. Three aspects of leadership, namely the practice of duties, facilitation, and project evaluation, were suggested to be urgently improved.

Organizational Structure

Both qualitative and quantitative data indicated that another obstacle to the school strategy implementation was ambiguous, ineffective and non-functional organizational structure. This structure allowed administrative team and staff work against the power structure. Also, it made teachers extremely difficult to work across the departments.

Based on quantitative data presented in Table 10, the participants mostly agreed that current school structure restricted the process of strategy implementation ($\bar{X} = 3.68$, $SD = 0.84$). Accordingly, the data gained from the in-depth interview revealed that the work was not widely distributed to teachers at an operational level. The school used the more centralization management system. Instead of delegating work to subordinates, most of the work was handled by only two of the administrators and a group of administrators' assistance. Responding to this accusation, administrators admitted that their team needed to control and execute most of the work, as they wanted to reduce resistance from subordinates. This working style clearly indicated that instead of forming coalitions and gain the support of influential people in the school, too much burden of work was given to a particular group of

people. As a result, the real work was not executed under the organizational structure. In supporting this issue, heads of department #2 mentioned that,

"All administrators should clearly assign responsibility in decentralization way. Administrators should deliver tasks to subordinates and head of departments. I strongly recommend them not do all the work by themselves."

Another barrier of organizational structure was that there were too many levels of authority where teachers from different departments found it difficult to share resources. The data from the in-depth interview indicated that the majority of teachers needed to depend their own department resources to operate their projects. In case they needed assistance from other departments, the request for the use of their resource was found very difficult. They reported that they needed to get approval from many people to access the resource. For example, they needed to go through head of the department, the deputy principal and the principal, and sometimes they needed to get approval from the teachers who looked after the resources. With this regard, Teachers #3 stated that,

"We want to borrow their chicken coop to run our Chicken Raising Project. We don't have money to construct it. They are not using it but the didn't give us."

In conclusion, it was found that organizational barrier was related to the existence of high extent of decentralization, which was considered as a main cause of unstructured working process, as well as the too many levels of authority which made it difficult for teachers from different department to utilize the shared resource.

Understanding of Strategic Management System Plans

The data pointed out that a part of the problems to implementing school strategy derived from teachers' lack understanding. Quantitative data revealed that most of teachers were lack of practical knowledge and experience in implementing strategies as well as in project management ($\bar{X} = 3.85$, $SD = 0.70$).

Similarly, the data collected from an in-depth interview pointed out that most of the participants, including administrators, heads of department, teachers, and stakeholders specifically agreed that teachers were less knowledgeable in terms of project formulation and implementation. Teachers reported that most of them did not involve in the formation of the Strategic Management System Plans while some others were absent from the strategy orientation sessions. Moreover, the document of the Strategic Management System Plans was not widely distributed to teachers. Also, they described that the implementation of strategic management system plans was a new experience for them as they were only accustomed to implementing short-term plans in previous academic years. With these matters, teachers' understanding on project formulation and implementation was very limited. Eventually, teachers did not feel confident in their ability to work on the given projects, and they were also reluctant to participate in the school project implementation when they were invited. As the head of department # 6 viewed that,

" Actually, most of us didn't get involved in the strategic plan formation. Also, the school orientation was not widely organized..... The teachers in my department are not knowledgeable enough for project implementation. If they understand it, I believe they will be likely to participate more."

As described above, the barrier of lack of understanding was perceived by most of the participants. It was found that teachers directly working with the project implementation were not fully equipped with adequate knowledge of both project formation and implementation.

Organizational Culture

Data collected from administrators, heads of the department, and community representatives emerged that many of the teachers at the operational level remained strongly resistant to the Strategic Management System Plans. Statistically, participants perceived that working culture opposing the change was above the average level ($\bar{X}=3.68$, $SD=0.84$). This problem was clearly demonstrated through the lack of participation and cooperation as well as low commitment.

Based on the data collected from in-depth interview with administrators and head of the departments, most of the teachers, particularly old-aged teachers, refused to accept additional work as a project holder. As mentioned by the administrators, in addition to main teaching responsibility, teachers were required to fulfill the school strategy implementation in which they needed to dedicate more time to conduct extra-curricular projects. With this extra burden, teachers were unhappy with this assignment and consequently most of them were likely to provide less cooperation if they were not given reasonable incentives. In elaborating this matter, head of department #5 pointed out that,

"We have faced many obstacles. Some of our teachers do not participate in our projects. For instance, project holder doesn't cooperate with us as stationed teachers. Even I tried to invite them to join our project, but they didn't cooperate."

Likewise, administrators, heads of the department, and community members described that the commitment of teachers who joined running the projects was very low. Most of them were reported not to monitor their work consistently. Also, it was found that some project holders, did not actually operate the projects with their best. They delayed or terminated the projects with unreasonable excuse. For example, head of the department # 4 said that,

"My colleagues did not follow up the progress of our project... It seems that they are not willing to work on this project."

As earlier described, it indicated that teachers strongly opposed to comply with decisions made by top management or administrative team. Especially, they expressed their resistance toward the implementation of school strategy by giving less cooperation, poor commitment, and negligence of responsibility.

Communication

Most respondents believed that problem to the success of the Strategic Management System Plans implementation was related to communication.

Communication in this section represents both communications within organization and with development partners. Statistically, teachers and stakeholders considered communication as a major barrier for school initiatives being implemented slowly ($\bar{X} = 3.54$, $SD=0.68$).

Based on the responses from administrative team and teachers, the school did not perform well enough in terms of information dissemination. They reported that in the current working situation, Kampong Chheuteal High School appeared to be having poor internal communication. They particularly revealed that there was very rare meeting among management team and teachers at operational level. Administrators blamed each other for failing to organize regular meetings. At the same time, it was found that many teachers in the school were not willing to participate in the meeting, while many others complained that they were staying in the environment where they felt isolated in their cubicles. Therefore, it can be said that both administrators and teachers did not do their best to share information to one another ($\bar{X} = 3.84$, $SD=0.96$). In relation to this communication problem, the Administrator # 2 said that,

“ Administrators should have organized a meeting one or twice a week in order to discuss and follow up our operational plans as well as sharing information.”

Likewise, the data obtained from administrators and MoEYS officers indicated that the school communication with community, development partners, and business industry was not widely strengthened. Community and MoEYS officer relatedly believed that the school did not build up a good level of communication with external organizations. It was reported that there were frequent miscommunication between the school and development partners as well as the school and community. For example, for many times, teachers misunderstood the original concepts and purposes of initiatives granted by HRH Princess Maha Chakri Sirindhorn Education Project. Also, the school did not consistently communicate with communities. To give more concrete example of this poor linkage, Community Representative # 2 disclosed that,

"The decrease in students' academic result and discipline due to the school and community do not talk with each other quite often. We should meet more often to talk about and deal with the school issues."

In consistent to what is mentioned by community representative, MoEYS officer # 2 stated,

"I don't see that school has a solid industrial linkage. It is the school's responsibility to expand its cooperation with workplaces so that both teachers and students can learn from them via study visit and practicum."

As previously mentioned, it could be concluded that the school was found to have poor communication with both those inside the school and outside the school. This constraint caused a number of negative consequences; for example, they missed the opportunity to maximize the benefits in terms of students' academic performance and professional practice.

Effectiveness of Strategic Management System Plans

Research Question 3: To what extent do the strategic management system plans of Kampong Chheuteal High School be successfully implemented?

This research question investigates the effectiveness of the implementation of strategic management system plans. The data to answer to this research question were a self-assessment report, in-depth interview, and a survey. These methods were used for the purpose of triangulation. However, the interview did not generate much information on the effectiveness of the Strategic Management System Plans as the majority of the respondents similarly mentioned that it was too early to judge whether the school strategy implementation positively affects the school performance and achievement while many of the school projects were still underway.

The results from a self-assessment showed how well the school implemented the Strategic Management System Plans. The self- assessments were based on rating scale of 0 to 5 where 0 meant the activity has not implemented or evaluated yet while 5 meant the particular activity was fully and successfully implemented. The rating of

the implementation of specific strategies was based on school indicator criteria stated in the document of the Strategic Management System Plans. The result of the self-assessment is indicated in Table 11. Likewise, the data collected from the questionnaire is computed into descriptive statistic. The statistical calculation of this result is presented in Table 12 and in Appendix O respectively.

Table 11 Effectiveness of the Implementation of Strategic Management System Plans by Self-Assessment

Strategies	Indicators	Scores	
		Baseline	Post-Implementation
Student Perspective			
C1: Provide educational service in various forms in order to fulfill the demands of communities.	1.Number of vocational programs offered.	4	4
	2. Percentage of students and people who are satisfied with school educational services.	0	0
C2: Use community to educate students to be a complete person.	1. Percentage of students who successfully pass the national exam.	3	0
	2. Percentage of students who successfully pass the national exam with good grade.	3	0
	3. Percentage of students who are able to accomplish their studies based on school criteria (knowledge, skills, integrity, and learning enthusiasm).	0	0
	4. Number of students who have outstanding achievements in developing the country.	0	0
C3: Provide students with a profit-earning skill and at the same time educate them to care for a local culture and environment.	1. Percentage of vocational students who are employed with one year after their graduation.	0	0
	2. Number of subject areas, which are taught with the integration of local culture and environment.	5	5

Table 11 Effectiveness of the Implementation of Strategic Management System Plans by Self-Assessment (Continued)

Strategies	Indicators	Scores	
		Baseline	Post-Implementation
Internal Process Perspective			
I1: Develop an Internal Quality Assurance.	1. The degree of achievement in developing internal quality assurance.	2	2
I2: Strengthen school strategy-based management	1. Number of school systems, which employ strategy-based approach.	3	3
I3: Develop school environment to be a good learning resource.	1. Percentage of students and people who are satisfied with school environment at high level.	0	0
	2. Number of subject areas which are taught using appropriate and effective instructional materials.	5	5
Learning and Growth Perspective			
L1: Organize professional development for administrators and teachers in accordance with their duties and school strategies.	1. Percentage of administrators, teachers, and supporting staff, who receive additional professional development.	5	5
L2: Develop the school to world- standard educational center.	1. Percentage of teachers and staff who are satisfied with school learning environment at high level.	0	0
	2. Number of knowledge-management projects.	1	3

Table 11 Effectiveness of the Implementation of Strategic Management System Plans by Self-Assessment (Continued)

Strategies	Indicators	Scores	
		Baseline	Post-Implementation
Financial Perspective			
F1: Increase school revenue through the integration of existing resources into academic instruction and the provision of community services.	1. Number of projects seeking for additional school income.	4	5
	2. Proportion between school income and budget provided by the MoEYS.	0	0
F2: Use good governance principle to strengthen financial management and to turn the school to be self-reliance.	1. Degree of achievement resulted from systematic budget distribution mechanism.	2	3
	2. Number of errors occurred in financial audit.	0	0
	3. Proportion between school income and outcome.	0	0

Table 12 Effectiveness of the Implementation of Strategic Management System Plans by Questionnaire

Persepctive	n	Min	Max	\bar{X}	SD
Students/Stakeholders	55	1.38	4.63	3.87	.57
Internal Process	55	1.75	4.75	3.72	.54
Learning and Growth	55	1.50	4.75	3.75	.64
Financial	54	1.00	5.00	3.39	.90

Data from the triangular sources relatedly revealed that the Strategic Management System Plans has increased the school effectiveness in many aspects. Considering the effectiveness of each perspective, results indicated that the school has done better in terms of students/stakeholders perspective followed by learning and growth perspective, internal process perspective, and financial perspective.

Effectiveness on Students/Stakeholders Perspective

According to the self-assessment report illustrated in Table 11, the Strategic Management System Plans influenced the student/stakeholder effectiveness. As a result, the school has been successfully offered at least four vocational programs (score=4). Also, it was found that many subject areas were taught with the integration of local culture and environment (score=5). Even though the statistical number of students, who successfully pass the national exam, accomplish their studies based on school criteria, and get employment, has not been found out, there was remarkably increase in student and stakeholder-related projects. Especially, the increase was found during the second semester. The total number of projects related to students and stakeholders was 23. The detailed projects are listed in Appendix P. Meanwhile, this result is consistent with the quantitative data in which the effectiveness on students/stakeholders perspective earned the highest score ($\bar{X}=3.87$, $SD=0.57$). Besides, the self-assessment report illustrated that the implementation of strategic management system plans has resulted in the improvement of the productivity of the school to some extent, in terms of students' learning behavior, ethics and integrity ($\bar{X}=3.93$, $SD=0.85$), students' love of local culture and environment ($\bar{X}=3.91$, $SD=0.77$), as well as their readiness for the world of working employment ($\bar{X}=3.87$, $SD=0.74$).

Effectiveness on Internal Process

The Strategic Management System Plans was also seen as a factor to improve the school internal process and to help strengthen school management systems. As shown in Table 11, the self-assessment report showed that school invested their time and efforts in developing and using an internal quality assurance system (score=2). Likewise, it was found that the attempt to improve school internal process using strengthening school-strategy based management was at moderate level

(score=3). Noticeably, it was found that the school was successful in increasing appropriate instructional and learning resource for most of the subject areas (score=5). With these efforts, the school has employed strategy-based approach in a number of its management systems, such as school management system, personnel evaluation system, budget management system, and storage and inventory management system. Along with this result, response from in-depth interview revealed there was an increase in transparency and smoothness of school operation. In this case, MoEYS officer # 3 commented that,

" The internal management is okay. Transparency is acceptable. I don't see any noticeable management problem. "

This result is also supported by quantitative data in Table 12 in which teachers perceived that strategic management system plans has resulted in the improvement of internal management at some extent ($\bar{X}=3.72$, $SD=0.54$). Insightfully, teachers agreed that strategic management system plans have resulted in promoting quality of academic curriculum ($\bar{X}=4.05$, $SD=0.67$), better school environment ($\bar{X}=3.73$, $SD=0.84$), and effective human resource management ($\bar{X}=3.62$, $SD=0.82$) respectively. Nevertheless, teachers seemed to be unconfident that school strategic management system plans could effectively restructure administrative work in the school as they scored this item the least at $\bar{X}=3.55$ and $SD=0.76$. The details of effectiveness of strategic management system plans on school internal process are presented in Appendix O.

Effectiveness on Learning and Growth Perspective

Owing to school learning and growth, data from the interview, focus group discussion, and questionnaire similarly confirmed that the strategic management system plans produced a good result in terms of teacher professional development.

Based on the self-assessment report, the teachers' capacity building has been improved significantly (score=5). In this case, the school statistic indicated that 90 % of administrators and teachers have received ongoing professional development in the field they were working in. It was reported that the majority of teachers were sent to

pursue higher degrees in Thailand and Cambodia, while some others were sent to take short training courses, seminars, and academic study tours in Cambodia and in other foreign countries. To illustrate this finding, Administrator #1 pointed out that,

"The teacher development is good. Almost all teachers are provided with additional ongoing development."

On the other hand, the self-assessment report indicated that the number of knowledge-management projects was considered to be limited (score=3). Only monthly technical meeting, orientation on school strategic management system plans, and seminar on Cambodia educational policy have been organized.

Effectiveness on Financial Perspective

In terms of financial perspective, the self-assessment report indicated that there was a gradual increase in school revenue. This can be evident through the increase in financial-related projects in which an integration of existing resources into academic instruction and the provision of community services are emphasized (score=5). In spite of many projects, Table 12 presents an overall level of the effectiveness on financial perspective was lower than that of others ($\bar{X}=3.39$, $SD=0.90$). The school ability to increase school revenue was not much as expected ($\bar{X}=3.24$, $SD=1.08$) while the application of good governance principle in financial management was rated a bit higher at $\bar{X}=3.54$ and $SD=0.96$.

Generally, it can be concluded that the Strategic Management System Plans had positive effects on school performance in all perspectives. Even it was too early to assess the effectiveness of strategic management system plans, the students' performance and school's learning and growth were seen significantly improved while the effectiveness level on the school internal process and finance management was seen lower than moderate level.

Recommendations to Effective Strategy Implementation

Research Question 4: What are the recommendations for educators to effectively formulate and implement strategic management system plans?

This research question discusses solutions to overcome the current barriers to the implementation of strategic management system plans. To address this question, responses and recommendations from participants who were administrators, heads of departments, teachers, students, MoEYS officers, community representatives, as well as committee of HRH education project, are synthesized. Despite recommendations varied, the common proposed method to overcome barriers to the implementation of strategic management system plans centered on developing and wisely utilizing a guideline of strategy implementation.

Guidelines for Strategy Implementation

The first critical realization among participants is that effective implementation efforts required specific and flexible guidelines, which can be adapted to overcome constraints of the school. The execution of strategy should be a well-structured process. The efforts of staff members and the managerial skills are sometimes not sufficient to make all strategies work. Therefore, to address the formidable implementation obstacle previously identified is to develop a guideline to lead and support the implementation process.

The proposed guideline for strategy implementation was evaluated by 27 panel experts in the field of educational administration from Cambodia and Thailand. The list of the experts is listed in Appendix N. The experts were invited to provide with both verbal and written comments. The comments were then used to verify the guideline so that it becomes effectively applicable. To clarify what to be reviewed in the guideline, the comments from experts were summarized as follows:

Table 13 Summary of Experts' Comments on Guidelines for Strategy Implementation

Aspects	Comments
Training	There has to be a capacity building program provided to both administrators and ordinary teachers so that school has enough talented and skillful personnel.
Decentralization	There should be an empowerment program that allows school to make decision on resource allocation.
Participation	It is important that all stakeholders involve in the formation and process of strategy implementation. The active participation leads to sustainability of the work.
Effective management system	To have a smooth run on strategy implementation, the school should establish an effective management system in which monitoring and appraisal work has to be carried out regularly.
Organizational Culture	The school should take the organizational culture in to consideration. Successful strategy implementation required a spirit of cooperation, discipline, and transparent working culture.
Computer Assisted Program	It is helpful to utilize technology to facilitate the strategy implementation
Resource and 4 M	The school should secure necessary resources and utilize them wisely based on the purpose of the strategic management system plans. Similarly, the school should ensure that they have 4 M (Man, Materials, Management, and Money) ready in place for the strategy implementation.
Objective Alignment	The school should strictly set up the objectives of the initiatives in line with the whole Strategic Management System Plans. Make sure that every initiative goes in the same direction.

The comments from the experts were used as a basis to modify a guideline for the strategy implementation process. The overall guidelines emphasize two general aspects. First, the guideline illustrates the flow of logical execution actions. The arrows indicate the flow and the relationship. For instance, the operational process cannot be successfully conducted without support from internal and external factors. Second the aspect focuses on the loop of evaluation, which comprises feedback and change. The implementation of strategic management system plans is a dynamic, adaptive process, leading to organizational learning. For learning and change to occur, feedback about school performance against strategic objectives and process is necessary. Continuous monitoring of performance and conducting self-assessment of implementation and managing change are critical aspects of the implementation process.

The guidelines, as shown in Figure 8, begin with school's Strategic Management System Plans, which is concerned with students, internal process, learning and growth, and financial perspective. The school role is education-oriented and strategic, and weighing how to invest physical, human, financial resources to reach ultimate objectives, and how to grow the entire organization in sustainable way. The operational process is influenced by both external and internal context.

External Context

Kampong Chheuteal High School is an educational organization, which is operated under the supervision of the Ministry of Education, Youth and Sport (MoEYS) of Cambodia. In addition, the school constantly gets supports and cooperation from external stakeholders such as organizations and development partners. Either directly or indirectly associated with the school strategic plans, stakeholders play significant role effectively in order to help the school reach their top potential. Stakeholders are supposed to participate throughout the process of strategic planning and to give trust, technical support, financial support as well as to provide places for study tour and professional practicum. Although there are many stakeholders, this section focuses on the only key stakeholders' responsibility they are supposed to adhere to as follows.

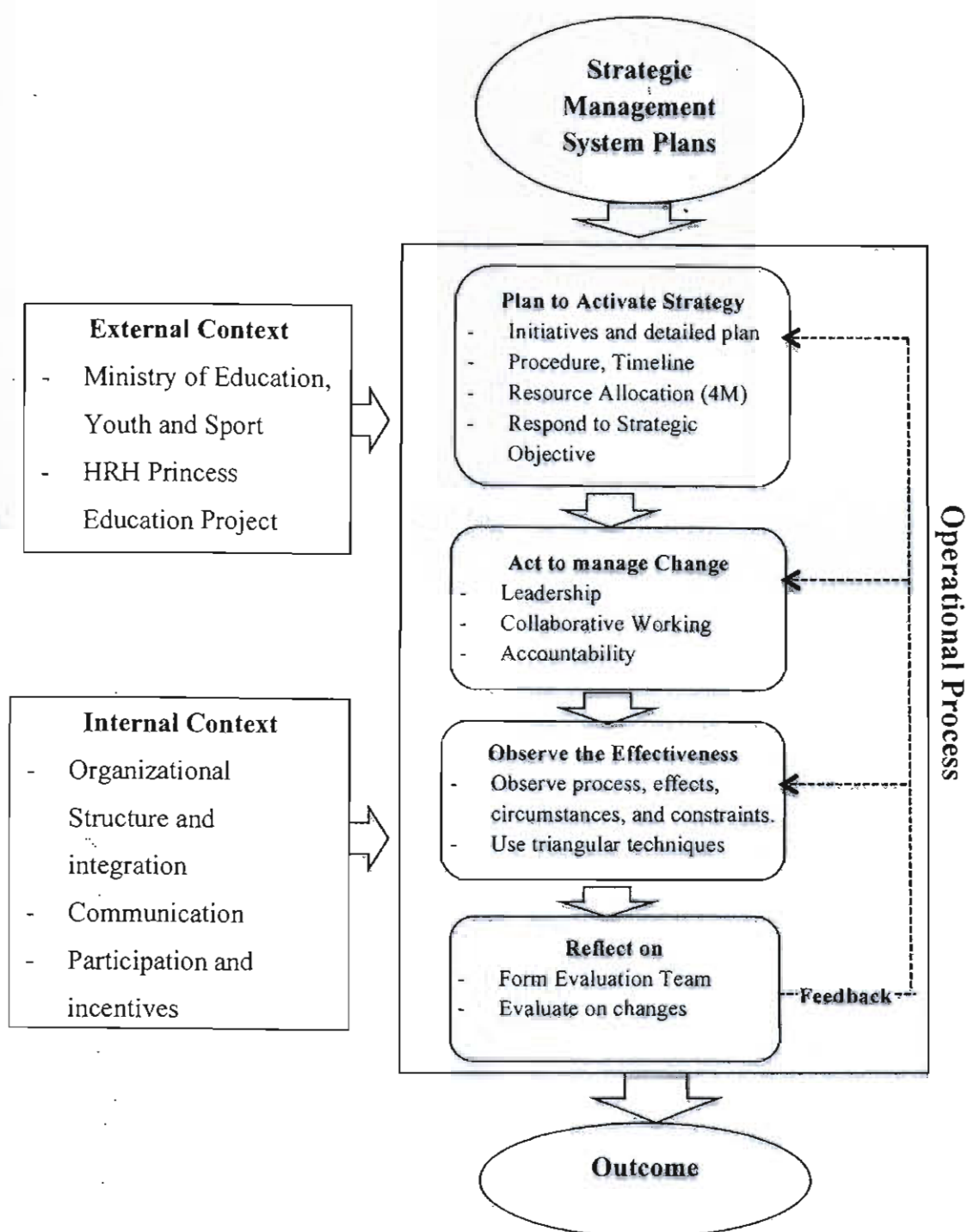


Figure 8 Guidelines for Implementing Strategic Management System Plans

Ministry of Education, Youth and Sport

For the ministry level, the common suggestions from participants and experts concerned two main aspects: decentralization of authority and speedy facilitation. Participants reported that decentralizing in budgetary and other management authority to school level was intensely debated among teachers at all school levels. Over time, both administrators and teachers considered the current budgetary and management authority was too much centralized. By strictly aligning with MoEYS' s guideline, the allocation of budget was not totally responsive to the purpose of the school Strategic Management System Plans. Conversely, they believed that decentralizing in more financial management and authority could offer school with greater flexibility over the use of categorical program fund that are provided by the MoEYS. With full authorization of management, school would be able to develop school policies through more participatory style of decision-making. Likewise, autonomy in budgeting allocation or re-allocation could allow the school to invest the money to fulfill their strategic plans as well as their real needs without any pressure.

A part from decentralization in budgetary management, speedy facilitation from the MoEYS is urgently needed. It was reported that the MoEYS's facilitation and assistance to school was seen somehow limited. This can be seen via the continual delay of budget allocation and poor technical supports to school. Unlike other schools in the country, Kampong Chheuteal High School is dual system school, where the Strategic Management System Plans required the school to conduct most of its instruction via field practice. The delay of financial funding and technical supports may result in all the initiatives postponed or terminated. Therefore, it is vital that MoEYS provides school with more facilitation in cooperative manners.

To sum up, it is recommended that the school should be given full authority to work independently without any pressure. To do this, thorough decentralization in budgetary and administrative management should be provided to school level so that they could have full ability to execute their duties. Furthermore, the additional facilitation and cooperation should be respectively given in order to speed up and to successfully accomplish the planned assignment.

HRH Princess Maha Chakri Sirindhorn Education Project

It is undeniable that HRH Princess Maha Chakri Sirindhorn Education Project has been a main development partner of Kampong Chheuteal High School. Through MoU, the HRH project has been supporting the school with a whole education system and has played an important role to help the school to successfully accomplish most the predetermined strategic objectives. In order to maximize benefits from this project, two recommendations are proposed to solve current barriers.

First, there has to be an effective communication between the committee members of the HRH project and the school. Both sides needed to continuously work through existing mechanism collaboratively. They should mutually and regularly communicate to prevent misunderstanding. For the sake of school improvement, communication should be sincere, direct, and top-down. With this regards, the administrator teams suggested the committee members of the HRH project to communicate with them before they start working with staff at operational level. The absence of administrators' facilitation has been a major blockade to implement school projects with development partners.

Second, the HRH project could provide the school with extra financial supports to execute unplanned projects. As reported earlier, the use of the school budget needs to be strictly adhered to the MoEYS's guideline. In other words, the projects, which are not associated with this guideline, would likely confront financial challenges. As a result, this limitation has caused a number of projects collapse. Therefore, the financial supports from the project could play a vital role to help the school accomplish its extra-scheme projects as well as to boost the achievement of the Strategic Management System Plans as a whole.

Business Industry

Business industries play an important part in the success of the School Strategic Management System plans. On the other hand, Kampong Chheuteal High School has experienced poor industrial linkage in recently years. In order to achieve school strategic objectives, participants suggested that cooperation between business industry and school should be strengthened. One of the most recommended ways the business industry could do is to provide school with long-term partnerships.

With strong business-school partnership, a number of programs could be generated. First, the business industry could provide students with opportunities to experience the real world of work. This can be done through facilitating the study tour or workplace visits, organizing workshop and conference, and offering internship and on-job training. Second, business industry could collaborate with school in curriculum development, assisting the school with guest speakers, providing in-service training to teachers, and allowing the use of their facilities. Third, the business industry could support both students and teachers with grants and scholarships for their further academic development.

Internal Context

The operational process of the strategic management system plans requires supports from internal context, which consist of organizational structure, communication, and participation and incentive.

Organizational Structure and Integration

The school strategic management system drives the choice of school structure. Alternatively, the choice of structure is vital to the implementation of school strategic management system plans. In this guideline, the relationship of the structural issue between centralization and decentralization of authority in the school is discussed.

Over time, Kampong Chheuteal High School has been a centralized-oriented organization. However, centralization and decentralization degree should be balanced in this High School. The mix of centralization and decentralization is conceived to be crucial mechanism for operational workflow. This is because some activities or functions that cut across different departments require centralization so that it could reduce the duplication of resource. For instance, the school should have centralized staff functions such as personnel or human resource division that service all departments to avoid duplication and generate cost saving.

Like other public organizations, Kampong Chheuteal High School is made up by different departments and divisions. To reduce the efficiency of the work, it should be decentralized around the departments and divisions in which a certain amount of autonomy, local control, responsibility, consistent consultation, and lateral coordination of functional expertise are given to all departments and divisions.

Clear communication

It is recommended that successful implementation of school strategic management system plan requires that all of stakeholders be acutely aware of strategic priorities and direction. Many of Kampong Chheuteal High School teachers complaint that they did not have enough information and knowledge to strategy implementation.

To cope with these challenges, the school should imply the use of all possible means of communication, such as top-down, bottom-up, lateral, formal, informal, internal, external, and continuous communication in order to ensure that all staff members understand the strategic plans, internalize the need for change, and support the execution of the plans. It is important to provide a consistent, clear, and positive message about why the new strategy is the best course of action, and to encourage staff to own its implementation. It is also important to repeat that message.

Administrators' communications should cover what will be different about the organization, why this change is critical to achieve the impact the school seeks, and how the staff members can play an important role in strategic management system plans implementation. On contrary, vague and unclear communication would likely lead to frustration and resentment among staff that will create further impede the process of strategic management system plans and consequently it will end with ineffective results.

Participation

It was found that there was strong resistance from teachers in the implementation of school strategy. To deal with this obstacle, Kampong Chheuteal High School should make it as much as possible that teachers take part both in planning and throughout the operational process. The Strategic Management System Plans are more likely to succeed when teachers at all levels get intimately involved with the process. This is due to participation is one of the most crucial steps to carry out new policies and procedures effectively. To make all teachers actively participate in the implementation of school strategy, administrators should keep on encouraging them to work in team collaboratively through all possible measures.

First, administrators could begin with providing training to all teachers so that they understand their role in the execution of the strategy; what is expected; and when and how to do it. Second, teachers should be encouraged to get involved in

strategy implementation in so that they could have the opportunity to demonstrate how their daily activities contribute to the school strategy. Third, the teachers' comments and feedback should be taken into account for changes. With this regard, teachers would feel that they are honorable and their feedback is respected. Finally, incentives should be provided to those who could accomplish their job with desirable achievement. With incentives or rewards, teachers feel motivated to perform their tasks with care and responsibility.

Operational Process

The operational process of strategic management system plan is proposed based on the framework of Kemmis and McTaggart (2007) in which a cycle of four steps are identified.

Plan to Activate Strategy

In order to achieve the ultimate goal of the strategy, planning of operation is required to activate strategies. With this regards, several considerations are suggested.

First, the characteristic of the planning should be flexible and achievable. To do so, it is recommended that school strategy must be translated into short-term operating projects. To achieve strategic objectives, the school must develop short-term, measurable, objectives that relate logically to, and are consistent with school strategy. By this mean, the school should start with small projects on issues that can produce early successes in order to build confidence of participants and those who observe from the sidelines. Over time, the focus of the projects may gradually extend into system-wide policies and practice.

Second, while the details of initiatives are clarified, the procedure and timeline should be precisely set. At the same time, the 4 M resources (Man, Management, Material, and Money) should be made appropriately available. The availability of the 4 M helped prevent the termination of the initiatives as the matter of resource shortage.

Third, the school should weigh on the importance of each perspective and the resources it is going to allocated. Since Kampong Chheuteal High School is non-profit organization, the students/stakeholders perspective should be prioritized and at least 40 % of the school resource should be allocated on student improvement

projects. At the same time, the rest of the resources should be used for the promotion of internal process, learning and growth, financial perspective respectively.

Act to Manage the Change

The act phase is guided by the planning but is not controlled by it. Action needs to be fluid and dynamic, with teachers required to make spontaneous decisions and exercising practical judgment. To make all the actions become smoothly operational, it required at least three elements, the leadership of administrators, the collaborative team working, and the teachers' accountability.

The administrators are suggested to have a strong leadership, mainly to be fully committed to the initiatives by providing long-term support, encouragement, guidance, and involvement throughout the implementation process, and continue afterwards to ensure its continuous use.

At the same time, the action needs collaborative working among teachers. At Kampong Chheuteal High School, many teachers distanced themselves from the school projects. Therefore, it is necessary that administrators try every possible mean to get back their active involvement. To do so, it is suggested that school administrators should secure all resources needed for project implementation as well as provide teachers with training on project implementation, incentives, and encouragement. Administrators could assign a task force or group of people to manage and take the overall responsibility of the implementation process of strategic management system plans.

In addition, teachers who are projects holders must be accountable for their defined tasks. According to the findings, a number of teachers were not fully committed to their duties. Thus, there should be a full mechanism for accountability so that teachers may be evaluated, they may be penalized or rewarded as per needed.

Observing

Observing on the outcome and reality of the plans is very crucial for the implementation of strategic management system plans. This is because observation has the function of documenting the effects of critically informed action. It provides a basis for reflection at the time, as well as in the future as the cycle runs its course.

To effectively conduction an observation, it is recommended that Kampong Chheuteal High School set up a collaborative research team to document

their practice. The research team could observe the action process; the effects of the action (both intended and unintended), the circumstances and constraints of action, the way circumstances and constraints limit or channel the planned action and its effects, as well as any other issues aroused. The research team should be scheduled to have a regular meeting as it is a way of reporting action progress, monitoring its impact, generating new ideas and drawing more people into the process.

It is important that observation is comprehensive, well-planned, responsive, and open-minded to record even the unexpected. While document on insights towards the topic of concern is important, observation can be conducted through a number of triangular techniques, namely journals, tape and video records, and questionnaire and interview.

Journals are excellent tools for recording on-going systematic critical reflections on the effects of the project and how it is progressing. It is a record of what the participants did and thought. Some of the items that may be included in the journal are: initial reflections on the topic of concern, the plans that were made, actions that were taken, impressions and personal opinions about the action taken and reactions to them, results obtained from observational techniques, references, and notes from relevant literature that were discovered.

Tape or video recording provides an unaltered memory of the events that have occurred. It is a quick way of obtaining a complete, accurate, and detailed record of discussion, meetings, conversations or interviews. There are some ethical issues that need to be addressed over the use of tape/video recording. The people taped should be aware of both the purpose and possible uses, and of course anonymity must be maintained in subsequent reports.

Questionnaire and interview are excellent techniques for obtaining specific feedback on a variety of topics. They should be employed and conducted with key people, for example school administrators and heads of department, project holders, and other stakeholders.

Reflection

The reflection stage is an active evaluative process whereby the school could make processes, problems, issues, constraints, and feedback reflectively visible in their strategic management system plan. It is the mechanism that allows the school

to evaluate and understand whether effects of the strategy on the key performance indicators and against the predetermined principle objectives and the right things are indeed being accomplished in the strategy implementation. Based on this understanding it is possible to determine the organization's priorities.

In this reflection stage, the school should form both an internal evaluation committee and external evaluation committee. These committees are supposed to critically weigh their experience, to judge whether effects were desirable, and to provide future directions. Particularly, the reflection should focus on the issues, such as the effectiveness of the changes they have made, the things they have learned, the barriers to be solved, and the ways to improve changes in the future. It is strongly recommended that this process is done collaboratively to get comprehensive reflection and feedback. Through dialogue, group reflection will usually lead towards a future cycle of research with a revised plan. It is through this process that the concern or problem becomes clearer and more focused.

Additional Findings

Strategy Formation

This study found out that there were some limitations on the feasibility of strategies, indicators as well as their evaluating criteria. To be applicable, this study suggested two recommendations: the modification of the indicators and the establishment of additional strategies. Of all the 24 indicators, four indicators should be modified as follows:

1. Indicator C1.1 "*The number of vocational program offered*". It found that the change in number of the academic programs is not determined by the school. The school could only make a proposal, however, the final decision is made by the MoEYS. Therefore, this indicator should be modified.

2. Indicator C2.1 "*Percentage of students who successfully passed the national exam*" and indicator C2.2 "*Percentage of students who successfully pass the national exam with good grade*". It was found that the nature, environment and criteria of the national exam recently changed dramatically. The number of students who passed the national exam nationwide was significantly lower than that was

expected. Therefore, the criteria used to measure this indicator in this study were too high to achieve and it is necessary to adjust them.

3. Indicator F1.2 *"Proportion between school income and budget provided by the MoEYS."* It was found that the criteria used to measure this indicator were too high to achieve. This is due to two factors. First, Kampong Chheuteal High School provides educational service at secondary education level. Based on the MoEYS's regulation, the school are supposed to provide free education all students regardless their races and ages. These could mean that any income collected from a tuition fee is prohibited. Second, the school is non-profit organization. Financial revenue earned from its operation is not prioritized. While the financial resource is mainly supported by the MoEYS, the major emphasis of the school is to give quality of education to students and stakeholders. Therefore, it is suggested that the criteria used to measure this indicator should be modified.

In addition to the modification of indicators and their criteria, a number of strategies should be additionally established. The suggestions are as follows:

1. Students/stakeholders Perspective: The current admission is to accept all the applicants to the vocational education program. This selection system is seen as disadvantages. It is suggested there should be mechanism to recruit talent students to the programs. Therefore, there should be another strategy added such as *"attract high number of quality students to the program."*

2. Financial Perspective: The current strategy on financial perspective focus on two major areas, namely the increase school revenue through the integration of existing resources into academic instruction and the provision of community services and the good governance principle to strengthen financial management. As the revenue is not in the prioritized agenda and as the rule limits the school to collect tuition fees, there should another strategy on *"raising fund to support school operational activities."*

Chapter Summary

As mentioned from above sections, it can be concluded that strategic management system plans had positive effects on the school performance. Even though, the end-year evaluation has not been conducted yet, the Strategic Management System Plans were seen as a crucial mechanism to best promote the student achievement as well as school learning and growth. Likewise, it somehow helped improve the school internal process and financial management.

However, it was reported that some obstacles were found hindering the implementation process of strategic management system plans. Lack of resource allocation and resistance to changes were found to be the most potential problem while poor leadership, lack of understanding of the Strategic Management System plans, and lack of communication were considered moderately serious.

To tackle these formidable barriers and to successfully implement strategic management system plans, it is recommended that a flexible and dynamic guideline for strategy implementation is needed. The proposed guideline consists of three fundamental elements. First, the operational process should be conducted in accordance with the principle of Plan-Act-Observe-Reflect. This principle is an adaptive process leading to organizational learning and changes through feedback about school performance against strategic objectives and process. It also allowed continuous monitoring of performance and conducting self-assessment of implementation and managing change.

Second, the operational process required consistent supports from external stakeholders, namely the MoEYS, the HRH Princess Maha Chakri Sirindhorn education project, and business industry. Through external supports, schools could maximize the benefits in terms of having autonomous management and technical supports; bringing resources to enrich the curriculum; ensuring the academic programs which are required by industry; improving the education setting through upgrading facilities or equipment; connecting schools with local businesses, assisting with school curriculum development; and providing new learning opportunities and skill development.

Third, organizational leadership, organizational structure, culture, participation, communication, and incentive have a greatest influence on the success

of strategy implementation. Therefore, it is necessary for administrators to exercise a distributed leadership, communicate thoroughly, and set up an effective organizational structure so that work can flow smoothly. At the same time, teachers should reduce a culture of ignorance and resistance to changes. Most importantly, teachers who have good working achievement should be provided with rewards.

Moreover, the study found some limitations on the feasibility of strategies, indicators as well as their evaluating criteria. As a result, three indicators were suggested to be modified. At the same time, two more strategies were suggested to be added up.

CHAPTER 5

CONCLUSION AND DISCUSSION

This chapter concludes the current study, consisting of six parts. The first part begins with a brief summary of the study in which the research objectives, the research questions, the research design, and the research methodology are reviewed. The second part briefly summarizes research findings. The third part elaborates on the discussion of the research findings. The fourth part discusses the limitations of the study. The fifth part suggests the implications drawn from the findings. The final part provides recommendations for further studies.

Summary of the Study

This study aimed to investigate the implementation process, the barriers, and effectiveness of the Strategic Management System Plans of Kampong Chheuteal High School in Cambodia. At the same time, the study also proposed recommendations for successfully implementing the Strategic Management System Plans. Therefore, the study attempts to answer the following questions:

1. How is the implementation process of the Strategic Management System Plans conducted at Kampong Chheuteal High School?
2. What are the obstacles to the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School?
3. To what extent do the Strategic Management System Plans of Kampong Chheuteal High School be successfully implemented?
4. What are the recommendations for educators to implement the Strategic Management System Plans?

The design of this study was the embedded mixed method design where involved both quantitative and qualitative data; and the collection of qualitative data was embedded in the phase of the Strategic Management System Plans implementation.

The study was conducted into five phases. The first phase involved the study of conceptual foundation of the implementation process and evaluation of the Strategic Management System Plans. The second phase dealt with the construction of

instruments to evaluate the school Strategic Management System Plans implementation. The third phase is the implementation process of the Strategic Management System Plans of Kampong Chheuteal High School. The fourth phase is the proposal of strategic recommendations for educators to effectively implement strategic management system plans. The strategic recommendations were proposed based on the data collected during the implementation of the Strategic Management System Plans. The final phase is the conclusion and publication of the study report.

Research Results

The research results of the current study can be summed up into four parts. The first part deals with the examination of implementation process of the Strategic Management System Plans of Kampong Chheuteal High School. The second part addresses the constraints hindering in implementing the Strategic Management System Plans while the third part reports the effectiveness of the Strategic Management System Plans. The fourth part suggests recommendations for educators to effectively implement the Strategic Management System Plans.

Implementation Process of the Strategic Management System Plans

The implementation process of the Strategic Management System Plans of Kampong Chheuteal High School can be summarized into three main stages: prior to implementation, during implementation, post-implementation, as follows.

Prior to Implementation (Plan)

Prior to the implementation, three steps of action took place: (1) training is provided to facilitate implementation of SMSP, (2) departments were assigned to submit their project proposals, and (3) recommendations to and approval on proposal were provided by administrators.

In the first step, administrators invited all teachers across the school and community representatives to attend two rounds of the Strategic Management System Plans orientation. The orientation focused on several aspects, the importance of the Strategic Management System Plans, the overview of the Strategic Management System Plans as well as strategies and indicators. At the same time, all orientation participants were asked to brainstorm possible projects to support all the four perspectives and strategic goals of the Strategic Management System Plans.

In the second step, administrators directly contacted each department, encouraged, and assigned them to develop specific project proposals, which align with one or more school strategic goals. To ensure all proposed projects match school strategies and become feasibly operational, all heads of the departments, who were also internal researchers, were assigned to explain and facilitate the implementation of those projects.

The third step was the approval on proposal by administrators. Proposals, which were not in line with school strategies or not completed were sent back to the teachers with directive comments for revision. On the other hand, projects, which were well-written and responsive to school strategic goals, were approved.

During Implementation (Act and Observe)

The implementation period of the Strategic Management System Plans lasted for six months and were divided into two rounds. The first round started from November 2013 to January 2014 and the second round immediately began from February to April 2014. Due to the shortage and delay of financial supports from MoEYS, a numerous projects were either terminated or postponed. Therefore, responses from respondents were not insightful as expected. Despite limitation of the amount of information, the data triangulation from document, field note and observation could generate implementation into two steps as follows:

Step of Act

According to the school record, 32 projects, identified as small projects, were launched during the first round. However, a number of projects were terminated or postponed half way due to the limitation of financial and technical supports. Some newly-approved and postponed projects were later implemented in the second round of the implementation period. Each of the projects was accountable by one project leader and two or three subordinates. All the three vice-principals and heads of the departments were assigned to facilitate the project implementation process and provide assistance as requested. Their main accountabilities were to enable all of project holders to work collaboratively to complete the projects. The project holders were allowed to run their project independently. They were required to make instant decision and practical judgment to deal with real constraints.

Step of Observe

In both rounds of implementation periods, administrators as well as heads of department simultaneously did several jobs including observing, monitoring, and controlling. They particularly followed up the progress of the projects over time by documenting the effects of action; carefully observing the implementation process as well as the intended and unintended effects of action; recording circumstances and constraints that limited the planned action. Furthermore, they held a regular monthly meeting to discuss things they recorded and to ensure that the projects were implementing on the right track and to minimize obstacles to the implementation.

Post-Implementation (Reflect)

By the end of each round of the implementation periods, administrators, heads of the departments, teachers and researcher recalled the reflection of the action as it had been recorded in observation step. The reflection was done via the forms of focus group discussion and in-depth interview. Participants were asked to report the progress of the projects, the potential issues and constraints they encountered during the project implementation. They were also asked to provide recommendations to overcome barriers and a variety of perspectives possible in the situation leading to a revised plan. Tape-recorded was used and data obtained from the interview and the focus group discussion was coded, categorized into themes and translated into English.

Obstacles to Strategy Implementation

The data revealed that top six obstacles to strategy implementation were commonly found during the implementation of the Strategic Management System Plans.

The first barrier was financial resource allocation. This barrier included insufficient amount of budget; delay of budget allocation, and mismatch between budgeting policy and school's needs. It was perceived that without financial support and incentives, a numerous projects were postponed or halted immediately. The second barrier was ineffective leadership. The administrators' leadership was specifically concerned irresponsibility. This constraint included ignorance of duties, poor facilitation, and lack of systematic evaluation. The third barrier related organizational structure. It was found the current school structure was ineffective and

non-functional. This structure led unstructured of the workflow. Particularly, it allowed administrative team and administrative staff to work against the power structure. Also, it made teachers extremely difficult to work across the departments. The fourth barrier was found regarding the lack of teachers' understanding on strategic management system plans. It was found that most teachers were lack of practical experience in implementing strategies as well as in knowledge on project management. The fifth barrier concerned organizational culture. It was found that teachers were strongly resistance to the change. Particularly, they refused to accept additional work on strategy implementation. This resistance was shown through lack of participation and low commitment, and discouragement. The last barrier was poor communication. Data revealed that the school had poor communication in both contexts, inside and outside the school. Internal meeting among management team and teachers were seen very rare while the connection with community, development partners, and workplaces was not widely strengthened. This constraint would cause a number of negative consequences such as poor or inadequate information sharing, minimum support from community and development partners, and unclear responsibility and accountability. Failure to recognize and handle all above obstacles would definitely lead to failure of implementation.

Effectiveness of Strategic Management System Plans

The data on effectiveness of strategic management system plans revealed that the strategic management system plans has gradually increased the school effectiveness in many aspects. Considering the effectiveness of each perspective, results indicated that the school has done better in terms of students/stakeholder perspective followed by learning and growth perspective, internal process perspective, and financial perspective.

For effectiveness on student/stakeholder perspective, the school has been successfully offered at least four vocational programs in which many subject areas were taught with the integration of local culture and environment. Also, the implementation of the Strategic Management Plans has resulted in the improvement of the productivity of the school in terms of students' learning behaviors, ethics and integrity, students' love of local culture and environment, as well as the readiness for the world of working employment.

Owing to school learning and growth perspective, the strategic management system plans produced a good result in terms of teacher professional development. Approximately 90 % of administrators and teachers have received ongoing professional development in the field they were working in. At the same time, the number of knowledge-management projects was gradually increased.

The Strategic Management System Plans was also seen as a factor to improve the school internal process and to help strengthen school management systems. This can be seen through developing and using an internal quality assurance system, strengthening school-strategy based management, as well as increasing appropriate instructional and learning resources for most of the subject areas. With these efforts, the school has employed strategy-based approach in a number of its management systems, such as school management system, personnel evaluation system, budget management system, and storage and inventory management system. Nevertheless, it was found school strategic management system plans could not restructure effective administrative work in the school.

In terms of financial perspective, it was indicated that strategic management system plans moderately influenced on the financial perspective. This can be evident through the increase in financial-related projects in which an integration of existing resources into academic instruction and the provision of community services are emphasized and the application of good governance principle in financial management.

Recommendations for Strategy Implementation

To successfully implement the Strategic Management System Plans, a flexible and dynamic guideline for strategy implementation is needed. The proposed guideline consists of three fundamental elements.

First, the operational process should be conducted in accordance with the principle of Plan-Act-Observe-Reflect which is an adaptive process leading to organizational learning and changes through feedback about school performance against strategic objectives and process. It also allowed continuous monitoring of performance and conducting self-assessment of implementation and managing change.

Second, the operational process required consistent supports from external key stakeholders, namely the MoEYS, the HRH Princess education project, and business industry. Through external supports, schools could maximize the benefits in terms of having more autonomous management and technical supports; bringing resources to enrich the curriculum; ensuring the academic programs which are required by industry; improving the education setting through upgrading facilities or equipment; connecting schools with local businesses, assisting with school curriculum development; and providing new learning opportunities and skill development.

Third, internal factors of leadership, organizational structure, culture, participation, communication, and incentive should be noticeably emphasized. Therefore, it is necessary for administrators to exercise a distributed leadership, communicate thoroughly, and set up an effective organizational structure so that work can flow smoothly. At the same time, teachers should reduce a culture of ignorance and resistance to changes. Most importantly, teachers who have good working achievement should be provided with rewards.

Discussion

In this section, the discussion focuses on two respective aspects: effectiveness of implementation of the Strategic Management System Plans and barriers to the Strategic Management System Plans. The details of the discussion are addressed as follows:

Effectiveness/Result of Implementation of SMSP

The result of this study indicated that the Strategic Management System Plans, which employed the concept of Balanced Scorecard as a core element, had positive effect on the performance of the school. It was found that the Strategic Management System Plans played as an integral part to improve overall performance or effectiveness of the school. Based on the researcher's observation and data from focus group discussion, the betterment in school performance may due to two factors, namely the application of Balanced Scorecard and the availability of resources.

The application of Balanced Scorecard

In this study, the framework of Balanced Scorecard was integrated into the Strategic Management System Plans of Kampong Chheuteal High School. From the

researcher's observation, evaluation document, together with data gathered from in-depth interviews, Balanced Scorecard-focused strategy was appropriate to improve strategic performance of Kampong Chheuteal High School.

Prior to the application of Balanced Scorecard in its management system plans, the school management strictly followed its traditional routine short-term plans. Six months after the implementation of Balanced Scorecard-focused strategy, the evaluation result evidently pointed out that the strategy gradually had positive effect on the four perspectives of the school, namely students/stakeholders perspective, internal process perspective, learning and growth perspective, and financial perspective. For instance, one of the MoEYS officer mentioned that, "*I don't see any drawback in implementing of the school strategy. I think every aspect of the school work gradually improved*"

According to previous studies, implementing Balanced Scorecard has a transformational effect on an organization and creates a strong positive impact on the quality and performance of its core business. The Balanced Scorecard is not only better in monitoring and evaluating performance of an educational institution but also in increasing staff member participation, modifying educational strategy, and ultimately improving the performance to its best level. (Al- Zwyalif, 2012; Seppala, 2010; Yek, et al., 2007; Yuksel & Coskun, 2013). Similarly, Brown (2012) suggested the balanced scorecard framework is an excellent strategy-based management system that can be used in education institutions to assist them in clarifying their mission and vision and translating their vision into strategies. These strategies, in turn, can serve as the basis for developing operational objectives or actions with measurable indicators for the purpose of evaluating performance improvement and achieving success. More importantly, the balanced scorecard can be used as a tool to respond to current needs of educational organizations (Kaplan, 2001). With this regards, the Balanced Scorecard helps educational organizations to become increasingly more accountable, efficient, and productive. By enabling educational organizations to align initiatives, departments, and individuals to work in ways that reinforce each other, the balanced scorecard brings about dramatic performance improvements (Brown, 2012) and also allows education organizations to find new ways to do business, new methods for

organizing themselves and managing their performance, in order to be successful (Kaplan, 2001).

This result was consistent with the study conducted by Farid et al. (2008), which suggested that the development of the Balanced Scorecard is a fundamental process that enables continuous improvement and enhancement. The longer the Balanced Scorecard was used the more valuable it became, particularly because over time the administrative team was able to identify trends in the data and act on those trends for the betterment of the organization. The application of Balanced Scorecard is a test, learn and adapt. It explicitly states the hypothesis of the strategy, allowing it to evolve in real time as new ideas and directions emerge from the organization (Kaplan & Norton, 2001). Thus, without waiting for a perfect solution before the implementation of the strategy, Balanced Scorecard enables organizational change, which does not happen at one point in time, but is a continuous management process.

Availability of Resources

The existing resources of Kampong Chheuteal High School were supported from two main sources: Her Royal Highness Princess Education Project and MoEYS. Her Royal Highness Education Project has chiefly supported ongoing professional development, and physical resources including facilities and learning resources, while the MoEYS has mainly supported operational budget. In this section, the resource factor, termed by the researcher, is divided into three groups: human resource, physical resource, and financial resource. All participants believed that the success of implementation of the Strategic Management System Plans was in connection these resources.

Human Resource

Human resource plays very important role in contributing to the success of the implementation of the Strategic Management System Plans. In this study, human capital and their commitment for changes are addressed.

It was reported that retaining quality of human capital was in the focal emphasis of Kampong Chheuteal High School. With consistent supports from Her Royal Education Project as well as the MoEYS, all teachers were provided with opportunities to update themselves with current development of knowledge. As a result, more than 90 % of teachers currently working at Kampong Chheuteal High

School received further professional development. The professional development was conducted in various forms such as pursuing additional university degree, providing on-site coaching to individual teachers, organizing study tours, and attending seminars and conferences. Those who received further professional development, in return, were reported to contribute a lot to the implementation of the Strategic Management System Plans. On this matter, one of the administrative teams admitted that, "*The teachers graduated from Thailand have new ideas. They could help us a lot. I just instructed them a little, they could do it by themselves.*" This statement indicated that teachers who received ongoing professional development were able to carry on their work without major constraints. This is because professional development has deepened and broadened teachers' knowledge, abilities, and experiences. Additionally, professional development has boosted their confidence on the subject matter they taught as well as has enabled them to overcome challenges and fulfill demands of their jobs.

A numerous research studies have confirmed that human capital played an important role in the strategic planning on how to create competitive advantages. It paved the way for greater innovativeness, and this in turn offered positive implications on the organizational performance. They further found that the human capital indicators had a positive association on organizational performances. These indicators such as training attended and team-work practices, tended to result in superstar performers where more productivity could be translated to organizational performances (Dooley, 2000; Okumus, 2003; Seleim, Ashour, & Bontis, 2007; Selvarajan et al., 2007; Marimuthu, Arokiasamy, & Ismail, 2009).

The result of this study was consistent with the key strategic talent management proposed by Odden (2011) in which heavily investing in ongoing professional development could result in dramatic improvement of school performance. Likewise, the result of this study was confirmed by Cohen and Hill (2001) who suggested that teachers' human capital has received ample attention as a key ingredient for successful school reform and achievement. This is because knowledgeable teachers may have better handle teaching, be able to incorporate new instruction, and develop new insights and instructional practices that benefit students and school outcomes.

Sustained commitment of the administrators and staff members is another factor, which accelerates the implementation process of the Strategic Management System Plans. Most of the participants reported that the principal together with a group of young-generation teachers were strongly committed to overcome the obstacles to school strategy implementation. As said by one of the MoEYS officers, "*The principal has been working very hard to reach the goals even though there are some resistances from the colleagues.*" At the same time, one of the head of the department additional mentioned that, "*We want to show that we can succeed our project we are responsible for.... Other teacher will join us if they see our work ends in productive result.*" These comments reflect that both the principal and some of his subordinates were grounded with the working commitment. While they were devoting their efforts and time on undertaking their projects with full determination, the challenges they encountered, as mentioned in the previous section, may become minimal. Their commitment, even from a small number of people, led to an active involvement in the school strategy implementation, which was believed to be a strategic key to overcome and to reduce the challenges and ultimately led to the success of the strategy implementation.

According to Kaplan and Norton (2001) and Naganga and Ombui (2013), to become truly strategy-focus, however, it requires more than process and tools. Active involvement of the executive team is the single most important condition contributing to the success of the initiatives. Similarly, Brenes, Mena and Molina (2008) found that the manager's leadership and suitable, motivated management are central in attaining success. They pointed out that implementation becomes very complex in the absence of manager's commitment, communication, and leadership in effective implementation otherwise the strategy would have a rocky path on its way to implementation and success.

It was noted that in schools where there is strong commitment, subordinates are urged to a level of involvement that they themselves never thought possible. Actual involvement is critical in the strategy implementation process and also determines the level of support and backing that teachers give to the new strategy. Therefore, Kaplan and Norton (2001) suggested that senior management

must also be emotionally committed to the strategy, investing time and resources to see the strategy through.

The result of this study concurred with what was claimed by Kiruthi (2001) who found that with efforts and involvement of management team, serious challenges in the strategy implementation will gradually be reduced. Therefore, it is important to ensure that all the key people such as managers, supervisors are involved with the strategy.

Physical Resources

It was found that Kampong Chheuteal High School was almost fully equipped with physical resources such as buildings, library, agricultural farm, and instructional materials. All respondents believed that these resources would have a direct link to the success of implementation of strategic management system plans. From the triangular data sources, the rich in physical resources assisted the school to be able to implement many of their projects smoothly. Particularly, the school was able to run a lot of student-related projects, for example, mushroom seeding, fish rising, vegetable planting, hammer production, and so forth. The result of this study was confirmed by Ofori and Atiogbe (2011), who found that school outcome was influenced by learning environment and nature, in which facilities, accommodation, and physical environment are included.

In terms of financial resource, the arrival of budget allocation has played as a powerful force to speed up the implementation of delayed projects. Participants including teachers, administrative team, and MoEYS officers commonly perceived that budget is a crucial factor to support and to achieve the success of the implemented projects. It was noted that various school initiatives were put into implementation on the second semester period when the budget was allocated to school. To confirm this matter, the principal mentioned that, *"We could only implement small scale projects during the first semester. But now we received the money from the ministry and projects which need to use more budget can be implemented straight away."* With this statement, it was deemed that budget provided a potential boost to outcome of the project implementation.

Ndegwah (2014) and Ngannga and Ombui (2013) found that the implementation of the strategic plans is influenced by financial allocation, as it was a

fundamental part of any action planning especially where the school had capital-intensive strategy. Similarly, Schobel and Scholey (2012), stressed that educational organizations with well-defined financial strategies that are linked to educational outcomes will be well positioned for success even as their funding models change. This result is also paralleled with the principle of Balanced Scorecard of Kaplan and Norton (2001) which stated that to make strategy a continual process in the strategy-focused organization, the stretch targets and strategic initiatives on the Balanced Scorecard should link rhetoric of the strategy with the rigor of the budgets. Both operational budget and strategic budgeting will help the organization to achieve desired performance.

In summary, two major factors: the application of Balanced Scorecard and the availability of resources, were found to relatively contribute the most to the success of strategy implementation of Kampong Chheuteal High School. The use of Balanced Scorecard as a framework for school strategy formation give a clear picture of what the school want to achieve and it also enables the school to gradually improve its performance. Likewise, the existing resources of people with consistent professional development and working commitment, physical environment, and financial resource all help to minimize the obstacle and speed up the process of strategy implementation.

Obstacles to Strategy Implementation

As mentioned in previous section, six potential problems were found obstructing the implementation process and the success of strategic management system plans. These problems were related financial limitation, leadership constraint, ineffective organizational structure, poor understanding of strategic management system plans, inflexible organizational culture, and poor communication. Many times, these barriers were overlooked and failure to recognize and handle all above obstacles would definitely lead to failure of implementation (Okumus, 2003). Therefore, it is important that school discusses these matters thoroughly to ensure that the process of implementation happens successfully. The following sections discuss each of the barriers identified in more details.

Lack of Financial Resource

It was reported that Kampong Chheuteal High School experienced a

difficulty in financial resource. This financial hardship is due the fact of two factors: the delay of budget allocation from the MoEYS and the mismatch in concepts between the school strategy and MoEYS's guideline.

It is hardly surprising when most of the participants included the lack of resource allocation as a potential problem to implementation process of strategic management system plans. Kampong Chheuteal High School has been through some of the toughest times in the last few years from the insufficient and late budget allocation. Although, the MoEYS has recently provided a significant increase in school budget, the budget has been delayed for at least two months. Based on the interview, one of the MoEYS officer admitted that, "*It takes time to get the school budget approved as we need to working process need to go through the ministry of Economic and Finance.*" It seemed to be obvious that when the school encountered the limitation of financial resource, there were frequently a competition of resources within the organization. There were several changes to be made to its budget allocation system. Only prioritized projects was approved and provided with financial supports. With this regard, it meant that implementation of other less prioritized initiatives at that time would have been stalled or delayed.

Another reason behind this problem was the mismatch between the school strategy and budgetary guideline. Kampong Chheuteal High School, as any others throughout the country, was required to strictly follow the MoEYS's guideline in terms of budget spending. However, most of school strategy-focused plans were not aligned with the MoEYS' guideline. For instance, one of the administrators pointed that, "*Some of the subaccounts were not compatible with our actual plans. So in order to use them, we need to ask for approval for adaptation from ministry.*" With this comment, it could be inferred that the school was not able to utilize some of its annual budget and it would take longer time until their request for reallocated budget was approved.

This finding is similar to the study of Ndegwah (2014), Ngannga and Ombui (2013), and Wilcoxson (2012) in which financial resource were main challenges in implementing strategies in many schools of under developing countries. Budgeting was found to be a fundamental part of any action planning especially where the school had a capital-intensive strategy. Similar findings found by Kaplan

and Norton (2008), Jones (2008), and Dutka (2013) that 60% of organizations do not allocate appropriate financial resources to the strategy implementation.

To ensure the success of strategy implementation, the study also suggested that financial resources should be adequately availed to capacity building, implementation activities and tasks based on the organizational structure.

Leadership

It was reported that there was an existence of leadership problem regarding irresponsibility. Insightfully observed, this challenging constraint was due to the fact of disappointment and limited understand as well as inexperience.

As earlier mentioned, both administrators and teachers were disappointed with repeated failure of previous initiatives. Participants, especially administrative team, admitted that some administrators were demotivated and not fully committed to their duties. This problem was reported resulting from insufficient supports from both MoEYS and development partners. For example, one of the administrators stated that, *"Some of the administrators are not willing to be responsible for the school initiatives. They don't want to waste their efforts."*

This result supports what suggested by Pujas (2010) in which the management team, affected by discouragement, lost their initial enthusiasm. This little commitment toward the initiatives by the top of the organization resulted in the staff losing motivation. Pujas puts great importance for the success of the initiatives on top management commitment toward the program. And many initiatives failed because top management was never really committed to the program.

Also the result is consistent with motivational concepts proposed by Hoy and Miskel (2008), which described that motivational individuals in schools are committed towards program by their goals. In order to keep their group working towards something, the goals must be achievable. Conversely unrealistic goals will hurt individual's morale. If their goals are frequently not achieved, they will gradually discourage and consequently leave their work behind. Furthermore, this finding is in line with the concept of Maslow's hierarchy of needs and Herzberg's Motivation-Hygiene theory in which discontent and restlessness are related to working achievement and they will develop unless individual best fulfills their goals.

Irresponsibility may also be concerned with administrators' understanding

and practical experience of the school strategy. Being a novice in strategy implementation, administrators were reported to have very limited understanding how to execute them effectively. Instead of giving staff members a directive guidance, most of the administrators distanced themselves from the school initiatives, as they were unable to provide much instructional assistance. The absence of administrators' sponsorship have resulted in ignorance of the duty and harmed school initiatives. Eventually, many ambitious initiatives could fail.

This result is consistent with the proposal of Hrebiniak (2006) on obstacle to effective strategy implementation. He mentioned that one basic problem to strategy implementation is that managers know more about strategy formation than implementation. They have been trained to plan, not to execute. The lack of functional expertise could cause successful implementation of strategy become less likely and more problematic. Additionally, this finding is supported by Pujas (2010) in which lack of knowledge caused the gradual loss of confidence in the concept and, accordingly, the support of the organizational leaders. Niven (2006) argue that if administrative team does not support the initiative, and, more importantly, does not appreciate its role in solving real-life problems, the initiatives will show mediocre results and will probably fail. Administrators are considered as key decision makers (Chemwei, Leboo, & Koech, 2014). The administrators' personal involvement, understanding, and commitment are necessary to overcome this passive resistance. The result of such a lack of leadership involvement is a waste of resources and a loss of trust in the administrators by the staff members. Niven (2006) confirms that if management gives little support to the initiatives, staff members will soon perceive it as a project, which is not worth their time.

Therefore, Leadership and especially strategic leadership, is widely described as one of the key drivers of effective strategic plan implementation. However, lack of leadership and specifically strategic leadership by the top management of an organization, has been identified as one of the major barriers to effective strategy implementation.

Organizational Structure

It was found that there was an obstacle to strategy implementation regarding the ineffective organizational structure. Participants, particularly teachers at operational level, the current organizational structure did not match the nature of the functional work of the school. They reported having difficulty in working with other departments as well as administrators. Also, they complaint unstructured working process of administrative team which was considered to be against their given privilege. The occurrence of organizational structure barrier may be resulted from ineffective organizational structure.

Based on the chart of organizational structure, it was noted that organization structure was considered to be much problematic to strategy implementation. Instead of nominating four deputy school principals, the number was reduced to only three in which two of vice school principals were responsible for academic affair while another school principal was responsible for administrative affairs. With this assignment, it is obvious that there was no specific nomination for those to be accountable for the work of students' affair, community relation, and industry linkage. As the school strategic management system plans cover all school aspects, it was found that school structure and school strategy were not parallel. This uncertainty of responsibility created problems in terms of authority distribution. As a result, teachers who were subordinates, found it difficult to know who they would work with to accomplish their initiatives. For instance, one of the teachers pointed out that, *"When I need consultation, I don't know who I should talk to. Nobody can give me an assistance. This is not the effective way to we should work.....I don't know who is my boss."*

This result is also consistent to that of Heide, Gronhaug, and Johannessen (2002) which found that initiatives are not being implemented successfully because there are too many managers, and consequently none of them show any will or ability to follow up on implementation. In addition, the result of this study is related to the principle of functional and dysfunctional model claimed by Hoy and Miskel (2008). They argued that unclear hierarchy of authority caused the dysfunctional structure. It produced a potential blockage in communication because subordinates were reluctant to communicate anything.

Another noticeable point concerning organizational structure is that administrative team and administrative staff was seen working against their own power. As previously mentioned, it is factual that some of administrators and teachers were not working with the best. This resulted in some work being left uncompleted. In order to survive their work life day-to-day and to normalize workflow, some of the administrators need to force themselves to get all the work done under their responsibility.

This result was similar to what suggested by Naangaa and Ombui (2013) in which schools with inconsistent organizational structure were not able to achieve their goals as efficiently as those with well-aligned, practical and acceptable structure. The researcher noted very clearly that organizational structure can help or hinder, support or block strategic change and that a good fit-for-purpose structure will enable changes, continuous or discontinuous, small or large, to be made effectively and efficiently.

Lack of Understanding

The study found that there was a limited understanding of the Strategic Management System Plans. This barrier may cause from limited involvement of teachers to the Strategic Management System Plans. To insightfully look into this issue, two main considerations are addressed.

First, there was not much participation of teachers in the formation process of the Strategic Management System Plans. It was reported that administrative team mainly formulated the school Strategic Management System Plans while teachers at the operational level did not get much involvement in this process. Therefore, most teachers who worked directly with school initiatives have limited understanding on them. As one of the administrator stated that *"Actually, the development of the Strategic Management System Plans was participated by only administrators and there is a limitation of participation from staff and teachers."*

This barrier is consistent with what was claimed by Kaplan and Norton (2008) in which, in general, approximately 10 % of staff members did not understand the strategy. They both did not practically understand the strategy and also had no instruction and direction to work on strategy implementation. Surprisingly, Rollins (2011) found that up 67.1 % of the educational staff did not know how to implement

balanced scorecard in the strategic management. Poor understanding of all involved parties led to lack of human resource to implementation school strategic management system plans. As found by Chemwei et al. (2014), inadequacy of human resources was the key constraint impeding on the implementation of strategy in the schools. Without knowledgeable staff members to work towards an organization's vision and mission, it is not possible by all means to succeed in strategy implementation even if the budgetary allocation is sufficient.

Second, the information sharing is not effective. Although, there were orientations of the Strategic Management Plans to all teachers the number of teachers who did not participate in the orientation sessions is high. In addition, those who understand the strategies often do not communicate enough to those who had to implement them. It was reported that some teachers were asked to implement strategies without really understanding the reason or implication of the implementation. For instance one of the head department mentioned that *"A number of teachers do not precisely understand the concept of strategic management system plans and how to implement it..... They never experienced writing a project proposal before. I believe that some teachers have ideas of projects in their mind but they don't know whether which particular strategies or indicators would match their ideas."*

Even some training on strategy were provided, according to Hrebiniak (2005), both manager and staff members were mostly educated and trained to only plan the strategy formation. Staff at every level seemed to understand the process of planning and strategy formulation very well, however, they did not know how to implement the strategy properly as it is learned in on-the-job experience. Thuy (2012) and Drivas (2006), thoroughly stressed the issue of teachers' inadequate training and education in their research studies as they believed that inadequate training and education would cause other problems like low awareness and misunderstanding, which were in turn the sources for ineffective implementation.

Organizational Culture

Organizational culture was one of the barriers identified by the findings. One of the most frequent themes implied from organizational barriers was resistance to change. It was found that teachers at the operational level remained strongly

resistant to participate in the implementation of the Strategic Management System Plans. The matter of opposition to the change may emerge from two factors.

First, people did not want to change the way of working culture.

Kampong Chheuteal High School had its own culture which represented a traditional norm and behaviour of the organization. When the Strategic Management System Plans was introduced into their operational work, teachers felt that the change would give them additional burden. Then they tried to find excuses to avoid being involved in the implementation of initiatives. According to Tan (2004), resistance to change is always prevalent in the implementation initiatives, and it can be a challenge to persuade teachers to accept the change. People tend to dislike a change because they are reluctant to move out of their comfort zone. They are worried they might lose control of their responsibilities, or they have to adjust with new working environment.

Second, teachers' disappointment with previous initiatives was another reason teachers refused to the change. Most of the participants at school level similarly confirmed that old-generation teachers were the group who demonstrated the strongest opposition to the Strategic Management System Plans. More and more teachers were reported to experience failure in implementing their projects of previous academic years. Although their projects were well-planned, the matter of repeated lack of moral, technical, and financial supports forced a number of their proposed projects to be finally terminated. Consequently, teachers' disappointment has caused low working commitment and discouragement.

The finding of this study is consistent with the studies of Kaplan and Norton (2001), Tan (2004), Okumus (2003), Alashloo et al. (2005), and Sudirman (2012) which suggested that the organization would encounter strong resistance and lack of commitment if staff members were unhappy with a particular of decision made by top management team. Particularly when their work responsibility was incompatible with the organizational culture. However, this finding seems to be opposite from that found by Wilcoxson (2012) which resistance was resulted from the lack of understanding about strategic management system plans or how it is used and in other cases it appears as though the resistance comes from a lack of skepticism. To implement strategy successfully, Dukta (2013) suggested that human resource and their participation are important factor as people are the ones who implement desired

strategy and change, and they are actually behind everything the organization does. Changes are important part of everyday life, therefore it is important to involve people from the very beginning stage with providing valuable information, making the process clear, describing responsibilities and actions in details.

Lack of Communication

It was found that there was a poor internal communication among administrators as well as school staff members. The majority of participants perceived that communication was a common barrier to implementation initiatives that they had been involved in. Their responses implied that communication forms the basis of any organizational activities, particularly so for something as important as implementation. This problem may be generated from two main factors.

First, Kampong Chheuteal High School failed to regularly organize meetings among management team. For example, a administrator mentioned that, "*We planned to have a board meeting twice a weeks but we didn't follow the plan.*" Second, an inadequate information sharing, follow-up and coordination of project implementation of administrators ultimately caused vertical lines of communication were insufficiently developed. At Kampong Chheuteal High School, it was noticeable that many teachers were reported to be staying in the environment where they felt isolated in their cubicles and both administrators and teachers did not do their best to share information to one another. For example, one of the head of department stated that, "*the administrative teams did not give us enough guidance and they rarely monitored our project.*"

This finding of this study is consistent with that of Kaplan and Norton (2001, 2008), Jones (2008), and Dutka (2013) in which the majority of the strategy-focused manager teams found communication of strategy to subordinates most important challenge. Specifically, they similarly found that managers rarely hold a discussion on strategy. Only 15% of them dedicated more than one hour per month discussing the strategy. The current environment changes appeared very fast and management was kept busy dealing with them. Therefore, it resulted in spending less time on future planning, but solely on fixing the present or even the past problem instead. Not discussing the future planning leads to least importance of the strategic subject among staff members. Instead of talking with others to gather information, it

seemed that most teachers tended to prefer basing their decision on their own assumptions. This matter lead to misinformed decision being made, which can be a barrier to the implementation process (Tan, 2004).

Also, the result of this study was similar to that of Heide et al., (2002), Hrebiniak (2006), and Joseph and Ombui (2013), which found that the major strategy implementation barriers were communication-related factors. Strategy implementation involves with more people; therefore, communication down the organization or across different factions becomes a challenge. Another possible explanation of the high level of communication problem may be the paucity of interaction and team functioning among staff members. This would cause every staff member unfamiliar with the school strategy. Niven (2006) found out that the majority of staff members would never have heard of school strategy as well as balanced scorecard. Even those who are somehow familiar with this concept will show much uncertainty to it if information is not regularly delivered to them. Based on the first principle of balanced scorecard, the best strategy in the world cannot be executed effectively if it is not well communicated to the people involved (Kaplan & Norton, 2001).

Therefore, the Balanced Scorecard-focused strategy would fail because they are not adequately communicated to staff members. In other words, without communication, nothing can be implemented successfully. This is because communication serves as a link between administrators and teachers across the school. It is the mechanism that helps disseminate information to others and to ensure that responsibilities and duties are clearly explained.

Implications

The results of this study suggested that Strategic Managment System Plans played a very important role to foster the school performance. Several suggestions for best practice of balanced scorecard-focused strategy implementation can be implied on the basis of the results of this study.

Implications for Policy Level

The implication from policy level, generated from this study, are as follows:

1. The Balanced Scorecard is an effective framework to boost the school performance when it is well integrated with the school Strategic Management System Plans. Therefore, the MoEYS should widely promote the use of Balanced Scorecard-focused strategy at the all levels of educational institutions. The MoEYS should start with the training educational planners to see the importance of the application of Balanced Scorecard. Gradually, the MoEYS could educate them how to effectively formulate, implement, and evaluate the Balanced Scorecard-focused strategy.
2. The best practice for the implementation of the Strategic Management System Plans mostly depends on the decision of school or operational level. Therefore, it is necessary that MoEYS decentralize more management authority to the school level. In particular, the school should be independent to allocate all the resources to fulfill the requirement of the school initiatives.
3. The results of this study suggested that the positive impact of the Strategic Management System Plans was due to active participation from stakeholders throughout the implementation process. All stakeholders should be invited to analyse the current problems and needs, to generate the action plans, to participate in the implementation process, to evaluate the progress and to give feedback.

Implications for Operational Level

To enhance an effective implementation of the Strategic Management plans, the school should consider following aspects:

1. The school should closely tie resource allocation to the Strategic Management System Plans. It is important that the school needs to secure and wisely use all the required resources, financial, human, and physical resources. Conversely, without these resources the school could hardly achieve the expected results of their initiatives. Also, it is important to keep in mind that the use of these resources needs to be responsive to the objective of the Strategic Management System Plans otherwise the resources would become a waste of investment.
2. It is crucial to provide an adequate training to teachers on the importance and the implementation process of the Strategic Management System Plans. The

training could be carried out via multiple forms such as an orientation, a seminar or workshop, and one-on-one coaching. It is believed that for the Strategic Management System Plans to have a positive impact, people in the school must understand the process and its validity in planning for the future of the school.

3. The desired goals set in each school initiative should be measurable and reachable. Too many goals will inevitably make for a cumbersome and ineffective strategic management system plans. At the same time, the school initiative goals should be well aligned with that of the strategic management system plans.

4. The school should develop work plans or a specific guideline to support the implementation of the Strategic Management System Plans. A good guideline should be dynamic and flexible. It should adopt the principle of Plan-Act-Observe-Reflect (PAOR) where systematic working would be applied. By using efficient and effective guideline, the process of the strategy implementation could go on the right track, be observable, and stay focused on its mission.

5. The school should adopt a well-structured bottom up implementation of strategic plans approach for major strategic issues. This could play a vital role in a implementation of the Strategic Management System Plans. The approach would imply a proactive team input in the implementation process. To enhance this, all teachers should be invited to participate in every step of the implementation process. They should be provided with responsibilities of completing certain strategic objectives. Without responsibilities, the focus can easily shift from meeting the school goal to other irrelevant targets. Therefore, it is important to ensure that all the constituents of the school work together to move forwards in the same desired direction.

6. It is important to monitor projects and conduct self-assessment regularly and systematically. To do this work successfully, a team or committee should be formed to overlook and facilitate the implementation process.

7. The school should update the Strategic Management System Plans. To do so, administrators should regularly request feedback about development process of strategy implementation on a monthly basis. The feedback would help to review the status of the key strategic initiatives to create a sense of urgency to make decisions, to take actions to the problems. Also, the school should revisit and consider any

necessary revision and adaptation to the Strategic Management System Plans annually. Regular revisiting the Strategic Management System Plans helps keep the goals and objectives of the school fresh and responsive to the current demand of the community as well as labor market. However, thorough revision for significant changes to the Strategic Management System Plans should be conducted every three to five years.

Recommendations for Future Research Studies

The results from this study generated some recommendations for further studies. It is recommended that future research studies should extend to implement the Strategic Management System Plans for a longer period of time in order to evaluate whether the existing plans and the current changes have been effective. In addition, future research studies could investigate the relationship among the variables or factors that negatively impact the smoothness of strategy implementation process.

This study employed embedded research design where several techniques, in-depth interviews, focus-group discussions, observation, and survey were used. Nevertheless, it would be interesting for future research studies to employ other qualitative research techniques such as shadowing to collect the data in PAR.

Since the results of this study are relevant to its own context, it is remarkable to conduct further research studies in other contexts, such a case study at other public and private high schools or higher institutions that also focus on the implementation of the Strategic Management System Plans to add to the body of literature on the implementation and potential best practice.

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APPENDICES

APPENDIX B

PARTICIPANT'S CONSENT FORM

Dear Participant,

I am a Ph.D degree student at the Faculty of Education, Burapha University in Thailand. My research study entitled "*An Implementation of Strategic Management System Plan of School under Her Royal Highness Princess Maha Chakri Sinrindhorn's Sponsorship: A Case Study of Kampong Chheuteal, Kingdom of Cambodia.*" The objectives of my research study are: (1) to examine the implementation process of the strategic management plans of Kampong Chheuteal High School; (2) to identify the constraints hindering in implementing the strategic management plans of Kampong Chheuteal High School; (3) to assess the effectiveness of strategic management system plans of Kampong Chheuteal High School in Cambodia; and (4) to propose recommendations for effectively implementing strategic management system plans.

If you agree to participate in this research study, you will be given a questionnaire and/or be interviewed and observed about some information and knowledge regarding the implementation of strategic management system plans of Kampong Chheuteal High School. In this study, you are invited to participate based on voluntary basis and you have the right to refuse to answer any specific questions, remain silent or end your participation in this study at any time without any penalty. Any information received from this research study, including your identity will be kept confidential. You will receive a complete explanation of the nature of the study upon its completion if you wish.

The research will be conducted by Mr. Kimcheang Hong. If you have any concerns, please contact me via hongkimcheang@hotmail.com. Your information and cooperation will be greatly appreciated.

Please sign your name below to indicate you consent to participate in this research study. You will be offered a copy of this consent form to keep.

Signature of Subject

Date

Signature of Witness

Signature of Researcher

APPENDIX C**AGREEMENT STATEMENT OF PARTICIPANT****Research Title:**

“An Implementation of Strategic Management System Plan of School under Her Royal Highness Princess Maha Chakri Sinrindhorn’s Sponsorship: A Case Study of Kampong Chheuteal, Kingdom of Cambodia.”

Date of data collection Month..... Year.....

Before I give a signature below, I already got a clear explanation from Mr. Kimcheang Hong about the purposes, methods, procedures, and benefits of the research study, and I understand all the explanation. I agree to be a participant of this study.

Signature Participant

(.....)

>

APPENDIX D

INTERVIEW QUESTIONS

Progress, Barriers and Solution to Implementation of Strategic Management System Plans

I. Participant's Background and Information

1. What are your main responsibilities of your job?
2. How long have you been working in this school?

II. Participant's Involvement in Implementation of Strategic Management System Plans

3. Have you been in (directly or indirectly) with the creation and implementation of the strategic management system plan?
4. If so, can you describe your involvement in the plans?
5. Do you think that your plan/ project implementation is going on the right track? Why?

III. Barriers to the Implementation Process of Strategic Management System Plans

6. What have been the common barriers that you and your team challenge during the implementation process of the plans/projects?
7. Do these barriers persist in other area in your school?
8. Do you think teachers and staff from different departments, who are involved with the projects, identify similar barriers?
9. How would these barriers affect future implementation of the school projects?

IV. Overcoming Barriers

10. Could these barriers have been taking into consideration before the implementation stage to prevent it from becoming a potential barrier?
11. How do you think the school and staff could do to overcome these barriers?

APPENDIX E

INTERVIEW QUESTIONS

Effectiveness, Process, Barriers, Solution and Recommendation of Strategic

I. Participant's background and Information

1. What is your position in the school (student, community representative, officers of MoEYS, committee of HRH's education project... etc.)?
2. What are your main responsibilities of your job?

II. Understanding and Involvement in Implementation of Strategic Management System Plans

3. Does the school use strategic management system plans for their operation? If yes, please briefly describe your understanding of the school strategic management system plans?
4. As a part of strategic management system plans, did you participate in any projects? *(If yes, continuous asking the following items. If no, skip to item 15)*
5. How is the result of the projects you have implemented?
6. How do you feel about being responsible for the project?

III. Process of Strategic Management System Plans

7. What actions did the school do to prepare the teachers and staff ready for strategic management system plan implementation?
8. What steps can you identify that were taken to implement the strategic management system plans?
9. What methods have been most effective in implementing the strategic management system plans?
10. How is the action plans/project implemented at different levels throughout the school?
11. How does the school monitor the implementation of strategic management system plans?

IV. Constraints and Solutions

12. What have been the biggest challenges to developing and implementing strategic management system plans at your school?
13. How did you deal with those challenges?
14. Is there a best practice you would recommend from the strategic management system plan implementation process used at your school? If so, please briefly describe the practice.

V. Effectiveness of Strategic Management System Plans

15. In general, what school achievement/effectiveness, which resulted from strategic management system plan implementation, are you satisfied?
16. What impacts do you think the strategic management system plans efforts will have on the future of your school?

VI. Additional Questions

17. What is your perception of the culture within the school regarding the formulation and implementation of strategic management system plans?
 18. What additional thoughts do you have about the strategic management system plans and their implementation process that we have not yet addressed?
-

APPENDIX F

INTERVIEW QUESTION IN KHMER

ប្រសិទ្ធភាព កិច្ចដំណើរការ ឧបសគ្គ ដំណោះស្រាយ និងអនុសាសន៍
សម្រាប់ការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ

I. ព័ត៌មានមូលដ្ឋានអ្នកផ្តល់កិច្ចសម្ភាសន៍

1. តើលោកគ្រូ អ្នកគ្រូមានតួនាទីអ្វីក្នុងវិទ្យាល័យនេះ?
2. តើលោកគ្រូ អ្នកគ្រូទទួលបន្ទុកការងារអ្វីខ្លះ?

II. ការយល់ដឹង និងការចូលរួមក្នុងការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ

3. តើវិទ្យាល័យប្រើប្រាស់ផែនការយុទ្ធសាស្ត្រសម្រាប់កិច្ចដំណើរការរបស់ខ្លួនដែរឬទេ?
បើប្រើប្រាស់ សូមពន្យល់សង្ខេបអំពីផែនការយុទ្ធសាស្ត្រដែលលោកគ្រូ
អ្នកគ្រូបានយល់ដឹង។
4. តើលោកគ្រូ អ្នកគ្រូបានចូលរួមដំណើរការគម្រោងអ្វីខ្លះក្នុងការអនុវត្តផែនការ
យុទ្ធសាស្ត្រ? (បើបានចូលរួម សួរសំនួរបន្ទាប់ បើមិនបានចូលរួម រំលងទៅសួរ
សំនួរទី១៥)
5. តើគម្រោងដែលលោកគ្រូអ្នកគ្រូបានដំណើរការទទួលបានលទ្ធផលដូចម្តេចដែរ?
6. តើលោកគ្រូ អ្នកគ្រូគិតយ៉ាងណាដែរចំពោះការចូលរួមដំណើរការគម្រោងរបស់
វិទ្យាល័យ?

III. កិច្ចដំណើរការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ

7. តើសកម្មភាពអ្វីខ្លះដែលវិទ្យាល័យបានរៀបចំ ដើម្បីឲ្យលោកគ្រូអ្នកគ្រូបានត្រៀម
ខ្លួនក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្រ?
8. តើមានជំហាន ឬដំណាក់កាលអ្វីខ្លះដែលត្រូវបានប្រើប្រាស់ក្នុងការអនុវត្ត
ផែនការយុទ្ធសាស្ត្រ?
9. តើវិធីសាស្ត្រអ្វីខ្លះដែលលោកគ្រូ អ្នកគ្រូបានប្រើប្រាស់ ហើយគិតថាវាជាវិធីសាស្ត្រ
ដ៏ល្អបំផុតក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្រ?
10. តើការអនុវត្តគម្រោងនៅគ្រប់លំដាប់ថ្នាក់មានសភាព លក្ខណៈដូចម្តេចដែរ?
11. តើវិទ្យាល័យបានតាមដាន ការអនុវត្តផែនការយុទ្ធសាស្ត្រដូចម្តេចខ្លះ?

iv. ឧបសគ្គ និងដំណោះស្រាយ

12. តើអ្វីជាឧបសគ្គចម្បងក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្រ?
13. តើលោកគ្រូ អ្នកគ្រូបានដោះស្រាយបញ្ហាទាំងនោះដោយវិធីដូចម្តេចដែរ?
14. តើលោកគ្រូ-អ្នកគ្រូមានមតិយោបល់ដែលជាអនុសាសន៍អ្វីខ្លះទៀត ដើម្បីឲ្យការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រកាន់តែប្រកបដោយភាពជោគជ័យ?

v. ប្រសិទ្ធភាពនៃការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ

15. ជាទូទៅសមទិសដែលកើតចេញពីការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រអ្វីខ្លះដែលលោកគ្រូ អ្នកគ្រូពេញចិត្ត?
16. តើលោកគ្រូ អ្នកគ្រូគិតថាផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រនឹងមានឥទ្ធិពលអ្វីខ្លះដល់កិច្ចដំណើរការវិទ្យាល័យនាថ្ងៃអនាគត?

vi. សំនួរបន្ថែម

17. តើលោកគ្រូ អ្នកគ្រូមានគំនិតយោបល់យ៉ាងណាខ្លះទាក់ទងនឹងវប្បធម៌ការងារក្នុងវិទ្យាល័យក្នុងការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ?
18. តើលោកគ្រូ
— អ្នកគ្រូមានគំនិតយោបល់បន្ថែមទៀតឬទេចំពោះកិច្ចដំណើរការអនុវត្តផែនការគ្រប់គ្រងយុទ្ធសាស្ត្រ?

APPENDIX G

QUESTIONNAIRE

Effectiveness, Barriers, Solution and Recommendation to the Implementation of Strategic Management System Plans

My name is Kimcheang Hong, a Ph.D student majoring in Educational Administration at the Innovative Administration and Educational Leadership Center, Faculty of Education, Burapha University. Presently, I am conducting a research study entitled "*An Implementation of Strategic Management System Plan of School under Her Royal Highness Princess Maha Chakri Sinrindhorn's Sponsorship: A Case Study of Kampong Chheuteal, Kingdom of Cambodia.*"

I would like to ask for your assistance by spending your valuable time to answer all the questions in my questionnaire. With respect to the collected information, I will use it in my study to find out the effectiveness and challenges in implementing the strategic management system plans of Kampong Chheuteal High School. I will report only general findings and your individual answers will remain private, as I will not be referring to anyone by name in it.

I am very thankful for your time and participation.

Part One: Demographic Data

1. Position ☐ Administrator ☐ Head of department
 ☐ Teaching staff ☐ Supporting staff
2. Gender ☐ Male ☐ Female
3. Education ☐ Master ☐ Bachelor Degree
 ☐ Associate Degree ☐ Other (specify).....
4. Year of experience in education ☐ 1-5 years ☐ 6-10 years
 ☐ 11-15 years ☐ More than 15 years

Part Two: Effectiveness of Strategic Management System Plans

Please respond to each of the following statement using the scale below.

1	means	strongly disagree
2	means	disagree
3	means	no opinion
4	means	agree
5	means	strongly agree

Item	Statement	1	2	3	4	5
Customer Perspective (Students/Stakeholders)						
1	Strategic management system plans have enabled the school to make changes and improve in terms of curriculum that is offered.					
2	With strategic management system plans, students and all stakeholders have been satisfied with the school curriculum.					
3	Strategic management system plans led to an increase in individual academic achievement.					
4	Strategic management system plans led to an increase in distribution of school alumni to community and national development.					
5	Through strategic management system plans, the school is better able to prepare students to be ready to enter the world of work.					
6	With strategic management system plans, the school is able to organize activities to educate students to love local culture and environment.					
7	Strategic management system plans improved the productivity of the school in terms of students' ethics and integrity.					
8	Strategic management system plans have helped to improve students' learning behavior (happy learning or learning enthusiasm)					

Item	Statement	1	2	3	4	5
Internal Process Perspective						
9	Strategic management system plans have resulted in restructuring administrative work in the school.					
10	Strategic management system plans have resulted in responding to meet the requirement of internal quality assurance.					
11	Strategic management system plans have strengthened all school working systems.					
12	Strategic management system plans have resulted in an increase of stakeholders' involvement in school projects.					
13	Strategic management system plans have helped promote the quality of academic curriculum.					
14	Strategic management system plans led to increase stakeholders' involvement in the school curriculum.					
15	Strategic management system plans have helped create better school environment, which are beneficial to instructional activities.					
16	With strategic management system plans, school has been able to allocate teachers and staff in each department effectively based on an actual requirement.					
Learning and Growth Perspective						
17	Strategic management system plans have resulted in ongoing professional development of both administrators and teachers.					
18	Strategic management system plans have helped the school to become a standard educational center.					
19	Strategic management system plans have resulted in an increase of knowledge management projects.					
20	Strategic management system plans have helped bring about changes in instructional methodology					

Item	Statement	1	2	3	4	5
Financial Perspective						
21	Strategic management system plans have resulted in an increase of school incomes.					
22	Strategic management system plans have strengthened financial management based on good governance principle.					

23. Is there any other effectiveness of strategic management system plans in addition to what is mentioned above?

Part Three: Constraints of Implementing Strategic Management Plans

Please respond to each of the following statement using the scale below.

- | | | |
|---|-------|-------------------|
| 1 | means | strongly disagree |
| 2 | means | disagree |
| 3 | means | no opinion |
| 4 | means | agree |
| 5 | means | strongly agree |

Item	Which of the following statements do you think could be barriers to Strategic Management System Plan Implementation?	1	2	3	4	5
Strategy Formulation						
1	The strategic management system plans were complicated.					
2	The strategies and indicators were unreachable.					
3	There was time consuming of strategic management system plans.					
Environmental Uncertainty						
4	The time to implement strategic management plans and projects was not appropriate.					
5	The working environmental was changed.					

Item	Which of the following statements do you think could be barriers to Strategic Management System Plan Implementation?	1	2	3	4	5
Organizational Structure						
6	There was silo mentality in the school					
7	There were too many levels of authority					
Organizational Culture						
8	There was lack of effective team-based working					
9	Teachers were resistant to the rapid change of the way work					
10	Teachers were disappointed with previous initiatives					
Communication						
11	Teachers did not clearly understand implementation process					
12	There was a poor relationship among administrators and other colleagues					
13	There was too much information on each project.					
Resource Allocation						
14	The school had too restricted budget allocated for each project					
15	There was lack of transparency in financial management					
16	There was not sufficient human capital to operate projects.					

17. If you think of any other factors that could be challenges or barriers to the implementation of strategic management system plans, please write them here.

18. What did you do to deal with barriers you encounter?

Part Four: Recommendations

1. What are your recommendations for effectively implementing strategic management system plans?

APPENDIX H

QUESTIONNAIRE IN KHMER

កម្រងសំណួរសម្រាប់គ្រូ និងគណៈគ្រប់គ្រង
ស្តីអំពីការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្ររបស់សាលារៀនពីរប្រព័ន្ធ

ខ្ញុំបាទឈ្មោះ ហុង គឹមជាង ជានិស្សិតថ្នាក់បណ្ឌិតឯកទេសគ្រប់គ្រងអប់រំនៃមហាវិទ្យាល័យ
អប់រំសាកលវិទ្យាល័យបុរេផា។ បច្ចុប្បន្នខ្ញុំបាទកំពុងសរសេរនិក្ខេបបទបញ្ចប់ការសិក្សា ក្រោម
ប្រធានបទ “ការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្ររបស់សាលារៀនក្រោមព្រះរាជគម្រោង
ឧបត្ថម្ភរបស់ព្រះអង្គម្ចាស់ក្សត្រីមហាចក្រីសិរីថនៈករណីសិក្សាវិទ្យាល័យកំពង់ឈើទាលនៃព្រះរាជា
ណាចក្រកម្ពុជា”។

ខ្ញុំបាទសូមការអនុញ្ញាតវិធានពេលវេលាដ៏មានតម្លៃរបស់លោកគ្រូ-អ្នកគ្រូក្នុងការបំពេញ
ព័ត៌មានដែលមាននៅក្នុងកម្រងសំណួរនេះ។ ព័ត៌មានដែលទទួលបានពីកម្រងសំណួរនេះ ខ្ញុំបាទនឹង
យកទៅប្រើប្រាស់ដើម្បីស្វែងរកប្រសិទ្ធភាព និងឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការ
យុទ្ធសាស្ត្ររបស់វិទ្យាល័យកំពង់ឈើទាល។ ព័ត៌មានដែលទទួលបានពីលោកគ្រូ-អ្នកគ្រូនឹងត្រូវយក
ទៅសរុប វិភាគ និងសរសេរចូលក្នុងនិក្ខេបបទរបស់ខ្ញុំបាទ។ ឈ្មោះរបស់លោកគ្រូ អ្នកគ្រូដែលបាន
ផ្តល់ព័ត៌មាននឹងមិនត្រូវបានផ្សព្វផ្សាយឡើយ។

ខ្ញុំបាទសូមថ្លែងអំណរគុណយ៉ាងជ្រាលជ្រៅចំពោះលោកគ្រូ-អ្នកគ្រូដែលបានជួយសហការ
ក្នុងការបំពេញនូវព័ត៌មានផ្សេងៗ ក្នុងកម្រងសំណួរនេះ។

ផ្នែកទី១៖ ព័ត៌មានផ្ទាល់ខ្លួន

- | | | |
|-----------------------------|---|---|
| ១. តួនាទី | <input type="checkbox"/> គណៈគ្រប់គ្រង | <input type="checkbox"/> ប្រធានក្រុមបច្ចេកទេស |
| | <input type="checkbox"/> បុគ្គលិកបង្រៀន | <input type="checkbox"/> បុគ្គលិកការិយាល័យ ឬប្រចាំការ |
| ២. ភេទ | <input type="checkbox"/> ប្រុស | <input type="checkbox"/> ស្រី |
| ៣. កម្រិតវប្បធម៌ | <input type="checkbox"/> បរិញ្ញាបត្រជាន់ខ្ពស់ | <input type="checkbox"/> បរិញ្ញាបត្រ |
| | <input type="checkbox"/> បរិញ្ញាបត្ររង | <input type="checkbox"/> ផ្សេង(បញ្ជាក់)..... |
| ៤. បទពិសោធន៍ក្នុងវិស័យអប់រំ | <input type="checkbox"/> ១-៥ ឆ្នាំ | <input type="checkbox"/> ៦-១០ ឆ្នាំ |
| | <input type="checkbox"/> ១១-១៥ ឆ្នាំ | <input type="checkbox"/> ច្រើនជាង១៥ឆ្នាំ |

ផ្នែកទី២៖ ប្រសិទ្ធភាពនៃប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ

សូមគូសសញ្ញា ៗ ក្នុងតារាងស្របតាមការយល់ឃើញរបស់លោកគ្រូ-អ្នកគ្រូដោយប្រើប្រាស់លក្ខខណ្ឌដូចខាងក្រោមនេះ៖

- ១ មានន័យថាមិនយល់ស្របយ៉ាងខ្លាំង
- ២ មានន័យថាមិនយល់ស្រប
- ៣ មានន័យថាគ្មានយោបល់
- ៤ មានន័យថាយល់ស្រប
- ៥ មានន័យថាយល់ស្របយ៉ាងខ្លាំង

ល.រ	ប្រសិទ្ធភាពនៃប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ	១	២	៣	៤	៥
ផ្នែកសិស្ស និងអ្នកដែលពាក់ព័ន្ធ						
១	ការប្រើប្រាស់ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានធ្វើឲ្យកម្មវិធីសិក្សាដែលបើកបង្រៀនក្នុងវិទ្យាល័យមានការកែសម្រួល និងមានភាពប្រសើរឡើង ។					
២	ដោយមានការប្រើប្រាស់ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ សិស្សានុសិស្ស ព្រមទាំងអ្នកដែលពាក់ព័ន្ធទាំងអស់ មានការពេញចិត្តជាមួយកម្មវិធីសិក្សារបស់វិទ្យាល័យ ។					
៣	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានធ្វើឲ្យលទ្ធផលនៃការសិក្សារបស់សិស្សមានភាពល្អប្រសើរឡើង ។					
៤	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជំរុញឲ្យអតីតសិស្សដែលបានបញ្ចប់ការសិក្សាពីវិទ្យាល័យ មានការចូលរួមក្នុងការអភិវឌ្ឍន៍សហគមន៍ និងប្រទេសជាតិ ។					
៥	តាមរយៈការប្រើប្រាស់ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ វិទ្យាល័យបានបណ្តុះបណ្តាលសិស្សឲ្យមានលក្ខណៈសម្បត្តិគ្រប់គ្រាន់ និងត្រៀមខ្លួនរួចជាស្រេចដើម្បីប្រឡូកចូលក្នុងទីផ្សារការងារ ។					
៦	ដោយមានការប្រើប្រាស់ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ វិទ្យាល័យអាចរៀបចំសកម្មភាពដើម្បីបណ្តុះគំនិតសិស្សឲ្យចេះស្រឡាញ់បរិស្ថាន និងវប្បធម៌ក្នុងស្រុកភូមិរបស់ពួកគេ ។					
៧	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយធ្វើឲ្យ វិទ្យាល័យបណ្តុះបណ្តាលសិស្សក្លាយជាមនុស្សមានសីលធម៌ និងគុណធម៌ល្អប្រពៃ ។					
៨	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយជំរុញឲ្យសិស្សក្នុងវិទ្យាល័យស្រឡាញ់ការសិក្សា ។					

ល.រ	ប្រសិទ្ធភាពនៃប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ	១	២	៣	៤	៥
កិច្ចដំណើរការផ្ទៃក្នុង						
៩	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យមានកំណែទម្រង់ការងាររដ្ឋបាលក្នុងការគ្រប់គ្រងក្នុងវិទ្យាល័យ ។					
១០	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យកិច្ចដំណើរការ របស់វិទ្យាល័យមានការឆ្លើយតបទៅនឹងតម្រូវការធានាគុណភាពផ្ទៃក្នុងរបស់ខ្លួន					
១១	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយពង្រឹងប្រសិទ្ធភាពនៃប្រព័ន្ធការងារក្នុងវិទ្យាល័យ ។					
១២	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយជំរុញឲ្យអ្នកដែលពាក់ព័ន្ធបង្កើនការចូលរួមក្នុង កិច្ចដំណើរការគម្រោងរបស់វិទ្យាល័យ ។					
១៣	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយលើកស្ទួយគុណភាពកម្មវិធីសិក្សា ។					
១៤	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យអ្នកដែលពាក់ព័ន្ធមានការចូលរួមក្នុងការកែលម្អ និងអភិវឌ្ឍន៍កម្មវិធីសិក្សា ។					
១៥	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យមានភាពប្រសើរឡើងនូវបរិស្ថានវិទ្យាល័យដែលបម្រើផលប្រយោជន៍ដល់សកម្មភាពរៀននិងបង្រៀនក្នុងវិទ្យាល័យ ។					
១៦	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានបង្កភាពងាយស្រួលដល់ការងារចាត់តាំងគ្រូ និងបុគ្គលិកសិក្សាក្នុងក្រុមបច្ចេកទេសនីមួយៗបានយ៉ាងមានប្រសិទ្ធភាពដោយផ្អែកលើតម្រូវការជាក់ស្តែង ។					
ការសិក្សា និងការអភិវឌ្ឍន៍						
១៧	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយជំរុញឲ្យទាំង គណៈគ្រប់គ្រងនិងគ្រូបង្រៀនមានការអភិវឌ្ឍន៍ខ្លួនជាប្រចាំ ។					
១៨	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យវិទ្យាល័យក្លាយជាមជ្ឈមណ្ឌលអប់រំដែលមានបទដ្ឋានត្រឹមត្រូវ ។					
១៩	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយឲ្យមានកំណើនចំនួនគម្រោងចែករំលែកចំណេះដឹង និងបទពិសោធន៍ក្នុងវិទ្យាល័យ ។					
២០	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយអោយមានភាពប្រសើរឡើងក្នុងផ្នែកវិធីសាស្ត្របង្រៀន ។					

ល.រ	ប្រសិទ្ធភាពនៃប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ	១	២	៣	៤	៥
ហិរញ្ញវត្ថុ						
២១	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយបង្កើនប្រាក់ចំណូលដល់វិទ្យាល័យ។					
២២	ប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្របានជួយពង្រឹងប្រព័ន្ធគ្រប់គ្រងហិរញ្ញវត្ថុក្នុងវិទ្យាល័យ ដោយផ្អែកគោលការណ៍អភិបាលកិច្ចល្អ។					
យោបល់បន្ថែម						
២៣	តើលោកគ្រូ- អ្នកគ្រូមានគំនិតយោបល់អ្វីខ្លះបន្ថែមទៀតដែលអាចជួយដល់ការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រអោយកាន់តែមានប្រសិទ្ធភាព ?					

ផ្នែកទី៣ ៖ ឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ

សូមគូសសញ្ញា ✓ ក្នុងតារាងស្របតាមការយល់ឃើញរបស់លោកគ្រូ

អ្នកគ្រូដោយប្រើប្រាស់លក្ខខណ្ឌដូចខាងក្រោមនេះ ៖

- ១ មានន័យថាមិនយល់ស្របយ៉ាងខ្លាំង
- ២ មានន័យថាមិនយល់ស្រប
- ៣ មានន័យថាគ្មានយោបល់
- ៤ មានន័យថាយល់ស្រប
- ៥ មានន័យថាយល់ស្របយ៉ាងខ្លាំង

ល.រ	តើអ្វីខ្លះជាឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ ?	១	២	៣	៤	៥
ទម្រង់ផែនការយុទ្ធសាស្ត្រ						
១	ផែនការយុទ្ធសាស្ត្រមានភាពសំបូរ ពិបាកយល់					
២	ផែនការយុទ្ធសាស្ត្រ និងសូចនាករមិនអាចសម្រេចបាន					
៣	រយៈពេលក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្រមិនគ្រប់គ្រាន់					
ភាពមិនច្បាស់លាស់នៃបរិស្ថានជុំវិញ						
៤	ពេលវេលានៃការអនុវត្តផែនការយុទ្ធសាស្ត្រមានភាពមិនសមស្រប					
៥	បរិស្ថានការងារមានភាពប្រែប្រួល					

ល.រ	តើអ្វីខ្លះជាឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ ?	១	២	៣	៤	៥
រចនាសម្ព័ន្ធវិទ្យាល័យ						
៦	គណៈគ្រប់គ្រង និងលោកគ្រូ-អ្នកគ្រូពុំមានគំនិតចែករំលែកជាមួយអ្នកដទៃ					
៧	ការអនុវត្តផែនការយុទ្ធសាស្ត្រត្រូវឆ្លងកាត់ការអនុម័តពីថ្នាក់ដឹកនាំច្រើនលំដាប់ថ្នាក់ពេក					
ល.រ	តើអ្វីខ្លះជាឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ ?	១	២	៣	៤	៥
វប្បធម៌អង្គភាព						
៨	ការធ្វើការជាក្រុមរបស់លោកគ្រូ-អ្នកគ្រូក្នុងវិទ្យាល័យខ្វះភាពសហការដែលមានប្រសិទ្ធភាព					
៩	លោកគ្រូ-អ្នកគ្រូក្នុងវិទ្យាល័យពុំទាន់អាចបត់បែនបានទៅតាមការផ្លាស់ប្តូរនៃរបៀបបំពេញការងារ					
១០	លោកគ្រូ-អ្នកគ្រូក្នុងវិទ្យាល័យខកចិត្តជាមួយគម្រោងការងារមុនៗជាហេតុនាំឲ្យពួកគាត់មិនមានទឹកចិត្តអនុវត្តគម្រោងថ្មី					
ទំនាក់ទំនង						
១១	ការយល់ដឹងពីកិច្ចដំណើរការក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្ររបស់លោកគ្រូ-អ្នកគ្រូនៅមានកម្រិត					
១២	មានភាពទន់ខ្សោយនៃទំនាក់ទំនងរវាងគណៈគ្រប់គ្រង ជាមួយបុគ្គលិក					
១៣	មានការផ្តល់ព័ត៌មានច្រើនហួស ក្នុងការអនុវត្តគម្រោងផែនការនីមួយៗ					
ការបែងចែកប្រភពធនធាន						
១៤	ថវិកាសម្រាប់ដំណើរការគម្រោងមានតិចតួចពេក					
១៥	ការគ្រប់គ្រងថវិកាខ្វះតម្លាភាព			>		
១៦	ខ្វះធនធានមនុស្សក្នុងការអនុវត្តផែនការយុទ្ធសាស្ត្រ					

១៧. យោបល់បន្ថែម

ប្រសិនបើលោកគ្រូ-អ្នកគ្រូគិតថាមានកត្តាផ្សេងទៀតដែលជាឧបសគ្គក្នុងការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រ សូមសរសេរនៅក្នុងបន្ទាត់ខាងក្រោមនេះ ៖

១៨. តើលោកគ្រូ-អ្នកគ្រូបានចាត់វិធានការអ្វីខ្លះដើម្បីដោះស្រាយជាមួយបញ្ហាដែលលោកគ្រូ-អ្នកគ្រូជួបប្រទះ?

ផ្នែកទី៤៖ អនុសាសន៍

សម្រាប់ការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការយុទ្ធសាស្ត្រប្រកបដោយភាពជោគជ័យ

សូមលោកគ្រូ-អ្នកគ្រូមេត្តាផ្តល់ជាអនុសាសន៍ដើម្បីឲ្យ ការអនុវត្តប្រព័ន្ធគ្រប់គ្រងផែនការ
យុទ្ធសាស្ត្រកាន់តែប្រកបដោយភាពជោគជ័យ

APPENDIX I

KPI CHEKLIST

Results/Effectiveness of the Implementation of Strategic Management System Plans

Strategies (Objectives)	Indicators (Measure)	Year...../Scores					Remark
		1	2	3	4	5	
Customer Perspective (Students)							
C1: Provide educational service in various forms in order to fulfill the demands of communities.	1. Number of subject areas offered.						
	2. Percentage of students and people who are satisfied with school educational services.						
C2: Use community to educate students to be a complete person.	1. Percentage of students who successfully pass the national exam.						
	2. Percentage of students who successfully pass the national exam with good grade.						
	3. Percentage of students who are able to accomplish their studies based on school criteria (knowledge, skills, integrity, and learning enthusiasm).						
	4. Number of students who have outstanding achievements in developing the country.						

Strategies (Objectives)	Indicators (Measure)	Year...../Scores					Remark
		1	2	3	4	5	
C3: Provide students with a profit-earning skill and at the same time educate them to care for a local culture and environment.	1. Percentage of vocational students who are employed with one year after their graduation.						
	2. Number of subject areas which are taught with the integration of local culture and environment.						
Internal Process Perspective							
I1: Develop an Internal Quality Assurance.	1. The degree of achievement in developing internal quality assurance.						
I2: Strengthen school strategy-based management	1. Number of school systems which employ strategy-based approach.						
I3: Develop school environment to be a good learning resource.	1. Percentage of students and people who are satisfied with school environment at high level.						
	2. Number of subject areas which are taught using appropriate and effective instructional materials.						
I4: Seek additional cooperation from school partners.	1. Number of projects implemented with cooperation from school partners.						

Strategies (Objectives)	Indicators (Measure)	Year...../Scores					Remark
		1	2	3	4	5	
I5: Strengthen dual-system education to response to the needs of communities and labor market.	1. Number of well qualified academic curriculums.						
	2. Number of academic curriculums which are jointly managed school and stakeholders.						
	3. Proportion between teachers and students in each vocational department.						
Learning and Growth Perspective							
L1: Organize professional development for administrators and teachers in accordance with their duties and school strategies.	1. Percentage of administrators, teachers, and supporting staff who receive additional professional development.						
	1. Percentage of teachers and staff who are satisfied with school learning environment at high level.						
L2: Develop the school to world-standard educational center.	2. Number of knowledge-management projects.						

Strategies (Objectives)	Indicators (Measure)	Year...../Scores					Remark
		1	2	3	4	5	
Financial Perspective							
F1: Increase school revenue through the integration of existing resources into academic instruction and the provision of community services.	1. Number of projects seeking for additional school income.						
	2. Proportion between school income and budget provided by the MoEYS.						
F2: Use good governance principle to strengthen financial management and to turn the school to be self-reliance.	1. Degree of achievement resulted from systematic budget distribution mechanism.						
	2. Number of errors occurred in financial audit.						
	3. Proportion between school income and outcome.						

APPENDIX J

FIELD NOTE FOR IN-DEPH INTERVIEW

Date: Time: Place:
 Interviewer's name: Interviewee's name: Round of Interview:
 Situation (who, what, where, when, how, and why)

Description of Interview	Informant's Reaction	Researcher's Reaction
Assumption:		

APPENDIX K

FIELD NOTE FOR INTERNAL RESEARCHERS' MEETING

Part One: General Information

Topic:.....

Round of meeting: Date of meeting :

Time : Place of meeting :

Participants.....

- School principal person

- Teachers person(s)

Readiness and Environment of meeting.....

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Part Two: Information related to PDOR

Planning:

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Acting:

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Observing:

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Reflecting

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Part Three: Problems and Solutions

Problems	Solutions

Part Four: Additional Notes/Suggestions

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APPENDIX L
LIST OF EXPERTS VALIDATING CONTENT OF INSTRUMENTS

1. Gen. Vapirom Manasrangsri
Chief of Thai Committee of Her Royal Highness Education Project
2. Dr. Chatchanok Saisuwan
Committee of Her Royal Highness Education Project
3. Assist. Prof. Dr. Sumet Ngamkanok
Innovation Administration and Educational Leadership Center, Burapha
University, Thailand
4. Assist. Prof. Dr. Sittiporn Niyomsrisomsak
Innovation Administration and Educational Leadership Center, Burapha
University, Thailand
5. Assist. Prof. Dr. Chareonwit Sompongdam
Innovation Administration and Educational Leadership Center, Burapha
University, Thailand
6. Prof. Dr. Jamie Wallin
Graduate School, Rangsit University, Thailand
7. Mr. Sara Rath
Vocational Orientation, Ministry of Education, Youth and Sport, Cambodia

APPENDIX M
LIST OF EXPERTS VALIDATING TRANSLATION OF INSTRUMENTS

1. Mr. Sovann Khlaing

English Lecturer, Mean Chey University, Cambodia

2. Mr. Sokwin Phon

English Lecturer, Mean Chey University, Cambodia

3. Mr. Pum Chea

English Trainer, Kampong Thom Pedagogical Teacher Training College,
Cambodia

APPENDIX N

LIST OF EXPERTS VALIDATING GUIDELINE

Cambodian Experts

- | | |
|---------------------------|--|
| 1. HE. Im Koch | Secretary of State of MoEYS |
| 2. Dr. Kry Seang Long | Deputy Director in charge of VOD |
| 3. Mr. You Virak | Deputy Director of Department of Higher Education |
| 4. Mr. Keo Sakal | Deputy Director of Department of Cultural Relations and Scholarship |
| 5. Mr. Sun Bunna | Deputy Director of Department of Curriculum Development |
| 6. Mr. Rath Sara | Chief of Administrative Office of VOD |
| 7. Mr. Lim Hin | Chief of office of Department of General Secondary Education. |
| 8. Mr. Nguon Leakhana | Chief of office of Department of Finance |
| 9. Mr. Te Yoksou | Deputy Director of Kampong Thom POE |
| 10. Mr. Leng Sivandolla | Vice-chief of Vocational Training Office of VOD |
| 11. Mrs. Khan Naroeun | Official of Vocational Training Office of VOD |
| 12. Mr. Ouk Sothearin | Vice-Chief of office of Department of Cultural Relations and Scholarship |
| 13. Mr. Moeng Phum | Vice-Chief of office of Department of Personnel |
| 14. Mr. Khem Seng | Vice-chief of Secondary office of Kampong Thom POE |
| 15. Mr. Meak Chantheng | Principal of Kampong Cheuteal High School |
| 16. Mr. Khun Sokha | Vice-principal of Kampong Cheuteal High School |
| 17. Mr. Ke Bunthan | Vice-principal of Kampong Cheuteal High School |
| 18. Mr. Nhem Chanly | Chief office of Department of State Asset and Property |
| 19. Ms. Mam Suos vanbanyo | Vice-Chief office of Department of State Asset and Property |
| 20. Ms. Tuon Panhavotey | Official of Vocational Training Office of VOD |

APPENDIX N

LIST OF EXPERTS VALIDATING GUIDELINE

Thai Experts

1. General Vapirom Manasrangsri
Chief of Thai Committee of Her Royal Highness Education Project
2. Dr. Chatchanok Saisuwan
Thai Committee member of Her Royal Highness Education Project
3. Assist. Prof. Dr. Wimonrat Chaturanon
Associate Dean, Faculty of Education, Burapha University
4. Dr. Chanphorn Prommas
Associate Dean, Faculty of Education, Burapha University
5. Assist. Prof. Dr. Sumet Ngamkanok
Head of Department, Innovation Administration and Educational Leadership
Center, Burapha University, Thailand
6. Assist. Prof. Dr. Sittiporn Niyomsrisomsak
Innovation Administration and Educational Leadership Center, Burapha
University, Thailand
7. Assist. Prof. Dr. Chareonwit Sompongdam
Innovation Administration and Educational Leadership Center, Burapha
University, Thailand

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APPENDIX O

PERSPECTIVE ON EFFECTIVENESS AND BARRIERS OF STRATEGIC MANAGEMENT SYSTEM PLANS BY ITEM

Item	Effectiveness of Strategic Management System Plans	n	Min	Max	\bar{X}	SD
Students Perspective						
1	Strategic management system plans have enabled the school to make changes and improve in terms of curriculum that is offered.	55	1	5	3.85	.731
2	With strategic management system plans, students and all stakeholders have been satisfied with the school curriculum.	55	1	5	3.91	.701
3	Strategic management system plans led to an increase in individual academic achievement.	55	1	5	3.75	.821
4	Strategic management system plans led to an increase in distribution of school alumni to community and national development.	55	1	5	3.91	.867
5	Through strategic management system plans, the school is better able to prepare students to be ready to enter the world of work.	55	1	5	3.87	.747
6	With strategic management system plans, the school is able to organize activities to educate students to love local culture and environment.	55	1	5	3.91	.776
7	Strategic management system plans improved the productivity of the school in terms of students' ethics and integrity.	55	1	5	3.93	.858
8	Strategic management system plans have helped to improve students' learning behavior (happy learning or learning enthusiasm)	55	1	5	3.87	.883

Item	Effectiveness of Strategic Management System Plans	n	Min	Max	\bar{X}	SD
Internal Process Perspective						
9	Strategic management system plans have resulted in restructuring administrative work in the school.	55	2	5	3.55	.765
10	Strategic management system plans have resulted in responding to meet the requirement of internal quality assurance.	55	2	5	3.62	.707
11	Strategic management system plans have strengthened all school working systems.	55	1	5	3.73	.827
12	Strategic management system plans have resulted in an increase of stakeholders' involvement in school projects.	55	1	5	3.64	.802
13	Strategic management system plans have helped promote the quality of academic curriculum.	55	2	5	4.05	.678
14	Strategic management system plans have resulted in an increase of stakeholder involvement in the school curriculum.	55	2	5	3.84	.688
15	Strategic management system plans have helped create better school environment, which are beneficial to instructional activities.	55	2	5	3.73	.849
16	With strategic management system plans, school has been able to allocate teachers and staff in each department effectively based on an actual requirement.	55	2	5	3.62	.828

Item	Effectiveness of Strategic Management System Plans	n	Min	Max	\bar{X}	SD
Learning and Growth Perspective						
17	Strategic management system plans have resulted in ongoing professional development of both administrators and teachers.	55	2	5	3.78	.686
18	Strategic management system plans have helped the school to become a standard educational center.	55	1	5	3.78	.917
19	Strategic management system plans have resulted in an increase of knowledge management projects.	55	1	5	3.69	.814
20	Strategic management system plans have helped bring about changes in instructional methodology	55	2	5	3.76	.793
Financial Perspective						
21	Strategic management system plans have resulted in an increase of school incomes.	55	1	5	3.24	1.018
22	Strategic management system plans have strengthened financial management based on good governance principle.	54	1	5	3.54	.966

Item	Barriers	n	Min	Max	\bar{X}	SD
Strategy Formulation :						
1	The strategic management system plans were complicated.	55	1	5	3.31	.940
2	The strategies and indicators were unreachable.	55	1	5	3.29	.916
3	There was time consuming of strategic management system plans.	55	2	5	3.51	.791
Environmental Uncertainty						
4	The time to implement strategic management plans and projects was not appropriate.	55	2	5	3.36	.847
5	The working environmental was changed.	55	2	5	3.71	.762
Organizational Structure						
6	There was silo mentality in the school	55	1	5	3.16	1.135
7	There were too many levels of authority	55	1	5	3.33	1.072
Organizational Culture						
8	There was lack of effective team-based working	55	1	5	3.67	1.019
9	Teachers were resistant to the rapid change of the way work	55	1	5	3.65	.907
10	Teachers were disappointed with previous initiatives	55	1	5	3.73	1.044
Communication						
11	Teachers did not clearly understand implementation process	55	2	5	3.85	.705
12	There was a poor relationship among administrators and other colleagues	55	1	5	3.64	.969
13	There was too much information on each project.	53	1	5	3.06	1.082

Item	Barriers	n	Min	Max	\bar{X}	SD
Resource Allocation						
14	The school had too restricted budget allocated for each project	55	1	5	3.44	1.050
15	There was lack of transparency in financial management	55	1	5	3.60	1.011
16	There was not sufficient human capital to operate projects.	54	1	5	3.56	1.127

APPENDIX P
LIST OF PROJECTS OF ACADEMIC YEAR 2013-2014
(Recorded by May, 2014)

Name of Project	Type	Strategies	Budget Source	Holders
1. Text book Development	New	C1,	School, HRH Education Project	
2. Vocational Training for Community	New	C1	School	
3. School Guide	Continuous	C2	School	
4. Waste and Sanitary Management	New	C2	School	
5. Red Cross	New	C2	School	
6. Youth Scout	Continuous	C2	School	
7. Morality Education	New	C2	School	
8. Internal Sport Competition	New	C2	School, HRH Education Project	
9. Youth Camp for Elementary school	New	C2	School, HRH Education Project	
10. Research Group	Continuous	C2	HRH Education Project	
11. Vocational Field Trip	New	C2	School	
12. Air --Con inspection and Repair	Continuous	C2	School	
13. Flower Planting	New	C2	School	
14. Chicken Raising	Continuous	C2, F1	School, CP	
15. Fish Raising	Continuous	C2, F1	School	

Name of Project	Type	Strategies	Budget Source	Holders
16. Grass Planting	New	C2	School	
17. Frog Raising	New	C2, F1	School	
18. Organic Fertilizer	New	C2	School	
19. Mushroom Seeding	New	C2, F1	School	
20. Electronic device repair	Continuous	C2	School	
21. Purchase of Instructional Material	New	C1	School	
22. Community Development Camp	New	C2, I4	HRH Education Project	
23. Computer Training for poor students	New	C2	District Hall	
24. Formation of school committee	New	I2	School	
25. Formation of evaluation committee for personnel achievement	New	I2	School	
26. Formation of budget management committee	New	I2	School	
27. Formation of storage and inventory Management	New	I2	School	

Name of Project	Type	Strategies	Budget Source	Holders
28. Bachelor degree for teachers	Continuous	I4, L1	HRH Education Project	
29. English club for teacher	New	L1, L2	School	
30. School strategy orientation	New	L1, L2	School, Burapha University	
31. Seminar on current Cambodian Education Strategies	New	L1, L2	School	
32. Cooperative store	Continuous	F1	School, HRH Education Project	
33. Monthly technical meeting	Continuous	L1, L2	School	
34. Solar energy installation	New	L2	HRH Education Project	

APPENDIX Q

RESULT OF BASELINE STUDY

1. Strategies, indicator and Project in Student Perspective

Strategies	Indicators	Scores					Remarks
		1	2	3	4	5	
C1: Provide educational service in various forms in order to fulfill the demands of communities.	1. Number of vocational programs offered.				✓		Four academic curriculums are provided 1. Electricity 2. Electronic 3. Animal Husbandry 4. Agriculture
	2. Percentage of students and people who are satisfied with school educational services.	-	-	-	-	-	School did not conduct survey on people's satisfaction
C2: Use community to educate students to be a complete person.	1. Percentage of students who successfully pass the national exam.			✓			161 students enrolled national exam in which 141 of them passed (87.58%)
	2. Percentage of students who successfully pass the national exam with good grade.			✓			Two students passed with Grade B (1.24%)

	3. Percentage of students who are able to accomplish their studies based on school criteria (knowledge, skills, integrity, and learning enthusiasm).	-	-	-	-	-	School did not conduct an evaluation
	4. Number of students who have outstanding achievements in developing the country.	-	-	-	-	-	School did not have any students' data after their graduation
C3: Provide students with a profit-earning skill and at the same time educate them to care for a local culture and environment.	1. Percentage of vocational students who are employed with one year after their graduation.	-	-	-	-	-	School did not have any students' data after their graduation
	2. Number of subject areas which are taught with the integration of local culture and environment.	✓					Five subject areas 1. Fish Raising 2. Pig Raising 3. Chicken Raising 4. Fertilizer 5. Arts

2. Strategies, indicator and Project in Internal Process Perspectives

Strategies	Indicators	Score					Remarks
		1	2	3	4	5	
I1: Develop an Internal Quality Assurance.	1. The degree of achievement in developing internal quality assurance.		✓				The document of internal quality assurance was developed but it was not widely used.
I2: Strengthen school strategy-based management	1. Number of school systems, which employ strategy-based approach.			✓			There are three school management systems 1. Financial Management System 2. Personnel Management System 3. Environment Improvement
I3: Develop school environment to be a good learning resource.	1. Percentage of students and people who are satisfied with school environment at high level. 2. Number of subject areas which are taught using appropriate and effective instructional materials.	-	-	-	-	-	School did not conduct a survey on students and people's satisfaction At least five subject areas 1. Electricity 2. Electronic 3. Animal Husbandry 4. Agriculture 5. Computer

	✓						cooperated by HRH education project 8. Animal Raising cooperated by CP Co.Ltd Cambodia
I5: Strengthen dual-system education to response to the needs of communities and labor market.	1. Number of well-qualified academic curriculums.	✓					The majority of vocational teachers are not qualified
	2. Number of academic curriculums, which are jointly, managed school and stakeholders.	✓					Curriculum of Animal Husbandry cooperated by CP Cambodia, Co.Ltd
	3. Faction between teachers and students in each vocational department.					✓	- Electronic 1:17 - Electricity 1:17 - Animal husbandry 1:15 - Agriculture 1:16

3. Strategies, indicator and Project in Learning and Growth Perspective

Strategies	Indicators	Scores					Remarks
		1	2	3	4	5	
L1: Organize professional development for administrators and teachers in accordance with their duties and school strategies.	1. Percentage of administrators, teachers, and supporting staff who receive additional professional development.					✓	Total number of teachers for 2012-2013 was 99. Of all, 92 (92.93 %) received professional training.
L2: Develop the school to world- standard educational center.	1. Percentage of teachers and staff who are satisfied with school learning environment at high level. 2. Number of knowledge-management projects.	-	-	-	-	-	School did not conduct survey of teachers and staff's satisfaction
		✓					Monthly meeting of teacher in each subject area

4. Strategies, indicator and Project in Financial Perspectives

Strategies	Indicators	Scores					Remarks
		1	2	3	4	5	
F1: Increase school revenue through the integration of existing resources into academic instruction and the provision of community services.	1. Number of projects seeking for additional school income.				✓		- Fish Raising - Pig Raising - Chicken Raising - Cooperative Store
	2. Fraction between school income and budget provided by the MoEYS.	-	-	-	-	-	No records
F2: Use good governance principle to strengthen financial management and to turn the school to be self-reliance.	1. Degree of achievement resulted from systematic budget distribution mechanism.	-	-	-	-	-	No records
	2. Number of errors occurred in financial audit.	-	-	-	-	-	No records
	3. Fraction between school income and outcome.	-	-	-	-	-	No records

APPENDIX R
RESULT OF POST-IMPLEMENTATION

Strategies (Objectives)	Indicators (Measure)	Year 2014/Scores					Remark
		1	2	3	4	5	
Student Perspective							
C1: Provide educational service in various forms in order to fulfill the demands of communities.	1. Number of vocational program offered						Four academic curriculums: 1. Electricity 2. Electronic 3. Animal Husbandry 4. Agronomy
	2. Percentage of students and people who are satisfied with school educational services.	-	-	-	-	-	The school will find it out at the end of academic year
C2: Use community to educate students to be a complete person.	1. Percentage of students who successfully pass the national exam.	-	-	-	-	-	The school will find it out at the end of academic year
	2. Percentage of students who successfully pass the national exam with	-	-	-	-	-	The school will find it out at the end of academic year

Quality Assurance.	developing internal quality assurance.						assurance was developed, but the school did not use it for its operational work evaluation. Instead the MoEYS assigned a particular group of evaluators to assess the quality of the school performance.
I2: Strengthen school strategy-based management	<p>1. Number of school systems which employ strategy-based approach.</p> <p>✓</p>						<p>1. Formation of School committee</p> <p>2. Formation of evaluation committee for personnel achievement</p> <p>3. Formation of budget management committee 4. Formation of Storage and inventory</p>
I3: Develop school environment to be a good learning resource.	<p>1. Percentage of students and people who are satisfied with school environment at high level.</p>	-	-	-	-	-	The school will find it out at the end of academic year

									Agriculture 1:18
Learning and Growth Perspective									
L1: Organize professional development for administrators and teachers in accordance with their duties and school strategies.	1. Percentage of administrators, teachers, and supporting staff who receive additional professional development.							✓	90 % of administrators, teachers, and supporting staff received additional professional development.
L2: Develop the school to world- standard educational center.	1. Percentage of teachers and staff who are satisfied with school learning environment at high level.	-	-	-	-	-	-	-	The school will find it out at the end of academic year
	2. Number of knowledge-management projects.			✓					1. Monthly technical meeting 2. Seminar on Cambodian education strategy 3. Orientation of school SMSP

Financial Perspective									
F1: Increase school revenue through the integration of existing resources into academic instruction and the provision of community services.	1. Number of projects seeking for additional school income.								1. Chicken raising 2. Fish raising 3. Mushroom seeding 4. Frog raising 5. Cooperative store
	2. Fraction between school income and budget provided by the MoEYS.					-	-	-	The school will find it out at the end of academic year
	1. Degree of achievement resulted from systematic budget distribution mechanism.						✓		There is a mechanism for budget distribution as well as its annual report. However, there is no analysis and evaluation of budget management
F2: Use good governance principle to strengthen financial management and to turn the school to be self-reliance.	2. Number of errors occurred in financial audit.					-	-	-	The school will find it out at the end of academic year
	3. Fraction between school income and outcome.					-	-	-	The school will find it out at the end of academic year

BIOGRAPHY

Name	Mr. Kimcheang Hong
Date of birth	January 05, 1979
Place of birth	Kampong Thom Province, Cambodia
Present address	Phnom Penh, Cambodia
Position held	
2000-2002	English teacher, Kampong Thom High School, Kampong Thom Province, Cambodia
2002-2011	English teacher, Kampong Chheuteal High School, Kampong Thom Province, Cambodia
2011-Present	Faculty member, Faculty of Humanities, Social Sciences, and Languages, Mean Chey University, Cambodia
Education	
2011-2014	Doctor of Philosophy in Educational Administration, Burapha University, Thailand
2007-2010	Master of Education in Teaching English as a Foreign Language (TEFL), Chulalongkorn University, Thailand.
2004-2007	Bachelor of Arts in English Literature, University of Cambodia, Cambodia
Awards or Grants	
2011	Scholarship for the Doctoral Degree study from Her Royal Highness Princess Maha Chakri Sirindhorn Education Project.
2004	Scholarship for the Master Degree study from Her Royal Highness Princess Maha Chakri Sirindhorn Education Project.
2004	Best teacher award, gold medal, Ministry of Education, Youth and Sport (MoEYS), Cambodia