THE DEVELOPMENT OF AN INSTRUCTIONAL LEADERSHIP MODEL FOR OUTCOME-BASED EDUCATION AT PRIVATE HIGHER EDUCATION INSTITUTIONS IN CAMBODIA

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Key Words: INSTRUCTIONAL LEADERSHIP, OUTCOME-BASED EDUCATION, INSTRUCTIONAL LEADERSHIP MODEL, PRIVATE HIGHER EDUCATION INSTITUTION

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The purpose of this study was to develop an instructional leadership model for outcome-based education for private higher education institutions in Cambodia. The model was developed to enhance quality teaching, and subsequently promote student learning.

An exploratory sequential mixed-methods research design (quantitative and qualitative) was used for the study. Five private universities in Cambodia with 211 lecturers and 10 academic administrators participated in the study. A survey was used to collect the quantitative data from the lecturers and an interview was held to collect qualitative data from the academic administrators. For the quantitative data, statistical analysis was carried out to obtain the Mean and Standard Deviation. Multiple regression analysis was utilized to find significant variables. The qualitative data was analyzed using content analysis.

The findings of instructional leadership practices and outcome-based education practices were consistent with the overall framework of the theories. The current practices of instructional leadership significantly correlated with the current practices of outcome-based
education. Four dimensions including: Professional Development, Supervision of Curriculum Development and Instruction, and A Supportive and Collaborative Environment strongly and significantly correlated with all stages of outcome-based education. Moreover, three factors were found to be significant in affecting the instructional leadership practices. These factors included Qualification, Skills, and Experience ($p=.000$, $B=.301$), Cooperation, Culture, and Values ($p=.001$, $B=.235$), and Funding and Facilities ($p=.012$, $B=.141$).

Instructional leadership was found to be moderately practiced by the academic administrators of the five Cambodian private universities. Outcome-based education was not found to be typically practiced by the selected universities. However, the quantitative data derived from the survey gave greater Mean score while the interviews offered in depth of the current practices. A model of instructional leadership for outcome-based education was developed with two parts: instructional leadership and outcome-based education. The new instructional leadership model will hopefully be utilized by lecturers, the academic administrators of the faculty of education, and other faculties of the universities.
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25 UNTAC  The United Nations Transitional Authority in Cambodia
26 UNESCO  The United Nations, Educational, Scientific and Cultural Organization
27 VSO  Voluntary Service Overseas
CHAPTER I
INTRODUCTION

In the current trend of education, particularly in higher education, quality education has been the issue which many education practitioners, researchers, and stakeholders have focused on. The mission of higher education is to prepare students with the knowledge and skills required for their future careers and to compete with others in the job market (Darling-Hammond, 2006). The emphasis on teaching and learning in higher education is considerably important and the role of leadership plays a pivotal role. The rapid changes in the 21st century have brought about challenges to societies and individuals, including education (Schleicher, 2012). These changes include increasing competition among the universities, making higher education institutions more proactive in order to have the knowledge and the understanding of the ways students learn best and the methods in teaching that facilitate learning. Other changes may include globalization, mobile learners, modes of learning (for example, distance learning), lifelong learning, and work-based learning. Learners are gradually moving away from traditional teaching methods to more self-directed and student-centered approaches. Problem-based learning is a good example: students taking more responsibility for their own learning and the instructors become the guides and facilitators. Furthermore, the impact of technology continues to intensify the changes. Students can work from their home via internet. It increases the chance for students to choose distance-learning courses, which means they do not have to attend classes physically to gain qualifications. The increase of modularization also offers students a chance to learn at individual’s pace and time (Ashworth et al., 2004).

The expansion of higher education, the increasing emphasis on students’ learning, and new teaching approaches (including pedagogical opportunities) supported by technology require a new profile for teachers. The expectations for teachers in this changing environment
now are greater. Teachers are now involved in designing curriculum, project-based learning, assessments, fund-raising, regional networking, and class teaching.

There is an increasing pressure on universities around the world to prove their worth not only in the preparation of students but also in connecting students to companies and employers. To accomplish this, teachers’ methodology needs to be responsive to the job market in order to prepare students for their work lives. Due to the complexity and uncertainty of society, quality teaching standards are required by the institutions. Moreover, according to report of the Organization for Economic Cooperation and Development (OECD) in 2012, students are now more sensitive to the equality of treatment, including equality in teaching and learning opportunities as well as the assessment methods they receive. The report also indicates that strong support from the institutions to improve quality teaching is necessary. The reason is that there is a demand for relevant teaching. Both students and employers expect that education provides learners with professional knowledge and skills for better employment. Moreover, the institutions are also expected by different stakeholders to provide quality education. The institutions have to effectively compete for students who pay higher tuition fees and are more mobile. This is in line with Marginson’s (2007) observation that the increased international competition, especially for students who pay full tuition fees, has put more pressure on higher education institutions to establish benchmarks of student performance. Furthermore, the institutions have to make sure that the teaching and learning process is more efficient because the funding constraints are stringent.

Business leaders, educators and politicians agree that students need the 21st century skills, teaching quality and curriculum to help them succeed in this interconnected world (Rotherham & Willingham, 2009). Thus, the role of leadership is important in promoting the design of quality education system and influencing student learning. Learning outcomes are the major concerns of the policy makers and school administrators in both
public and private sectors (Alam & Ahmad, 2017). In order for the higher education institutions to face the above mentioned challenges and pressures (Marginson, 2007; Schleicher, 2012; OECD, 2012), instructional leadership plays an important role.

Instructional leadership is the key to student success (learning outcomes) as the academic leader needs to engage in the tasks of evaluating teaching and learning, having conversation with teachers for effective instructional strategies, and promoting teachers’ professional skills (Pan, Nyeu, & Chen, 2014). Instructional leadership emphasizes the role of the academic leaders known as instructional leaders who support teaching and learning activities and develop teachers’ professionalism. The term instructional leadership embraces some leadership characteristics, including setting and communicating academic goals, allocating resources, managing instructional programs, promoting and participating in learning, and establishing a positive learning environment for both teachers and students. Moreover, it refers to the leadership practices involving in planning, evaluating, coordinating, and improving teaching and learning (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Thus, this is a type of leadership which is called learning-centered leadership (Goldring, Porter, Murphy, Elliot, & Cravens, 2009). Through this type of leadership, there is positive impact on student learning outcomes and it is mediated by the commitment of the teachers. If teachers are committed to their responsibilities as a result of the positive relationship with the instructional leaders, student learning will be enhanced (Alam & Ahmad, 2017).

Student learning is at the heart of instruction which is the main focus of outcome-based education. The premise of outcome-based education is that all students can learn and succeed as teachers set high expectations for them so that they participate more in classroom decisions and support all aspects of classroom activities. Thus, the involvement of the administrators, educators, and students is significant. Consequently, both students and teachers as well as administrators and educators are responsible for successful learning
outcomes (Battistini, 1995). As higher education prepares students to face the different challenges in life, outcome-based education plays a significant role to prepare them to be qualified future employees. As learning outcome is the heart of instructions, it becomes the tool to shift the emphasis of higher education towards student-centered teaching methods as required by outcome-based education. Supported by the continuous feedback on student learning process, constructive teaching methods work well with this teaching approach. The implementation of outcome-based education is to constantly improve learning outcomes with the employment of formative assessment tasks during the learning process and summative assessment tasks in the middle or at the end of the course (Narallah, 2014). Outcome-based education system is the approach in curriculum or program planning where student learning outcomes, including knowledge, skills, values, abilities and attitudes, must be obtained at the end of the course (Zain, Hadi, & Hamid, 2016).

Background of the Study

For the past thirty years Cambodia has been attempting to rise above the destructive impact of the Pol Pot regime (1975-1979) during which time education was almost non-existent. The government has reintroduced public education at all three levels—primary, secondary and tertiary. The Ministry of Education, Youth and Sports (MoEYS), in particular, has formed effective plans for the nation’s education system within limited resources. Many local and international non-governmental organizations (NGOs) have also played significant roles in the redevelopment of the nation’s public education system. They have spent significant amounts of money in their attempt to help improve the quality of education which is critical for the country’s redevelopment. They help Cambodian people to understand more about the benefits of education. The issue of low quality education which has been the focused of the Ministry of Education as well as stakeholders can be explained by a number of factors, one of which points to problems with the teachers. More specifically,
Cambodia lacks qualified teachers and many of them have never had a chance to participate in any in-service professional training (Kuy, 2013; Phin, 2014).

The peace accord signed in 1991 in Paris allowed Cambodia to have a general election in 1993 which was monitored by the United Nations Transitional Authority in Cambodia (UNTAC). Thus, higher education resumed its course after peace was restored in Cambodia (Williams, Kitamura, & Keng, 2015). National universities became public institutions and then were later converted to semiautonomous institutions (Pith & Ford, 2004). Later in 1997, private universities came into existence. Many universities have been proliferating since then. The first private university, Norton, was founded in 1997. At the end of 2014, there were 105 higher educational institutions, 39 public and 66 private (Williams, Kitamura, & Keng, 2015). To date, according to the MoEYS (2016), higher education institutions have increased up to 121 across the country with 73 being private. The rapid expansion of higher education institutions indicates that there is a growing need for more qualified human capital for the market.

Higher education institutions in Cambodia are divided into three categories—the royal academy, universities, and colleges. The royal academy is supposed to be a think tank only. Due to the lack of human resources in the country, however, it also provides programs like other institutions. Universities operate on a larger scope comprising various faculties while colleges specialize in fewer fields (Chealy, 2009).

The MoEYS has established a strategic plan, namely the Education Strategic Plan (ESP) 2014-2018, focusing on quality assurance, quality improvement and management improvement at all educational levels and in all institutions in Cambodia. These priorities of quality higher education dictates the roles of the Department of Higher Education: 1) establish policies and strategies, 2) approve the administration of higher education institutions, 3) support programs and management tools development, and 4) improve higher
education quality and efficiency throughout the country. To function as the planner for future direction, the MoEYS staff teams must improve their expertise and capacity in response to their new role (Hirosato & Kitamura, 2009).

Another aspect in raising the quality of education was the establishment of the Accreditation Committee of Cambodia (ACC) in 2003. All higher educational institutions in Cambodia, local or international, have to be accredited in order to issue degrees. The accreditation process in Cambodia began after ACC established accreditation criteria in 2005. As a result, higher educational institutions put considerable effort in meeting the accreditation requirements. The accreditation is based on the institution’s mission, management, administration and planning, course program, teachers, students and services, resources for learning, facilities, financial management and plan, and information distribution. However, ACC was slow to certify institutions because of the lack of expertise in these areas (Chealy, 2009). From 2006-2012, the focus of accreditation was on the assessment of the Foundation Year Curriculum. The criteria include strategic plan, curriculum, teachers, facilities and resources to support learning, and student admission. After ACC’s seven years of operation, faculty members’ qualifications and teaching quality have been improved and clearer plans have been observed in most institutions (Khieu, 2011). However, there is still much to be done for improvement.

Lecturers in higher education institutions in Cambodia have been seen as the knowledge-transmitters. They design their instructions based on the content given by the institutions. This means that they design their curriculum which may not well-serve the needs of the students as well as the needs of the society. How curriculum and activities are designed by lecturers can determine learners’ learning style. Cambodian students are found passive, and not self-directed. They even do not have much interaction with instructors (Davis, 2003). These lead to poor quality instructions as indicated by VSO (2008), UNESCO (2011),

Students are expected to functionally use the knowledge and skills obtained from the system in their job. However, if the challenges of instructions and learning cannot be successfully addressed, not only students get affected, but also the institutions. Higher education institutions may not be able to compete with others locally and internationally (Darling-Hammond, 2006; Schleicher, 2012). Poor quality instructions may devastate students’ lives by not being able to obtain necessary knowledge, skills, and attitudes for their careers (Chet, Ngin, Chhinh, Dy, & Davaid, 2014; Un, 2014). Quality instruction comes from planning well for what students need to be achieved at the end of the lesson (Tilestone, 2004). Instructional leadership has been sufficiently and significantly proved to improving quality teaching and learning (Sheppard, 1996; Hess & Kelly, 2007; Neumerski, 2012; Brazer & Bauer, 2013; Rigby, 2014; Ylimaki, 2014; Author & Zepeda, 2016).

**Statement of the Problem**

As inferred from the literature and the scarcity of studies related to instructional leadership in Cambodia, instructional leadership is not found to be typically implemented by academic administrators in higher education institutions in Cambodia. This is an issue as in their supervisory roles related to course curriculum development and teaching and learning, it affects how courses are designed and taught. How lecturers design their courses and teach contribute to better learning achievement in students. However, lecturers in Cambodia are more likely to be knowledge-transmitters with traditional ways of designing instruction that result in students being passive and not self-directed. This in turn affects the overall quality of education in Cambodian higher education institutions.

As Cambodia has experienced setbacks in its education system, in order to drive the country forward and enable it to keep up with globalized instructional trends and
standards, there needs to be research conducted to enhance instructional leadership in the
country’s higher education institutions. It is the aim of this study to provide a model that may
assist in this endeavor.

Research Questions

This research focuses on five questions: They are:

1. What are the expected instructional leadership practices and outcome-based
   education practices at higher education institutions?

2. What are the current instructional leadership practices and outcome-based
   education practices at private higher education institutions in Cambodia?

3. Is there a significant relationship between the instructional leadership practices
   and outcome-based education practices at private higher education institutions
   in Cambodia?

4. What are the factors affecting instructional leadership practices at private
   higher education institutions in Cambodia?

5. What is an effective instructional leadership model for outcome-based
   education at private higher education institutions in Cambodia?

Research Objectives

1. To explore the expected instructional leadership practices and outcome-based
   education practices at higher education institutions;

2. To examine the current instructional leadership practices and outcome-based
   education practices at private higher education institutions in Cambodia;

3. To identify if there is a significant relationship between the current
   instructional leadership practices and outcome-based education practices at
   private higher education institutions in Cambodia;
4. To determine the factors affecting instructional leadership practices at private higher education institutions in Cambodia;

5. To propose an effective instructional leadership model for outcome-based education at private higher education institutions in Cambodia.

**Theoretical Framework**

The main theories were used to investigate in this study include instructional leadership, outcome-based education and backward design process of curriculum planning. These theories will be discussed below.

**Instructional Leadership**

Instructional leadership is composed of three constructs: set the school goals, manage instructional programs and promote school climate (Hallinger & Murphy, 1985). This leadership does not only apply to administrators but also teachers. They can contribute to framing the school goals and communicating them to stakeholders. Moreover, they need to supervise and evaluate instruction, coordinate curriculum and monitor student learning. Finally, they need to maximize instructional time, develop professional skills in response to the teaching and learning needs, encourage and motivate one another, and promote academic standards. It is believed that instructional leadership influences both teaching and learning.

**Outcome-Based Education**

Outcome-based education (OBE) is an instructional practice that has existed since the 1980’s and 90’s and was introduced by William Spady. In 1994, Spady stated that OBE is the focus and organization of everything in education based on what students are able to do resulting from their learning experiences. Spady, who advocates OBE, believes that education should enable learners to perform their lifelong roles, including being a consumer, a producer, a citizen, a family member, a friend and a lifelong learner. OBE consists of three premises and four principles. These three premises are: 1) students can learn and succeed at
different times and in different ways, 2) success in learning can lead to even more successful learning, and 3) the factors that directly influence successful learning are controlled by the schools. The four principles are as follows. The first principle is the clarity of learning outcomes. This principle requires that instructors have informed choices in designing instructions in order to facilitate students’ learning. Moreover, the instructors must align their instructional activities and assessments with the desired results. The second principle is the expanded opportunity and support for learning success. In this regard, time is considered a great resource which contributes to the learning achievement of the learners. Instructors have to apply various instructional strategies and provide learning opportunities in cultivating the intended learning outcomes. More opportunities given to students means, it is believed, that they can achieve higher standards. The third principle is the high expectations for all to succeed. Instructors need to set high expectations for all students. By reinforcing prior learning, heightening self-confidence and providing them motivation, students are expected to excel. The last principle is to design instruction based on outcomes. Instructional design should be guided by learning outcomes. Such design should then be supported by learning activities that enable students to achieve the intended learning outcomes.

**Backward Design Process of Curriculum Planning**

According to Wiggins and McTighe (2005), the backward design process of curriculum planning starts with the identification of the desired learning results and followed by the determination of evidence and the learning activities.

**Stage 1: Identifying the desired results.**

This first stage is crucial to the success of the process as instructors need to pinpoint the essentials which students will need to know and do resulting from the learning experience. In planning this, instructors must consider what contents should be understood by the students and what knowledge and skills the students should be able to acquire.
Stage 2: Determining acceptable evidence.

The instructors need to have enough evidence in mind whether students have achieved the desired results. In this regard, instructors are encouraged to think like an assessor before designing the units and lessons. This makes the instructors feel sure of how they can determine whether students have obtained the desired results. To help instructors determine the evidence, these questions should be asked: How will they know whether students have achieved the desired results? What will they accept as evidence of students’ understanding and proficiency?

Stage 3: Planning learning experience and instruction.

After identifying the desired results and determining the acceptable evidence of successful learning, instructors then think about the instructional activities. The activities must be in line with the intended learning outcomes and the assessment methods used. Wiggins and McTighe (1998) explain that after the desired results and assessments have been identified, teaching methods, sequence of lesson, and materials can be planned. In planning this third stage, instructors have to think of the knowledge and skills students need to perform effectively, the activities that help students obtain the knowledge and skills, the contents to be taught and coached and how they should be taught, and the materials to be used to attain the desired results. With clear goals identified, instructional planning will more likely achieve the desired results.

Conceptual Framework

The conceptual framework for this research is shown in Figure 1. Firstly, this study begins by exploring the expected instructional leadership practices and outcome-based education practices mainly from secondary sources such as books, articles and online databases related to the key elements regarding instructional leadership practices that encourage lecturers to adapt outcome-based education. These sources were from the year
1994, when outcome-based education became widely accepted, until 2018. The expected elements for objective one encompassed curriculum development, classroom instruction and activities, learning assessment and/or any other related elements. Secondly, the researcher developed a survey from the findings of objective one in order to determine the current instructional leadership practices and outcome-based education practices in private higher education institutions in Cambodia. Thirdly, the researcher determined if there is a significant relationship between the current instructional leadership practices and outcome-based education practices. Fourthly, factors affecting the instructional leadership practices were analyzed by using multiple regression. Finally, the researcher developed an instructional leadership model for outcome-based education. The model was validated by experts and modified to obtain a final model. The finalized model was tested at a private higher education institution in Cambodia.
Figure 1. Conceptual Framework

Scope of the Study

This study focused on the expected instructional leadership practices and outcome-based education practices and a model was developed to assist administrators at private universities to work effectively with lecturers in promoting learning outcomes via outcome-based education. The selection of the five private universities for this study was based on the following criteria: firstly, the universities were established for at least 15 years and they must offer an education program accredited by the Accreditation Committee of Cambodia (ACC). Approximately 211 lecturers and ten administrators took part in the study. The researcher used a purposive sampling technique to select the sample (lecturers and administrators).
Definition of Terms

ACC (Accreditation Committee of Cambodia) is the quality assurance body established by the Royal Government of Cambodia in 2003 to certify degree programs offered by higher education institutions. Before 2013, this body was managed by the Cabinet Ministry. At the present, ACC is under the management by the Ministry of Education, Youth and Sports (MoEYS).

Backward design process of curriculum planning is a process of planning curriculum which is based upon learning outcomes. It starts with identifying what learners should understand and be able to do, then determine the evidence of successful learning before planning the learning activities. The learning activities must be aligned with the learning outcomes and the assessment evidence.

Expected instructional leadership practices are the common actions of the instructional leaders taken to promote teaching and learning through the engagement in curriculum development, instruction, assessment and other related tasks, such as setting academic goals, promoting professional development, establishing positive learning climate, and providing incentives to teachers and students. These instructional leadership practices can be measured by respondents' rating using a five-point Likert-type scale.

MoEYS is the acronym of Ministry of Education, Youth, and Sports. This ministry is overseeing the operation of all educational institutions of all levels including sports in Cambodia.

Instructional Leadership

Instructional leadership is the action taken by a leader to influence teaching and learning. The action include building a supportive and collaborative environment, supervising curriculum development and instruction, providing professional development, and framing and communicating goals.
Building a supportive and collaborative environment is the action taken by the academic administrators to influence teaching and learning. These actions include listening to personal and professional concerns of lecturers, building a strong relationship with lecturers, encouraging lecturers to share responsibilities for student learning, and engaging lecturers in decision making about educational issues. (Survey items 12-16)

Framing and communicating goals is the action taken by the academic administrators to bring collective efforts of lecturers to set the academic goals and communicate them to all parties involved. (Survey items 1-2)

Providing professional development is the action taken by the academic administrators to promote professionalism of lecturers. The actions include encouraging lecturers to professionally interact with others as well as to observe peers’ teaching to learn from one another, doing research to support instructional practices, and providing professional training opportunities to lecturers. (Survey items 3-6)

Supervising curriculum development and instruction is the action taken by the academic administrators to influence teaching and learning. These actions include the monitoring on course design and instructions and on student learning progress with lecturers, the allocation of resources for instructions, and the observation of teaching and providing feedback for improved instructional practices. (Survey items 7-11)

Outcome-Based Education

Learning outcomes are what students will know and be able to do resulting from an instructional session. The outcomes are expressed as knowledge, skills and attitude. (Survey items 17-21)

Learning activities are the learning experiences meaningfully designed by lecturers to achieve the learning outcomes. The activities are designed to actively engage
students in the learning process and to offer chance for learners to apply what they have learned into the real practices. (Survey items 22-26)

*Learning assessment* is the process of checking students’ learning progress and providing timely feedback on learning. Moreover, it is the process of monitoring teaching and learning. Lecturers need to modify their instructions based on the learning results. (Survey items 27-31)

*Outcome-based education practice* is approach to designing courses and instructions which centralize on what students need to know and be able to do resulting from the learning experience and assessment. The outcome-based education can be measured by respondents’ rating using a five-point Likert-type scale.

**Factors affecting Instructional Leadership**

*Cooperation, culture, and values* are the factors faced by the academic administrators in bringing collective efforts and collaboration of lecturers to share responsibilities for better teaching and learning. (Survey items 37-41)

**Factors** are the challenges occurring within the organizational and social contexts which prevent the effective implementation of instructional leadership practices in a particular organization. These challenges may include time constraints and workload, qualification, skills and experience, cooperation, culture and values, organizational structure, funding and facilities, tasks and roles related to instructional leadership. These factors can be measured by respondents’ rating using a five-point Likert-type scale.

*Funding and facilities* are the financial and material resources for the higher education institutions to support teaching and learning. (Survey items 50-52)

*Organizational structure* is the management structure which challenges the academic administrators to developing own curriculum, providing professional development
to lecturers, and developing the academic goals in collaboration with lecturers. (Survey items 46-49)

*Qualification, skills, and experiences* are the factors that influence instructional leadership practices. These factors include the knowledge, the expertise in curriculum development, leadership and management experiences, and the ability to use the data to judge the quality of instructional activities. (Survey items 42-45)

*Tasks and roles related to instructional leadership* are the actions taken by the academic administrators to promote innovative instructional practices and action research, and to engage lecturers in decision making process. (Survey items 53-56)

*Time constraints and workloads* are the factors faced by the academic administrators to influence the implementation of instructional leadership. These factors include the lack of time in supervising course design and instruction, the administrative tasks which took away their instructional practices, and other workloads assigned by the higher education institutions. (Survey items 32-36)

**Significance of the Study**

The results of this research provides an instructional leadership model for outcome-based education to promote student learning. The findings are useful for lecturers in the private higher institutions in Cambodia to design their courses and deliver instruction. It allows lecturers to have a more systematic method in designing courses for instructions that centralize on student learning. Moreover, this study can be effective in promoting awareness to lecturers that they should also function as instructional leaders as instructional leadership does not only apply to the academic administrators alone but also lecturers to promote student learning. They can communicate the academic goals to students, making sure that students are well-informed about the course expectations and that they seek opportunities and ways to obtain them. Lecturers establish the environment that is supportive to teaching and learning.
The new instructional leadership model aims at implementing in the private higher education institutions being investigated. It is believed that the model would substantially influence the way the academic administrators currently practiced leadership. The administrators can adjust themselves in performing their instructional leadership practices through a number of factors which include time constraints and workloads, cooperation, culture, and values, qualification, skills, and experience, organizational structure, funding and facilities, and tasks and roles related to instructional leadership. The instructional leadership model may provide more insights for the administrators to employ leadership practices that convince lecturers to place all their best in their teaching profession for the purpose of student learning. The findings may encourage the administrators to get more involved in the process of instruction through their engagement in curriculum development, instruction planning, and assessment design.

The private universities themselves can receive tremendous supports from the findings. The role of higher education is to prepare students with the knowledge, skills and attitudes to function well in the real world. The findings, especially the instructional leadership model, can benefit other departments besides the education faculty. If the model is employed well, quality instruction can be promoted and student learning is surely enhanced. Thus, the universities produce quality outcomes and output for the society. This in turn attracts more students and the universities become well-known to public.

The results may encourage future researchers to use the instructional leadership model to further investigate in a larger contexts including different fields and location across the country. This helps generalize the results that would be beneficial for the Cambodian higher education institutions both public and private to promote quality education, quality teaching; hence, greater student learning.
CHAPTER II

REVIEW OF RELATED LITERATURE

The chapter provides the information on the context of the subject and related theories and constructs that form the basis of the study. It comprises of three parts including the Higher Education in Cambodia, Major Theoretical Concepts, and Related Research.

Part I: Higher Education in Cambodia

This part presents some information about Cambodia. The information includes the Demographic Information, the History of Higher Education in Cambodian, the Modern Context of Higher Education, the Quality of Higher Education, and the Quality of Teaching in Higher Education in Cambodia.

Demographic Information

Cambodia is located in Southeast Asia and is one of the ASEAN members. According to the Index Mundi (2016), Cambodia has a total population of 15,957,223 and is divided into five age groups as shown below:

Table 1

<table>
<thead>
<tr>
<th>Age structure</th>
<th>Percentage</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 years</td>
<td>31.24%</td>
<td>2,515,435</td>
<td>2,468,855</td>
</tr>
<tr>
<td>15-24 years</td>
<td>19.02%</td>
<td>1,501,070</td>
<td>1,533,500</td>
</tr>
<tr>
<td>25-54 years</td>
<td>40.18%</td>
<td>3,139,851</td>
<td>3,271,077</td>
</tr>
<tr>
<td>55-64 years</td>
<td>5.43%</td>
<td>342,063</td>
<td>524,114</td>
</tr>
<tr>
<td>65 years and above</td>
<td>4.14%</td>
<td>248,454</td>
<td>412,804</td>
</tr>
</tbody>
</table>

Source: Index Mundi (2016)

Cambodia’s population is composed of several ethnic groups. Approximately, 90 percent are Khmer, five percent are Vietnamese, Chinese constitute one percent and others are four percent. The official language is Khmer and English is the second language.

Buddhism is the major religion which accounts for 96.9 percent of the population and
Muslims, Christians, and other religions comprise 3.1 percent. The population growth rate is 1.6 percent with the birth rate of 23.4 births/1000 and death rate of 7.6 deaths/1000.

**History of Higher Education in Cambodia**

Cambodia has an interesting and long history regarding its higher education. According to Prah Sihanouk Raja Buddhist University (PBU, 2009) as cited in Rany et al., (2012), Cambodia had its higher education institutions in Angkor Empire in the 12th century. Queen Andradevy, the wife of King Jayavarman VII (1181-1220) established two universities, one of which was situated in Preah Khan temple (Wat Cheysrey) and another one was in Taprom temple (Raja Vihear). The roles of the temples were significant during that time in promoting educational and cultural activities. Consequently, there were 1081 temples throughout the country. There were 18 people who had doctoral degrees and 740 university teachers who enhanced the national human resources for the country.

Unfortunately, the Angkor Era declined in the 15th century when higher education institutions were destroyed or closed. War with neighboring countries was rampant until King Ang Duong (1797-1860) invited France to be the protectorate in 1863 (PBU, 2009).

During the time of the French protectorate (1863-1953), many schools and some higher education institutions were established. Research has pointed out that some higher education institutions were established a few years before the end of the French protectorate and colonization. These institutions included the National Institute of Law, the National Institute of Politics, and the National Institute of Economic Sciences. The higher education system in Cambodia during that time was heavily influenced by the French education system (Chen, Sok, & Sok, 2007; Williams, Kitamura, & Keng, 2015).

During post French colonization in 1953, Cambodia went through another period called Sangkum Reas Niyum (1954-1969) which was regarded as a glorious period (Chen, Sok, & Sok, 2007). King Sihanouk, former Cambodian king who took control of the country
built many higher education institutions during that period. For example, the first public university was started in 1960 and later other universities were established. These universities include the Khmer Royal University established in 1960 and in 1965, six more higher education institutions were opened, including the Royal Technical University, the Royal University of Fine Arts, the Royal University of Kompong Cham, the Royal University of Takeo-Kampot, the Royal University of Agricultural Science, and the People’s University (Williams, Kitamura, & Keng, 2015). Though regarded as one of the glorious times for Cambodia, some researchers have claimed that the quality of higher education was very low quality (Pith & Ford, 2004). The government struggled to improve higher education to prepare young adults for their careers and to develop the economy of the country. Unfortunately Cambodia went into the cold war in 1970 that paralyzed its higher education which was suspended until 1993 (PBU, 2009).

Cambodia went into the worst period from 1975-1979, the darkest time in the Cambodian history under the administration of Pol Pot, known as Democratic Kampuchea. During this period of time, the education system was almost destroyed and schools and higher education institutions were closed (Chealy, 2005; Chen, Sok, & Sok, 2007; and PBU, 2009). Approximately three quarters of university teachers and 96 percent of students were killed (Williams, Kitamura, & Keng, 2015).

The collapse of the Pol Pot regime in 1979 gave hope back to Cambodia. The education system was re-established and schools and higher education institutions were re-opened. In 1979, with help of the Soviet Union, People’s Republic of Kampuchea was established. Some experts from Russia and Vietnam came to help establish higher education again. The universities, including the Royal University of Phnom Penh which had been established before the Pol Pot regime, were operating again in Cambodia (Sloper, 2000).
Modern Context of Higher Education in Cambodia

The universities which had been established before the cold war in 1970 were reopened after the collapse of the Pol Pot regime. Though higher education institutions were reopened, private universities were not available until 1997. The first private university, established in 1997, was Norton University. Subsequently, the number of private universities continued to grow and by the end of 2014, there were 66 private higher education institutions across the country (Williams, Kitamura, & Keng, 2015). To date, according to the Ministry of Education, Youth and Sports (MoEYS) in 2016, the number of private higher education institutions has increased up to 73.

The increasing number of private higher education institutions in Cambodia indicates a growing number of students who value the importance of higher education in preparation for their careers. This phenomenon also reflects the increasing demands of the labor market. Private higher education institutions offer various degree programs from Associate Degree (AD) to Ph.D. Degree (PD). The number of young adults who embark on university education has increased dramatically. If compared with ten years ago, the number of students who enroll in Associate Degree has increased from 15,802 to 23,746, Bachelor Degree from 92,340 to 174,142, Master Degree from 8,830 to 18,723 and Ph.D. from 448 to 1,229 (MoEYS, 2016).
Figure 2. Student’s Registration for all Degrees between 2006-2007 and 2015-2016 (MoEYS, 2016)

As can be seen from Figure 2, there is a dramatic increase of student registration in higher education from 2006-2016. However, it does not mean that the number of graduates equals the number of students registered. Figure 3 below shows the number of students who graduated from the programs (AD, BD, MD and PhD) in 2015-2016 academic year.

Figure 3. No. of students who registered and graduated in the academic year 2015-2016 (MoEYS, 2016)

The statistics in Figure 3 demonstrates an important concern for higher education in Cambodia because the dropout rate is quite high. Some related factor may have included...
students experienced low quality education while they were in universities or they did not think the knowledge and professional skills they received would enhance their future living. Moreover, previous graduates’ experiences may help explain this phenomenon. Many graduates found it hard to get a better job. This would discourage high school graduates from pursuing higher education. Many of them may prefer entering the job market or starting their own business right after high school.

The Quality of Higher Education in Cambodia

The establishment of higher education is to provide human resources with knowledge and skills for self-dependence, sustainable development, and improved job competence. The importance of higher education in Cambodia has been gradually gaining many people’s attention since the 1990s. Thus, the Royal Government of Cambodia and the MoEYS have been planning to develop human resources of high knowledge and professional ethics for the new global trend and market competition in the 21st century (MoEYS, 2014).

Under the law, higher education in Cambodia is expected to promote research work in technical, cultural, social and scientific areas (MoEYS, 2010). The government has considered higher education a very important factor in building up human resources for the country; thus, actions have been taken to expand access. This together with the challenges of developing the education system have put much pressure on the government, especially the Ministry of Education. Thus, the Ministry of Education plays an important role in addressing the issues (Williams, Kitamura, & Keng, 2015).

According to the Education Strategic Plan (ESP) 2014-2018, quality assurance, quality improvement, and management improvement for all levels and in all education institutions have been placed in high priority. One of the efforts the government has made to improve the quality of higher education is the establishment of the Accreditation Committee of Cambodia (ACC) in 2003. All higher education institutions in Cambodia have to attain
accreditation from ACC to certify all degrees issued. Quality criteria in nine areas have been designated. These include the mission, management, administration, and planning, course program, teachers, students, resources for learning, facilities, financial management and planning, and information distribution. However, ACC could not perform its role effectively due to the lack of staff with expertise (Chealy, 2009).

Though the number of higher education institutions has been growing dramatically, a critique includes that they are not as effective in developing human resources of high knowledge and professional ethics for the new global trend and market competition in the 21st century. Most of them are akin to business agencies rather than real education institutions (Vann, 2012). They offer academic courses for profit but do not provide in-depth knowledge and skills to students. This short-sighted culture is not healthy and would leave Cambodian higher education behind international standards. The literature discloses some major issues hurting the quality of higher education in Cambodia. One of the issues is that most higher education institutions place much attention on short-term benefits. Another issue is the rapid expansion of higher education institutions without good quality assurance systems in place (Chet, 2006). Moreover, higher education institutions suffer from the lack of learning resources, professional management and quality teaching (Ros, 2014). Due to limited quality of education offered by universities, graduates are faced with limited employment opportunity. They do not receive the proper skills offered by universities. Students who graduate from universities do not have the knowledge and skills needed by the markets, thus, they find it hard to get employed. However, Cambodia has a commitment to improve the higher education system and this brings both challenges and opportunities (San, 2013).

Another perspective on the quality of higher education in Cambodia is from the work of Chen, Sok, and Sok (2007). These researchers investigated the factors which lead to quality and found five contributing factors in higher education in Cambodia. They include the
academic curriculum and extra-curricular activities, teachers’ qualifications and teaching methods, tuition fees, facilities, and network. The findings indicated that six percent of the instructors hold Ph.D. degrees and about 90 percent of them never published any papers. The results also showed that universities in Cambodia are more “teaching-oriented” rather than “research-oriented”. The authors suggested the universities to promote research works so that lecturers would be able to catch up with the current trend of education. Moreover, some universities charged very low, around USD 200 per academic year. Though there was a library at each university, there were no up-to-date books and materials. Furthermore, about 90 percent of the lecturers never got a chance for academic or professional discussion or meeting and 60 percent of the students said that their lecturers had insufficient time for student consultation. It was also suggested that the universities should pay more attention to sufficient resources, the increase of lecturers’ involvement and the interaction between lecturers and students to improve education quality.

**Quality of Teaching in Higher Education in Cambodia**

Quality teaching may be defined differently according to the context. The Organization for Economic Cooperation and Development (OECD) in 2012 defined quality teaching as the use of pedagogical techniques to yield student learning outcomes. Brusoni et al., (2014) defined it as the fulfillment of a certain standard which could be the fitness for the purpose. Though higher education in Cambodia has been growing dramatically, the quality of teaching has remained a great concern (VSO, 2008; UNESCO, 2011; Vann, 2012; Hughes, 2011; Eang, 2014; Williams, Kitamura & Keng, 2015). With reference to the definitions above, Cambodian higher education institutions have yet to yield student learning outcomes through applying quality pedagogical techniques. They fail to fulfill the purpose of developing human resources of high knowledge and professional ethics for the new global trend and market competition in the 21st century.
Poor teaching quality can be explained by low motivation (Eang, 2014). Low salary is the major issue causing low quality teaching. If the lecturers receive limited income, it’s hard for them to maintain their living. There is a correlation between salary and teaching quality (Ros, 2014). According to the survey conducted by Voluntary Service Overseas (VSO, 2008), lecturers were not happy with the workload given by the universities with little pay. Most of them needed a second job to earn enough income. Consequently, they did not have sufficient time to fully concentrate on their instructional practices, especially in preparing their lessons. Another study conducted by UNESCO (2011) reported that 99 percent of the participants could not survive with their salary from one job. Among them, 93 percent had second jobs. The increase of private higher education institutions has provided the opportunities for public university lecturers to work part-time in other higher education institutions. Due to the busy schedule, they did not have sufficient time to prepare lessons or conduct research to build up their capacity, thus, poor teaching quality became an issue.

The issue of insufficient time did not only cause poor teaching quality but also low learning quality. Lecturers should have enough time for student consultations. However, lecturers who had a second job did not have sufficient time for students. They had to go from place to place to teach and the only time they had for their students was the scheduled lessons. Most lecturers taught many classes in different universities, leaving students with very little time to meet their teachers beyond class hours (Vann, 2012). Moreover, the relationship between lecturers and students was another area of concern. Research shows that when students have a sense of belonging, they would engage actively in learning and achieve better outcomes (Hughes, 2011). However, Cambodian lecturers used passive teaching methods, thus, students and lecturer had little interaction. Students were very passive. They rarely asked their lecturer questions and vice versa. Lecturers had to teach big classes. Since they didn’t work full-time, they had very little time to develop good lecturer-student
relationships. Lecturing was the default method, hence, the interaction between lecturer and students was very limited. Due to the fact that students lacked reading habits and had very limited interaction with lecturers, they simply failed to learn well (UNESCO, 2011).

The lack of professional development for lecturers contributes to poor teaching quality. Lecturers received very limited instructional training after they graduated from university. Thus, they were not well-equipped to perform well in their teaching work. Moreover, many higher education institutions had few full time lecturers. Most of them were part-timers and thus these higher education institutions could not provide sufficient professional training opportunities and supports for their part-time lecturers (Williams, Kitamura, & Keng, 2015).

Public higher education institutions receive limited funding from the government and the private institutions receive almost nothing, hence, the government doesn’t exert much influence on them. Currently, private higher institutions are promoting affordable courses for high school graduates, such as business, management, banking and finance. These courses do not require laboratories or sophisticated equipment (needed for medical studies or engineering, for example) and therefore are cheaper to operate. Business-related courses are attractive to students because it is felt that it can help one make more money. Also most students tend to choose their majors based on popular trends without seriously considering their own interests and career goals (San, 2013). Moreover, higher education institutions’ internal governance is weak. Lecturers at public universities may question the unqualified top management personnel including rectors who come into the position by means of political connection. Private university lecturers also think that their rectors do not have adequate academic qualifications besides their wealth and power (Vann, 2012). Poor management demotivates lecturers and poor governance systems kill professionalism and determination.
The dysfunctional internal governance system badly affects the teaching quality, and consequently, student learning outcomes (VSO, 2008).

This part presented important information briefly about Cambodia as indicating in the demographic information and on the history of higher education in Cambodia particularly in different eras of leadership. The current Cambodian higher education contexts including the quality of higher education, the quality of teaching in higher education were also revealed. These information informed the past experiences of education, particularly in higher education and the development of higher education in the modern context. The information is also to inform the current situation of higher education in Cambodia and the future trend directed by the current education reform of the ministry of education in order to bring prosperity to the country.

Part II: Major Theoretical Concepts

This section explains the main theories used in this study. The two major theories include Instructional Leadership by Hallinger and Murphy (1985) and Outcome-Based Education by Spady (1994). One sub-theory has been introduced here. It is Backward-Design Process of Curriculum Planning. This sub-theory is to support the main theory of Outcome-Based Education as the approach in designing courses and instruction start from the learning outcomes. Previous research studies have been reviewed to back up the major theories and the sub-theory. Moreover, Adult Learning Theories particularly Transformative Learning and Constructivist Learning Theory have been introduced. These learning theories would assist lecturers in planning for their learning activities.

Instructional Leadership Theory

Schools in the 21st century are responsible for preparing students for the cultural, demographic, informational, economic and technological changes. These changes require students to have various skills, including learning, innovation, information and technology, to
help them succeed in this interconnected world (Hoy & Hoy, 2013). In this regard, leadership, particularly instructional leadership, is the key to student success (learning outcomes). The academic leader holds the responsibility to evaluate teaching and learning, have conversation with teachers for effective instructional strategies, and promote teachers’ professional skills (Pan, Nyeu, & Chen, 2014). The academic leaders need to influence instruction directly to obtain better student learning. Similarly, the role of an instructional leader is to ensure successful learning; hence, he or she has to know how to work effectively with teachers to best serve the students. In today’s higher education institutions, students have diverse learning styles resulting from their social, economic and cultural backgrounds. This brings challenges to teachers as well as academic leaders. Thus, instructional leaders need to know where to place themselves appropriately to address the issues (Raouf, 2016).

Hallinger (2005) considered instructional leaders as directive leaders who can turn their school around. They are culture builders since they work to establish the environment that promotes high expectations and standards for both teachers and students. Moreover, they are goal-oriented because they need to define the direction for the school and encourage people to achieve the goals together.

Instructional leadership comprises a number of leadership practices. These include the setting up of academic goals, the allocation of resources, the observation and evaluation of teachers and teaching, the promotion of learning environment among teachers, and the establishment of the school environment which is supportive to students and teachers (Brown & Chai, 2012). Moreover, instructional leadership focuses more on the role of the academic leader to support learning activities and promoting teachers’ professional skills (Leithwood, Louis, Anderson, & Wahlstrom, 2004). It is similar to what Hallinger (2010) mentions that instructional leadership places more emphasis on the role of the academic leader or principal. This kind of leadership is also called the leadership for learning.
In the context of higher education, an instructional leader refers to the chief academic officer who is the administrative head of an academic program responsible for all academic affairs at the institution. The major responsibility of the academic head is to oversee the curriculum development in the institution. He or she ensures that curriculum content and instruction follow institutional standards. He or she works closely with the teachers in developing the curriculum that meets both students’ needs and institutional guidelines. Diverse learning styles are present in higher education institutions today. Such diversity creates challenges for teaching and learning. The role of an instructional leader is to assist faculty members to facilitate effective student learning through curriculum development. Understanding such backgrounds would help instructors to assist students in drawing from their experience and connecting their learning to real life practices (Raouf, 2016).

In the attempt to adopt outcome-based education (OBE), a strong commitment from the administrator or academic leader is crucial. To make this happen, the administrator or academic leader needs to gain the instructors’ support. They have to explicitly explain the rationale for adopting OBE and highlight some good instructional practices and examples from the department and invest more on teacher training (Chan & Chan, 2009). Student quality learning and achievement need quality instruction which requires sustained instructional leadership. Instructional leadership has been popular and supported by many researchers in promoting high quality instruction (Brazer & Bauer, 2013; Neumerski, 2012; Rigby, 2014).

**The definition of Instructional Leadership**

Instructional leadership is defined as the behaviors of a leader that influence a group of instructors to promote teaching and learning. Instructional leaders interact directly with instructors to provide a supportive working as well as learning environment within the
school (Murphy & Hallinger, 1985; Sisman, 2012). Some researchers define it as actions to develop learning and teaching (Blasé & Blasé, 1999; King, 2002; Yim, 2011). Thus, in this study, instructional leadership can be the behaviors of and actions taken by a leader to promote teaching and learning.

**The origins of Instructional Leadership**

Instructional leadership originated from DeBevoise (1984). He suggested that communicating school purposes and standards, monitoring learner and instructor performance, recognizing and rewarding good work and providing professional development initiatives were the work of instructional leaders. Principals who were considered effective were those who viewed school culture as something they could monitor and change (Dwyer, 1984). Based on this idea and other research, Hallinger and Murphy (1985) proposed an instructional leadership model with three dimensions for school leaders. These dimensions include 1) setting and communicating school vision, 2) managing instructional programs, and 3) creating positive school climate. These three dimensions with ten leadership functions are still important (Hallinger, 2011). The first dimension addresses the mission for crafting the major purpose of the school. The second dimension addresses the instruction and coordination of the instructional program. The third dimension addresses the creation of a positive school environment.
Table 2

*Instructional Leadership Dimensions by Murphy and Hallinger (1985)*

<table>
<thead>
<tr>
<th>Define the School Goals</th>
<th>Manage the Instructional Programs</th>
<th>Promote a Positive School Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Set school goals</td>
<td>• Supervise and evaluate instruction</td>
<td>• Protect instructional time</td>
</tr>
<tr>
<td>• Communicate school goals</td>
<td>• Coordinate curriculum</td>
<td>• Promote professional development</td>
</tr>
<tr>
<td></td>
<td>• Monitor student progress</td>
<td>• Maintain high visibility</td>
</tr>
</tbody>
</table>

Source: Murphy & Hallinger (1985)

In 1990, Murphy updated his instructional leadership framework by splitting the third components into two and moved some of the items into the second components. Table 3 below shows the updated version of the instructional leadership framework.

Table 3

*Murphy’s Comprehensive Instructional Leadership Framework*

<table>
<thead>
<tr>
<th>Develop the School Goals</th>
<th>Manage the Educational Production Function</th>
<th>Promote an Academic Learning Climate</th>
<th>Develop a Supportive Work Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Set school goals</td>
<td>• Promote quality instruction</td>
<td>• Establish positive expectations and standards</td>
<td>• Create a safe learning environment</td>
</tr>
<tr>
<td>• Communicate school goals</td>
<td>• Supervise and evaluate instruction</td>
<td>• Maintain high visibility</td>
<td>• Provide chance for student involvement</td>
</tr>
<tr>
<td></td>
<td>• Allocate and protect instructional time</td>
<td>• Provide incentives for teachers and students</td>
<td>• Develop staff collaboration and cohesion</td>
</tr>
<tr>
<td></td>
<td>• Coordinate the curriculum</td>
<td>• Promote professional development</td>
<td>• Secure outside resources in support of school goals</td>
</tr>
<tr>
<td></td>
<td>• Monitor student progress</td>
<td></td>
<td>• Forge links between the home and the school.</td>
</tr>
</tbody>
</table>

Source: Murphy (1990)

Another version of instructional leadership model was developed by Weber (1996). This model is composed of five elements: define the school’s mission, manage
Defining the school’s mission. The leader works collaboratively to develop the vision and mission for the institutions.

Managing curriculum and instruction. The instructional leader monitors the classroom practice in alignment with the school’s mission. Moreover, he or she works to provide resources and support for instructional practices. The leader has to model and provide support by using the data to help the instructions.

Promoting a positive learning climate. The instructional leader communicates the school goals to staff, teachers, students and other stakeholders. He or she also establishes high expectations for students and creates an orderly learning environment for teaching and learning.

Observing and improving instruction. The instructional leader’s work wish to observe and improve instructions through observing classroom teaching and providing opportunities to develop teachers’ professional skills.

Assessing the instructional programs. The instructional leader engages in the process of designing, administering, and analyzing the assessments in order to check the effectiveness of the curriculum.

Instructional leadership is originally from western contexts which serves the purpose of western educational leadership practices. It has been adapted throughout the world, including Asia. An instructional leadership model has been newly developed for the Chinese education context by Qian, Walker & Li (2017). This Chinese-oriented model shares some features of the leadership framework from the western context. The model is comprised of six dimensions followed by a set of sub-dimensions.
Table 4

*Instructional Leadership Model*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining purpose and direction</td>
<td>Principals seek the qualities or strengths of their schools, particularly in curriculum and professional development strategies. The strengths can be translated into annual plans to help teachers understand and get involved in instructional development.</td>
</tr>
<tr>
<td>Evaluating and monitoring instruction</td>
<td>It is the work of principals to interact daily in the instructional process in order to support and give feedback to teachers regarding student learning.</td>
</tr>
<tr>
<td>Nurturing positive and collaborative relationships with and between teachers</td>
<td>Policy can be adjusted to include collaborative efforts to ensure a safe and supportive environment for teachers and students. Principals motivate teachers and staff to use research as their basis for designing learning activities.</td>
</tr>
<tr>
<td>Aligning the curriculum</td>
<td>The role of the principals is to align the curriculum with the national standards which focus more on student active learning.</td>
</tr>
<tr>
<td>Fostering professional development to enhance teacher capacity</td>
<td>Teachers engage in professional development both inside and outside school. Research work and external resources should be encouraged for teachers to strengthen their teaching capacity.</td>
</tr>
<tr>
<td>Promoting external communication to support learning</td>
<td>Building collaboration with other stakeholders for the benefits of student learning need to be done by the principals.</td>
</tr>
</tbody>
</table>

Source: Qian, Walker, & Li (2017)

The updated version of instructional leadership model by Murphy (1990), Webber (1996) and Qian, Walker, & Li (2017) has different ways of placing the key elements in varied dimensions. However, their key elements split do not stray far from the instructional leadership model by Hallinger and Murphy (1985). Hence, the researcher has adopted this model for the study.
As pointed out earlier, instructional leadership has gained the attention of educators, researchers and educational leaders in promoting instructional quality and student learning (Brazer & Bauer, 2013; Neumerski, 2012; Rigby, 2014). One major focus of education in the 21st century is to respond to the demand for increasing effective student learning. Schools ensures that students can master the expected curriculum objectives. As a result, instructional leaders place lots of effort to promote student performance relevant to the curriculum objectives (Stronge, Richard & Catano, 2008). In order for the instructional leaders to genuinely increase student learning, Stronge, Richard and Catano (2008) suggest five practices. Firstly, leaders build and sustain a school vision. They have a clear vision and mission to avoid needless consumption of the administrative resource. The leader express the importance of the school vision upon the staff. They need to understand that the presence of quality learning is a strong indicator of a successful school. This is supported by Cotton (2003) that learning is the most important goals for the schools. The academic leaders need to reach out to stakeholders to gain their support. Secondly, leaders encourage a sharing leadership. In leading teachers to achieve the vision, collaboration is needed. The administrators cannot work alone to meet the instructional goals. Thus, the administrators need to encourage everyone to get involved in shared efforts to accomplish the vision together. Thirdly, leaders need to be learners and encourage teachers to be learners, too. Constant learning allows teachers to master up-to-date knowledge and provides the best instructional practices for student learning. Fourthly, leaders make decisions based on available and relevant data. They need the information about the school in managing and planning to achieve the goals with staff. Finally, leaders need the knowledge of curriculum and instruction to assist teachers perform tasks more effectively.
Dimensions of instructional leadership by Murphy and Hallinger (1985).

Setting and communicating school vision.

Instructional leaders set up a vision and communicate it to every staff so that the whole school is moving forward in one clear direction. Some researchers mention that one of the roles for school administrators is to set clear goals for the school and communicate them to their academic staff (Jenkins, 2009; Hallinger, 2009; Seong, 2015). More than that, they have an obligation to communicate their values, beliefs and vision to the staff because it is important to make them aware of the direction they were heading to (Gurr, Drysdale, & Mulford, 2010). They also have to set high expectations and standards for both students and instructors (Hallinger, 2009).

Managing instructional programs.

Instructional leadership practices have become a popular research topic, especially relating to curriculum and instruction management. It is believed that instructional leadership practices have greatly impacted the instructions, thus, student learning. A leader have four roles in managing instructional program (Jenkins, 2009). He or she works to allocate the resources for instructions, manages the curriculum, monitors the lesson plans, and evaluates instructions. Instructional leaders provide direct management to achieve the ultimate goals of the school. These management activities include coordinating, controlling, and supervising the curriculum and instructions (Hallinger, 2009). Moreover, the supervision by instructional leaders impact the efficacy of instructors. Their activities are to improve classroom instructions, including classroom observation, feedback provision and assistance for teachers to improve their instructional practices (Rew, 2013). In addition, instructional leaders need to frequently check the teaching program, test results, pay classroom visits and monitor student progress (Ahmad & Hussain, 2012). Besides, the leader protects and maintains the instructional time well (Haggard, 2008).
Creating positive school climate.

A caring and positive working and learning environment are believed to be the drive to motivate instructors in their teaching job. One of the instructional leaders’ practices is to care for instructors. They should listen to issues related to instructors, including their workload, personal issues and tiredness. By doing so, they have the opportunity to offer verbal encouragement to instructors (Soeng, 2015). Two important practices which enhance teaching and learning are recommended by Blasé and Blasé (2000). First, the leaders should talk to instructors to promote reflection. Through the process of communication, instructional leaders can make suggestions, give feedback, model, use inquiry, collect advice and ideas and give praise. Building good relationships with teachers and assisting them to set high expectations have positive effects on students’ success (Gurr, Drysdale & Mulford, 2007). The second practice is to promote staff professional growth. Providing opportunities for teachers to interact and share their professional expertise as well as attending professional development programs promote the growth of their profession. A sense of collaboration needs to be encouraged and promoted among the teams. If professional learning is valued and promoted, positive school climate was enhanced (Devos & Bouckenoogh, 2009). Moreover, instructional leaders are motivators as they encouraged instructors to value innovative and new ideas on instructional designs. The encouragement becomes the motivational drive in promoting professional growth. They reflect on their instructional practices and seek new strategies to support their teaching (Lee, Walker & Chui, 2012). In this sense, the leaders are considered as facilitators rather than supervisors. They help instructors to grow and develop their teaching capacities to enhance student achievement. For a leader to be a facilitator, he or she has to know how to work with teachers and help them develop personal and professional expertise. More than that, a leader’s tasks are to improve the quality of teaching, curriculum development and assessment (Gurr, Drysdale, & Mulford, 2010).
The advantages of Instructional Leadership.

Instructional leadership has a very strong influence on student success; thus, it has been in the great interest of researchers as well as practitioners (Hallinger, 2011; Leithwood, Patten, & Jantzi, 2010). It is to bring success to students through the collaborative work of instructional leader and the instructors. Instructional leadership provides four benefits to both the instructors and students (Blasé & Blasé, 2000). First, instructional leadership provides direct assistance to instructors, particularly in the development of curriculum, professional skills, group development, and action research. Second, it affects indirectly the teacher behaviors, including the process of monitoring student progress. Third, it directly affects classroom instruction. These effects help teachers to be more committed, involved and innovative. Fourth, it directly and indirectly affects student achievement. The current literature discloses that instructional leadership has both indirect and direct effects on student success because leader works with instructors who has direct influence on student learning (Lee, Walker, & Chui, 2012).

Research related to Instructional Leadership.

A study conducted by Mielcarek (2010) aimed at explaining the key organizational variables and student achievement. The researcher reviewed and synthesized the literature on instructional leadership and developed a framework out of it. Structural equation was used to collect the data from 146 elementary schools in Ohio. The findings showed strong support for the model. The principal instructional leadership did not directly influence student achievement but it did with the teaching.

It could be concluded that instructional leaders did not seem to directly influence student achievement, but the teachers did. Needless to say, instructional leaders provided close supervision on the instructional level, thus they did not impact students directly. In this regard, instructional leaders greatly influenced instructions rather than learning.
Factors affecting Instructional Leadership.

Instructional leadership put more emphasis on academic leaders’ role in supporting the learning activities and developing the capacity of teachers to perform better in their teaching (Leithwood, Louis, Anderson, & Wahlstrom, 2004). The term instructional leadership embraces many leadership practices, including setting and communicating the academic goals and standards, allocating resources to achieve the goals, managing instructions through teachers and teaching observation and giving feedbacks, promoting and engaging in professional development schemes, and creating a positive environment for both students and teachers and staff (Brown & Chai, 2012). Instructional leaders plan ahead strategically. The plan helps them to provide effective instructional leadership in promoting a general learning environment for both teachers and students. The implementation of the instructional leadership in some schools, however, may be very foreign and even impossible due to the fact that it increases the managerial and administrative tasks for the academic leaders (Tanner & McLeod, 2006). Moreover, the differences in cultural and social contexts present challenges for academic leaders when interacting with teachers and students (Leithwood, Patten, & Jantzi, 2010).

Instructional leaders engage themselves with curriculum planning and development and encourage teachers to employ new methods to promote learning. However, teachers may reject new methods because they are familiar with school norms that generally allowed them to work in isolation. The new methods require them to work collaboratively among the teachers to achieve the academic goals that serve the purpose of student learning (Dufour, Dufour, Eaker, & Many, 2006). According to Lixun (2011), lecturers face some challenges when adapting new methods. These challenges include lecturers’ familiarity to the content-based curriculum design, the knowledge in developing learning outcomes, instructional strategies that can be employed to facilitate learning, the knowledge of
designing curriculum based on the significant learning set, the alignment of learning activities with the intended learning outcomes, and the selection of assessment tasks to measure student learning. This study found that lecturers were more familiar with content-based instructions. They confronted challenges with the adaptation of OBE instructions. Moreover, lecturers were exam-oriented, not really outcome-oriented. They emphasized more on the contents to be examined at the end of the course rather than whether or not students attained the set outcomes. A case in China is a good example to learn. China has a long history of exam-oriented education implementing throughout the country. However, within the last three decades, China has reformed its own education from exam-oriented to quality-oriented which means student-centered approach has been adapted. But it has not been successful yet because the exam-driven education is deeply-rooted in the Chinese education system. The school leaders are encouraged to implement instructional improvement strategies to adhere to the goals of the reform. But these must not put down those who continue to maintain the exam-driven culture (Tan & Chua, 2015; Zhao & Qiu, 2012).

The role of the academic head is to support the learning activities and develop the capacity of teachers to excel both in student learning and quality teaching (Leithwood, Louis, Anderson, & Wahlstrom, 2004). To equip the principals to perform effectively their roles to bring excellence to the institutions, according to Jabnoun (2009), two factors play a pivotal role. These two factors are related to economy and culture. Resources of funding has a great impact on teaching and research. Academic leaders face lots of challenges if fund is not sufficient to promote quality teaching and research work. Moreover, there are cultural factors, including the attitudes toward meritocracy, academic freedom and shared governance. Power distance influence leadership practices greatly. Instructional leadership needs to be shared with teachers; but if the power distance is high, shared governance is low. In such cases the relationship between academic leaders and teachers is not good (Jabnoun, 2009). This finding
indicated that some senior lecturers were invited to join the committee to develop the academic goals and curriculum. Not all lecturers were involved. This may be that the culture of high power distance existed in the universities that not all lecturers shared responsibilities to developing goals and making decisions on educational matters. However, the finding showed that the academic administrators had a good relationship with lecturers. This relationship might be more personal rather than professional. Moreover, Qian, Walker, & Li, (2017) tell us that we need to understand the different historical, cultural and social contexts well in order to effectively implement instructional leadership. The core leadership practices are similar but leaders interacted differently. Chinese education reform encourage student-centered teaching, but the teacher-centered approach is deeply rooted in the Confucian culture. The leaders try to find their ways to practice their instructional leadership that satisfy both expectations. They had to meet the dual expectations: exam results and teaching approach. Similarly, the tension between culture and the demands for new teaching methods presented challenges to school leaders. Some countries where power distance was high had low shared leadership (Hallinger & Walker, 2017).

Instructional leadership practices vary from country to country (Hallinger & Walker, 2017). To help school leaders perform their instructional leadership effectively, professional training on this area is important. However, according to the study, leaders in China and Vietnam received very few trainings on instructional leadership while in Malaysia, Taiwan, and Singapore leaders received extensive training. In Singapore, even middle-level leaders received such training. Therefore, it was not quite ready for school leaders in China and Vietnam for their responsibilities. The case of the instructional leaders in China and Vietnam was similar to this current findings. The academic administrators at higher education institutions in Cambodia received very few trainings. Thus, they lacked professional skills to performing better their instructional leadership roles.
**Outcome-Based Education (OBE)**

Education is a very powerful element in bringing about changes in the society. Teachers are the key actors in this process and the right kind of leadership can promote the quality of the instructions for sustainable human resource development. Guzman (2016) says that the essential part of the process of change is OBE because it is a self-directed learning and it promotes learner-centered teaching (Davis, 2003). The main focus is students being the center of the learning process, not the teacher.

**The definition of OBE.**

OBE is an instructional process that focuses on learning outcomes where students are taught to cope with real world situations (Biggs & Tan, 2007). It is also a student-centered approach to education and is the process of designing curriculum, teaching, learning and assessing which focuses mainly on students’ learning outcomes (Jackson, 2002; Lam, 2009). Lam (2009) mentions that OBE is to embrace learning outcomes, including knowledge, skills, attitudes and values, which are relevant to the cultural, social, and economic environment. To meet the requirements of the new OBE, the intended learning outcomes, the alignment of the curriculum, the methods of implementation and evaluating learning should be precisely developed. The focus and organization of everything in education is on effective outcomes resulting from students’ learning experience (Spady, 1994).

Moreover, OBE has been defined as a way to define, organize and direct the curriculum based on student achievements. The focus on the learning results includes knowledge, skills, and attitudes which are clearly defined in OBE. Learning outcomes are formulated by stakeholders and are translated into academic programs (ASEAN UNIVERSITY NETWORK-AUN, 2015).
The origins of OBE.

OBE is rooted in the work of Tyler (1950) who first notes the importance of objective in his study of mastery learning. In his syllabus, he suggests some important issues teachers must think of when developing curriculum and planning instructions: educational purpose, content, organization and evaluation. Curriculum developers must think of the educational purpose the school should seek to attain. That was how the objective was born (King & Evan, 1991). The concept of OBE became more popular in the 1980’s and 90’s. It is currently gaining wide attention from educators around the world. It is mostly considered as a systematic approach to reform curriculum in schools, particularly in the United States, Australia and South Africa. Moreover, it is also most famous in universities of the European Union (Lixun, 2011).

OBE has disseminated quickly in developed countries like UK and the United States in the 1980s and 1990s (Chan & Chan, 2009). In 2006, the University Grants Committee of Hong Kong decided to promote OBE formally in all higher education institutions in Hong Kong in order to raise the quality of instruction and learning. However, since OBE was new for higher education institutions in Hong Kong, they needed to wisely implement this approach within the Hong Kong context. Consequently, the Hong Kong Polytechnic University first adapted OBE approach in the academic year 2005-2006 (Lixun, 2011). Moreover, the Hong Kong Institute of Education (HKIEd) started to review the approaches to teaching and learning by adopting OBE philosophy in 2007. This approach became a crucial component in developing a new undergraduate program in 2009. The main focus was to see what students could know, do and value after they graduate (Kennedy, 2009). In addition, the ASEAN University Network (AUN) recently revised its Quality Assurance Model for Program Level, 3rd version. It was based on the needs of the stakeholders of which expected learning outcomes became the key. So OBE is clearly
adapted by the AUN (2015) in developing curriculum at the program level. Figure 4 shows precisely that the development of the program level starts with the needs of the stakeholders that are formulated into the expected learning outcomes. In the middle of the model there are four rows. The first one is the translation of the learning outcomes into the program and how these can be achieved through teaching, learning and assessment. The second row is the input which includes academic and support staff, student quality and support, and facilities and infrastructure. The third row is the quality enhancement of the program which includes curriculum design and development, teaching and learning, student assessment, quality of support services and facilities and stakeholders’ feedback. The last row is the output which includes pass and dropout rates, the average time to graduate, employability of the graduates, research activities and stakeholders’ satisfaction. The column on the right is the achievement of the expected learning outcomes and the program. At the bottom are the fulfillment of the stakeholders’ needs and the improvement of quality assurance as well as the benchmarking for best practices (AUN, 2015).

Figure 4. AUN-QA Model for Program Level, 3rd Version (AUN, 2015)
OBE is based on the three premises and four principles described in the following. The three premises include: 1) students can learn and succeed at different times and in different ways, 2) success in learning promotes further success and 3) the factors contributing to success in learning are controlled by schools. The principles are as follows. The first principle is clear significant learning. The instructors need to have a clear focus in designing instructions to facilitate students’ learning. The second principle is the opportunity and support for successful learning. Instructors have to apply various instructional strategies and support them with learning opportunities in cultivating the intended learning outcomes. More opportunities given to students help them believe that they can achieve higher. The third principle is the high expectations for all to succeed. Instructors need to set high expectations for all students by reinforcing prior learning, promoting self-confidence and providing them with motivation. The last principle is aligning the design with the culminating outcomes. Instructors must begin with the intended learning outcomes followed by the learning activities that facilitate students’ learning (Spady, 1994).

**Instructional design for OBE.**

The design of instructions for OBE includes three stages: intended learning outcomes, learning activities, and assessments. The focus of OBE is to organize everything around the essentials which all students must be able to do through their learning experience. The instructors must start with clear pictures of what students will be able to do and then organize curriculum, instruction and assessment to help them achieve the ultimate goals (Spady, 1994).

**Identifying intended learning outcomes.**

OBE is a student centered-approach to learning; thus, students are placed in the heart of the educational process. In designing curriculum, teachers need to start with the essentials which students are expected to gain. The design is followed by the learning
activities which enables students to achieve the learning outcomes and by the assessment used to measure learning (Lixun, 2011). According to Spady who supports OBE, the learning outcomes are what students need to achieve. The learning outcomes are the guiding principles in designing curriculum (Spady, 1998). Instructors need to keep in mind that the intended learning outcomes are what students will achieve at the end of the course or study and student learning is more important than teaching (Biggs & Tang, 2007). Moreover, when developing the intended learning outcomes for the course, teachers need to decide the knowledge, the topics, the level of understanding and the evidence of learning to be incorporated (Biggs & Tang, 2009). Moreover, the intended learning outcomes must be interesting, comprehensible, achievable, and coherent (Baume, 2005).

**Planning for learning experience.**

In order for the instructions to ultimately facilitate learning, the instructors need to apply different strategies, especially those related to student-centered learning. These student-centered strategies, such as cooperative learning, guided discussion, collaborative learning, and demonstration, are recommended for outcome-based instructions. These strategies can encourage and promote analytic and critical thinking and active individual and group engagement. Moreover, student-centered instruction is an approach where students can have the opportunities to influence the content, activities, materials and even the pace of learning (Guzman, 2016). However, the design of the learning activities is according to the outcomes. If collaborative learning is the outcomes, then group work activities can be employed (Lixun, 2011). Hence, instructors must design the teaching and learning activities that stimulate, encourage or facilitate students to achieve the learning outcomes and accomplish the assessment tasks. They must align the learning experience with what is necessary for students to be able to know and do (Gutema, 2013).
There is no one absolute instructional approach to guarantee meaningful learning experience (Killen, 2000). However, when discussing about teaching, there are two basic approaches: teacher-centered and student-centered. Teacher-centered approaches are direct instructions, including lectures and demonstrations, where the instructors control the learning content and information. Student-centered approaches (also called discovery learning, inductive learning or inquiry learning) place more emphasis on the student learning process. Cooperative learning is one of the student-centered teaching approaches. The success of OBE is often dependent on the application of cooperative learning. The long-term outcome of OBE is based on teamwork and cooperation (Killen, 1998). Cooperative learning fits well with OBE, but it should not be the only instructional approach to be adopted. Therefore, when the instructors plan their instructions, they have to bear in mind that:

- The main focus should be on learning rather than teaching.
- If students do not think, they cannot learn.
- Thinking is facilitated and encouraged by the process that engages students in learning the content.
- The subject does not exist in isolation and the instructors need to help students to connect it to other subjects.
- They must help students learn how to learn.

In OBE, students collaboratively work to pose questions, discuss the problems and find the solutions together (Lichakane, 2005). The instructor’s role is to promote communication where students listen, respond and question the instructor and their classmates. Then they try to convince one another, including the instructor, to believe in their ideas, solutions and answers (Owen, 1995). In addition, useful strategies include group work, direct instruction, cooperative learning, problem solving, and research. Performance activities are also good for OBE (Heugh, Siergruhn, & Pluddermann, 2004). However, OBE is new to
students (Caguimbal, Delacion, Medina, Mendoza, Mendoza, & Sanchez, 2013), thus, the instructors’ role is to encourage students to actively engage in the learning process. To promote student engagement in learning, the instructors need to pay attention to individual development, learning context and atmosphere, curriculum and standards. They are very crucial for enhancing student learning. Teachers also need to help students to do self-reflection. They need to be reflective, creative, open-minded and receptive to new ideas. Through their engagement in the academic activities, learning is enhanced (Fook, 2012).

Assessing student learning.

In OBE, it is necessary to acknowledge that the assessment strategies must be aligned with the intended learning outcomes. Instructors and all learners should be told of what they do not already know. Thus, when applying outcome-based instruction, instructors have to make sure that the intended learning outcomes are assessed. If not, they may not know exactly whether students have really achieved the learning outcomes at the end of the course (Lixun, 2011). This is one of the major responsibilities of the instructors. If the assessment shows that the achievement has not been obtained, then the instructors should not move on to the next step of teaching and learning (Gutema, 2013).

Moreover, various authentic assessment tasks should be employed to measure whether students understand the content and skills, including critical thinking, decision making, language acquisition, problem solving, and data gathering (Lui & Shum, 2012). Formative assessments, including oral presentations, quiz, test, and progress reports, should be employed. In case students perform below the standard, remedial lessons may be offered. In addition, an assessment portfolio which includes a summative assessment through written examination should be organized to assess the overall effect of the program (Lam, 2009).
Advantages and challenges of OBE.

The main focus of OBE is student learning. This philosophy is contradictory to traditional teaching where textbooks and tests are the major emphasis. Teachers should know what students need and how they can achieve it. Students, too, need to know what they want and how they could get it. Therefore, to help teachers and students obtain specific learning outcomes, OBE works best. There is sufficient evidence showing that OBE significantly improves student performance (D’Andrea, 1999; Prosser, Rickinson, Bence, Hanbury, & Kulej, 2006; Chow & Wong, 2012) and motivates students to learn (Spady, 1994). The intervention of OBE helps students to be more positive in feedback. They also participate more in classroom activities, and are more satisfied with the comments and suggestions from their teachers for their assignments (Chan & Chan, 2009). Moreover, those who support OBE have reasoned that it prepares students effectively to deal with future challenges. According to the report produced by the Education Commission of the States in 1995, OBE would:

1. Promote high expectations and learning.
2. Prepare students for the 21st century (life and work).
3. Foster authentic assessment.
4. Encourage decision making at all levels: curriculum, teaching methods, school structure and management (Killen & Spady, 1997).

Despite these advantages, there are critics, especially from teachers in higher education, who question the validity of setting explicit learning outcomes. Fixing on the learning outcomes limits the opportunities for instructors to cover other unintended learning outcomes appearing in the learning process (D’Andrea, 1999).

Instructors find new challenges in adapting OBE. According to the literature, teachers are faced with these seven challenges when adapting the OBE approach (Lixun, 2011). First, they seem to be more familiar with content-based curriculum design; thus, using
outcomes as their guide in planning instructions is really a challenging task. Second, it is difficult to design outcome statements. When writing the outcome statements, the instructors must think of ways in which learners are able to demonstrate them. Moreover, outcomes must be clear and achievable. Third, teachers must prepare good learning experience that facilitates student learning. They need to employ a variety of instructional methods to assist students to learn more effectively and provide students with the opportunities to practice in a good learning environment. Fourth, capacity building is also challenging for instructors. To support OBE, ongoing professional development programs are required. Fifth, curriculum designers need to be considerably responsible for identifying the significant learning outcomes. They need to be able to determine the essentials students will perform. This will guide and help instructors to plan their instructions (Biggs & Tang, 2010). Sixth, instructors must select the learning activities that serve the purposes of the intended learning outcomes. The challenge is to select the appropriate activities that encourage students to attain the outcomes. The last challenge is the effects of assessment on learning. Instructors see the intended learning outcomes as the heart of instructions, but students see them in a different perspective. They want to learn what they think will appear in the test (Biggs & Tang, 2010).

Furthermore, some instructors are knowledge transmitters. Teacher-centered approaches suit them well. More than that, some do not understand the exact meaning of learning outcomes; thus, when designing syllabuses, the learning outcomes are chosen from the benchmarks or copied from some websites. Large class presents another challenge for OBE to be effective. In such situations, the instructors seldom use constructivist activities in class; consequently, pair-work, group work, and problem solving activities are rarely employed (Nasrallah, 2014).

OBE does not only bring challenges to instructors but also to learners. The use of formative assessment tasks increases students’ burdens that they feel overloaded (Lixun,
2011). Besides the assessment tasks, they are expected to engage actively in the learning process where interactions and relationships with instructors are needed. Moreover, they are also expected to achieve higher standards as pointed out by Spady (1994). The instructors need to set tasks which are more challenging for learners in order to build the strengths, abilities, and interest of the students. Moreover, instructors need to build up relationships with students (Ayers, Sawyer & Dinham, 2004) to encourage them to engage in the challenging tasks in order to achieve the best of their potential (Killen, 2007).

**Research related to OBE.**

OBE has been in the interest of educators as well as researchers today. The results of some recent research shed light on student learning and their behaviors toward OBE. For example, a study on the impact of outcome-based curriculum on the core competence of students was conducted at the Polytechnic University of Hong Kong in 2009. The study found that students who received OBE exhibited greater level of achievement. They achieved even better results with longer intervention of OBE. The results also revealed that students’ behaviors became more positive with OBE in terms of feedback and class participation. Moreover, they were more satisfied with the comments and suggestions from their teachers in regard to their assignments. However, the core competencies of students who received OBE intervention were not identified as better than those who were non-OBE. This may be because the length of implementing OBE was not long enough to make a difference (Chan & Chan, 2009). The current findings demonstrated that lecturers in Cambodia have started adapting OBE instructions; thus, the results would not be observed yet. Moreover, lecturers have been still trying out this instructional approach. They were not familiar with it yet and they may not have positive feelings toward it yet. Another research was conducted by Akir, Eng and Malie in 2012 to examine the difference between grade point average in regard to academic performance for two groups of students (OBE and non-OBE) in the University of
Technology MARA Sarawak, Malaysia. These researchers used the data from two semesters’ final exam results, May 2010 and October 2010 for non-OBE students, and April 2011 and September 11 for OBE students. The findings showed that there is a significant difference in the mean of grade point average between the two groups. The mean of OBE students is higher than non-OBE students’. Moreover, it is suggested that OBE students are more active than non-OBE students. This is one research evidence revealing that with the intervention of OBE, students perform better. However, it cannot be generalized that OBE is the best approach to teaching and learning because the sample is small.

In 2014, AN conducted a study on the impact of OBE instruction on the behaviors of the students during the learning process and the performance after class. The researcher used descriptive design by establishing a questionnaire with three parts. The first part was about the respondent’s demographic information in terms of age and gender. The second part was about the impact of using OBE instruction in different areas and the third part was the implications shown in the curriculum planning. The researcher employed 20 sophomore bachelor students from Science in Accountancy of Lyceum of the Philippines University-Batangas. The findings showed that students became more cooperative in the discussion. OBE instruction could catch the interest and attention of the students through active engagement in the learning process. The findings also indicated that students established good rapport with others. They paid much attention to the instructor which was a positive indication of accepting OBE instruction. Moreover, students expressed that they could apply what they have learned, spoke their ideas and put the ideas into writing. They gained a new perspective on what real learning was about. The researcher concluded that OBE instruction could be adapted for new educational systems.

Based on the research findings above, the intervention of OBE has impacted the achievement of the students. They could use what they have learned in real life situations.
Moreover, OBE has also influenced students’ behaviors and attitudes. It promotes students’ positive behaviors toward classroom activities. Students become more participatory, satisfied with teacher’s comments and suggestions and actively engaged and cooperative in class.

**The Backward-Design Process of Curriculum Planning.**

Modules and lessons are designed to promote student learning. The instructors need to have a clear and systematic approach in planning their instructions in order to make their lessons worthwhile. Thus, the backward design process of curriculum planning helps teachers with better ideas and guidelines for their instructional planning. The process starts with the end results encompassed in outcome-based education. Starting with the end results helps teachers to have an in-depth understanding of their goals. They know where they are now and where they are going to so that they take the right steps in the right direction (Covey, 1989).

**The definition of the Backward Design process of curriculum planning.**

Backward design is the process of planning that guides curriculum, assessment and instruction, leading students to deep understanding of the content. Students will be able to explain, interpret, apply, gain perspective, emphasize, and have self-knowledge about the content being learned (Wiggins & McTighe, 1998 & 2005). In the backward design process, instructors start with the end results which they call “desired results”. Then the instructors collect the evidence of learning and design instructional activities. As mentioned above, “deep understanding” of the content is the desired result to be achieved by the teaching and learning. Thus, it is concluded that the design for instructions is centered on what is necessary for students to succeed in real practice.

**Origins of the Backward Design process of curriculum planning.**

It is really interesting to learn the history of Backward Design process of curriculum planning. Originally, it is from Wiggins and McTighe (1998), but its concept is
rooted in the work of Tyler (1949). Tyler says that objective is necessary and it is the “first step” in the curriculum development process. It is the most important element in guiding other activities of the curriculum developers. Tyler’s (1949) rationale has been adapted as a way to develop and evaluate curriculum for about fifty years. Wiggins and McTighe (1998) use this rationale to formulate a new concept and rename it “Backward Curriculum Design and Assessment”. This term has been circulated and adapted for school and classroom practices (McTighe & Thomas, 2003). Both Tyler’s and Wiggins & McTighe’s stages of designing instructions are to promote student learning. Wiggins & McTighe used Tyler’s design stages as the ground for their curriculum planning. When planning the curriculum, Tyler used these two guiding questions: “what educational experiences can be provided that are likely to attain the intended purposes?” and “how can these educational experiences be effectively organized?” However, Wiggins & McTighe considered these two questions as their last stage in their backward design process “planning learning experiences and instruction” (Tyler, 1949; Wiggins & McTighe, 1998).

Table 5

<table>
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<tbody>
<tr>
<td>1. What educational purposes should the school seek to attain?</td>
<td>1. Identify desired results</td>
</tr>
<tr>
<td>2. What educational experiences can be provided that are likely to attain these purposes?</td>
<td>2. Determine acceptable evidence</td>
</tr>
<tr>
<td>3. How can these educational experiences be effectively organized?</td>
<td>3. Plan learning experiences and instruction</td>
</tr>
<tr>
<td>4. How can we determine whether these purposes are being attained?</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cho & Trent (2005)
The logic of backward design rests on learning outcomes that need to be achieved. Starting with the standards provided by the institutions, curriculum developers must determine acceptable evidence which implied in the standards. Moreover, instructors who involve in curriculum development need to determine the evidence that indicates successful acquisition of knowledge and skills. After the determination of the acceptable evidences, planning learning activities follows. Instructors should change their way of practices as an instructor and curriculum writer. They cannot design the materials and learning activities until they know exactly what they want the students to understand (Wiggins & McTighe, 2005). Moreover, Wiggins and McTighe also express that the design of lessons, units and courses should not be based on activities and methods which the instructors are comfortable with but on the desired results. The curriculum should aim at the best ways to achieve specific results. Hence, this approach indicates clearly that “understanding” is the main educational emphasis. Teaching would be effective if the instructors are clear about the specific understanding to be attained. When the instructors can emphasize the desired results, the content, methods, and activities will need to be organized accordingly to achieve them.

Furthermore, many instructors have adapted the traditional approach where the lesson is taught and the assessment follows. They do not really know whether students have mastered the objectives. If they adapt the backward design process, they are able to employ better questions during the learning process. Moreover, by employing the backward design process the instructors would find the organization of instruction easier. Students can also manage substantial knowledge with understanding (Marie & Aldridge, 2010).

The concept of backward design has become an interesting indicator in addressing the issue of poor learning outcomes by many educators. To effectively address the issue, the instructors and administrators should place more emphasis on the design of
curriculum and instruction that ultimately enhance student learning (Bulgren, Deshler, & Lenz, 2007). There is an intention of the instructors and administrators to move away from textbook-driven curriculum. In backward design process the textbook is viewed as only one of the resources. Textbooks are organized topics and generally emphasize too much on the acquisition of knowledge and skills but too little on elicitation of meaning. Moreover, they are not necessarily linked to the interests, the styles of learning and even the ability levels of students in the classroom setting (Wiggins & McTighe, 2011).

**The Backward Design process.**

In the idea of backward design, teachers are designers. They design curriculum and learning experience for particular purposes. Moreover, they are also designers of assessments that guide their teaching and enable themselves and students to achieve the desired results. Student interests, levels, classes and previous learning become the factors shaping their ideas in designing the learning activities, assignments and assessments (Wiggins & McTighe, 2006). In the backward design process, first, the instructors need to identify the desired results they want to achieve and analyze sources and determine action plans (McTighe & Thomas, 2003). Moreover, Wiggins and McTighe (2005) continue to claim that backward design begins with three stages: identify desired results, determine acceptable evidence and plan learning experiences and instruction.

![Figure 5. Stages in the backward design process (Wiggins & McTighe, 2005)](image-url)
Identifying desired results.

At this first stage, it is crucial to ask what the instructors want their students to accomplish, what students should know and be able to do, the attitudes and values students should have and the skills students need and be able to present. These key questions are the core ideas in the design of the lesson. In developing a deep understanding of the goals and objectives, essential questions from the designers should be raised in the discussion, reflection, problem solving, research and debate. Individuals who participate in these activities contribute to the profound development of the desired results (McTighe & Thomas, 2003).

Curriculum planners at this stage can think of four categories: content standards, enduring understanding, essential questions, and knowledge and skill. The first category includes one or two standards addressing the design. Curriculum goals must be emphasized. The second category is the enduring understanding which are very important. Teachers as curriculum developers cannot cover all content areas for their instructions. They must prioritize the curriculum priorities into three aspects: 1) identify meaningful knowledge which students will read, hear, see or encounter; 2) specify important knowledge which students learn the facts, strategies, processes, concepts, principles and methods; and 3) focus on enduring understanding, supported by the second aspect. The first stage of curriculum design is to identify the learning goals and determine worthy understanding. When planning units of the study, there are many targets involved, including knowledge, skills, and attitudes. But teachers need to differentiate the goal of understanding from other achievement targets and select important understandings to focus on. Teachers select essential questions to frame the curriculum and focus instruction on matters of enduring understanding. Enduring understanding refers to the big and significant ideas that will stay with students even after they forget the details (Wiggins & McTighe, 1998, 2005).
Students can understand beyond what they can see, using big ideas to make meaning of it. Of course, understanding results from the efforts to understand. The term understanding here has different meanings. It is not only the achievement, but also different kinds of evidence of successful learning. If a student demonstrates an understanding of something, that student can teach it, use it, prove it, connect it, explain it, defend it, and read between the lines. Students use their knowledge to convince teachers that they really understand quizzes and tests. Students who demonstrate mature understanding show these following six facets (Wiggins & McTighe, 2005):

- **Can explain.** Make connections and provide examples.
- **Can interpret.** Tell meaningful stories and express personal reason behind ideas and events.
- **Can apply.** Use what they know in real contexts.
- **Have perspective.** Aware of various opinions and see the big picture.
- **Can empathize.** See the values in others.
- **Have self-knowledge.** Show the awareness in shaping own understanding through the reflection of learning and experience.

The third category is essential questions that require no simple right answers. These questions can lead to other questions that help deepen student understanding. Moreover, essential questions guide students to new understandings, knowledge and skills (Wiggins & McTighe, 2005). The last category is knowledge and skills teachers want their students to know and be able to do. Teacher begins with the learning standards which students are expected to meet at the end of the course or lesson (Bryant, 2016). The design is to provide students with the opportunities to meaningfully interact so that they can enhance their understanding of the topic. Teachers need to select the enduring concepts to be
mastered. Therefore, teachers must list down essential knowledge, skills and concepts students will be learning during the lessons.

**Determining acceptable evidence.**

Planning instructions by adopting the backward design process requires the instructors to play the role as an assessors, not activity-designers. This is a matter of priority that the instructors should consider assessment ahead of planning the learning experiences. At this stage, Wiggins and McTighe (1998, 2005) suggest three components: *performance tasks*, *other evidence* and *self-assessment*. The instructors can employ various assessment techniques. These include the formal and informal assessments to check students’ understanding during a course. Standards have no value without assessment and assessment is nothing without clear standards. The backward design process of planning instruction is well-known because it emphasizes the assessment that measures the level of student understanding.

The assessment methods include informal checks for understanding, observation or dialogue, quiz or test, academic prompt and performance task or project (Wiggins & McTighe, 1998, 2005).

![Continuum of assessment methods](image)

*Figure 6. Continuum of assessment methods (Wiggins & McTighe, 2005)*

The continuum of assessment methods provides the instructors with possible evidence they can use to gauge the learning progress. They can be the crucial evidence showing that students have achieved the desired results. The assessment tasks and other evidence can be used to determine student understanding. This stage distinguishes from other means of course design. Before planning the activities, instructors must identify the evidence.
of successful student learning. Moreover, at this stage, instructors should place an emphasis on the following three thoughts. The first one is the kinds of evidence teachers need to check the degree of understanding. This allows instructors to collect general evidence, including kinds of performance showing understanding. The second thought is the specific results in terms of student responses, products, and performances. The instructors determine the degree of achievement. This helps the instructors identify and differentiate levels of understanding along a continuum of quality by using certain sorting criteria. The third one is to check if the evidence enables instructors to determine whether the knowledge, skills, and understanding are aligned with the academic goals (Wiggins & McTighe, 2005).

Table 6 shows the differences between thinking like an assessor and thinking like an activity designer.

Table 6

**Two Approaches to Thinking about Assessment**

<table>
<thead>
<tr>
<th>When thinking like an assessor, we ask—</th>
<th>When thinking like an activity designer (only), we ask—</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ What would be sufficient and revealing evidence of understanding?</td>
<td>▪ What would be fun and interesting activities on this topic?</td>
</tr>
<tr>
<td>▪ Given the goals, what performance tasks must anchor the unit and focus the instructional work?</td>
<td>▪ What projects might students wish to do on this topic?</td>
</tr>
<tr>
<td>▪ What are the different types of evidence required by Stage 1 desired results?</td>
<td>▪ What tests should I give, based on the content I taught?</td>
</tr>
<tr>
<td>▪ Against what criteria will we appropriately consider work and assess levels of quality?</td>
<td>▪ How will I give students a grade (and justify it to their parents)?</td>
</tr>
<tr>
<td>▪ Did the assessments reveal and distinguish those who really understood from those who only seemed to? Am I clear on the reasons behind learner mistakes?</td>
<td>▪ How well did the activities work?</td>
</tr>
<tr>
<td></td>
<td>▪ How did students do on the test?</td>
</tr>
</tbody>
</table>


The questions in the left column are from desired results. They are for designing activities and instructional strategies with appropriate assessments. The questions in the right
column make the assessment less appropriate. Though the activities designed may lead to understanding and meet some standards as a result, it would be more by luck. Teachers are expected to use the assessments which are aligned with the school standards. If teachers pay attention to assessment based on the backward design process, school-based assessment standards would be greatly improved.

**Types of classroom assessment.**

It is pivotal for the instructors to have the knowledge of classroom assessment types. Classroom assessment is divided into three types: diagnostic, formative and summative (Hanna & Dettmer, 2004). These three types are called the assessment for learning (formative assessment), assessment of learning (summative assessment) and assessment as learning (diagnostic assessment) by NSW DET (2003).

**Diagnostic assessment.** This type of assessment helps teachers identify the current knowledge, skills and capacity of students. It also helps clarify misconceptions before teaching begins. Diagnostic assessments can be done through the following types: pre-tests, self-assessment, discussion board responses, and interviews. Through diagnostic assessment, students’ strengths and weaknesses can be found and the findings help teachers plan their instructions more effectively.

**Formative assessment.** This type of assessment can provide feedback and information during the instructional process. It reflects student progress as well as the instructors’ progress. If the teachers are implementing a new activity in class, they can survey the students to see whether the activity can be used again or needs to be modified. Formative assessment includes all activities, planned by teachers and students, which provide necessary information for feedback to modify teaching and learning activities (Black and William, 1998). It helps teachers to decide on the steps to be taken during the learning process. In this
type of assessment, student involvement is needed (Black, Harrison, Lee, Marshall, & Wiliam, 2003).

According to Hanna & Dettmer (2004), formative assessment can be done through the following means:

- Classroom observation
- Homework exercises
- Question and answer sessions
- Meeting between the students and instructor
- Students’ presentation in class
- Student feedback on instructions and teacher’s performance

**Summative assessment.** This type of assessment is held at the end of the program to assess student learning. It is to provide information and feedback about teaching and learning. Through the assessment, teachers can decide whether students can move to the next part of the lesson or next level of schooling. Summative assessments can be in the forms of examinations, papers, project results, portfolios, performances, student feedback on the program, and self-evaluation done by instructors. In addition, preset rubrics can be used for summative assessment.

**Planning learning experiences and instruction.**

Learning experiences are shaped by the desired results and evidence of assessment (Wiggins & McTighe, 1998, 2005). To effectively develop learning experiences responding to the first and second stage, the instructors need to bear in mind the following thoughts: 1) the necessary knowledge and skills students need, 2) the activities that facilitate learning, 3) the content and the method employed to teach it, 4) the materials for the curriculum, and 5) the course or unit designed to achieve learning (knowledge and skills).
Moreover, the instructors need to ensure that the teaching engages the learners which ultimately leads to successful outcomes (Tomlinson & McTighe, 2006).

**The advantages of Backward Design process of curriculum planning.**

Backward design curriculum places more emphasis on what students need to know and are able to do resulting from the learning experiences. Student learning is the focus of OBE. Instructional planning needs guiding stages which teachers can use to plan and guide their instructions to ultimately obtain the intended learning outcomes. The three stages in backward design places learning outcomes as the most important. The assessment evidence comes next while learning activities are to support both learning outcomes and assessment. Wiggins and McTighe (1998, 2005) are interested in assessment for learning, rather than encouraging teaching for tests and exams. Teachers need to address the issues of assessment for learning, especially formative assessment, to always check student progress and how they help them reach their ultimate goals.

It is believed that backward design process of curriculum planning provides benefits to both teaching and learning. The best lessons are the ones which are engaging and effective. The lessons are engaging when students think that the materials are thought provoking, fascinating and energizing. The lessons are effective in a sense that students are competent and productive at work. Effective lessons are a part of quality education—instruction, support, and other conditions contributing to the needs of the students. Backward design process of curriculum planning enhances learning through engaging students actively in the learning process (Wiggins & McTighe, 2005).

Understanding by Design which is called Backward Design process by Wiggins and McTighe is a process of planning to guide curriculum, assessment and instruction. In planning backward design, it is important to have the knowledge of these seven key tenets (ASCD, 2012):
1. If the instructors purposefully have the ideas in curriculum planning, learning will be enhanced.

2. Backward design method helps to form a curriculum that facilitates teaching and deepen student understanding so that they can use the content knowledge and skills.

3. As students demonstrate their learning in authentic performance, understanding is revealed. That means students are able to explain, interpret, shift perspectives, emphasize and self-assess.

4. Effective curriculum is planned backward using the three stages: identify the desired results, determine performance evidence, and determine learning experiences.

5. Instructors become coaches of understanding.

6. Units and curriculum are regularly reviewed to promote design standards for quality and more effective curricula through professional engagement and discussion.

**Research related to backward design process of curriculum planning.**

Many studies have been conducted to investigate the impacts of backward design on teaching and learning. One of them was by Hodaeian and Biria (2015) who studied the effects of the backward design process of curriculum planning on reading comprehension, its merits and the attitudes of instructors in teaching L2 comprehension through backward design. The researchers employed 150 female students who were divided into experimental groups. A quick placement test and post-test were used to collect data. The results showed that backward design had significant impact on students’ reading comprehension skill, meaning that reading comprehension of the students was enhanced. Another study was conducted by Burson (2011) on the connection between backward design and classroom
behavior. In order to investigate the impact of backward design on classroom behavior, a survey questionnaire was used and 13 teachers were involved in the study. The teachers rated the items based on their perception of the effectiveness of backward design process of curriculum planning toward student behavior and classroom management. Moreover, they asked teachers to explain backward design based on their own understanding, how they applied it and how this influenced students’ learning. The results showed that students had positive behaviors. They paid more attention to lesson, participated in classroom activities and were more responsive. The results also indicated that teachers felt comfortable in adopting backward design process of curriculum planning.

A comparative study between lessons planned by using backward design and those using traditional method was conducted by Kelting-Gibson (2005). A total of 59 participants who were all pre-service teachers from the sections of an undergraduate Educational Planning and Management course were selected. Moreover, a total of 153 lesson and unit plans were produced by these 59 teachers. The score for the lesson and unit plans were marked as 1= Unsatisfactory, 2= Basic, 3= Proficient, and 4= Distinguished. The study found that teachers who received instruction using Backward Design (Wiggins & McTighe, 2005) performed better. The teachers who were in the experimental group demonstrated better content knowledge. They demonstrated a better understanding in communicating criteria for assessments and more ability in setting up goals for students. Moreover, they were aware of available resources and demonstrated greater performance in developing plans to align with their instructional goals.

Another research by Graff (2011) studied the efficacy and usefulness of backward design practiced by the former students who had been taught in the Curriculum and Instruction course from 2004-2006. Thirty participants were selected for the focus group. The results indicated that 65 percent of the participants said that backward design really helped
them to prepare the plan. Moreover, planning lessons with the end results in mind could offer teachers better insights into designing and evaluating instruction. Teachers also expressed that students learned better and they left the classroom with confidence. Furthermore, backward design helped teachers with their decision making on the practices for particular contexts and students (their interests and needs). The respondents also stressed the content knowledge required for planning which conforms Shulman’s (1986) observation: pedagogical content knowledge cannot happen without the depth of content knowledge.

**Adult Learning Theories**

Learning is how one perceives and understands the world and makes meaning (Marton & Booth, 1997). Learning involves understanding principles, proofs, facts, learning techniques, recognizing and debating ideas, and adopting suitable behavior in particular situations. Adult learning theories explain how adult learners apply what they have learned to the real world settings. These theories tell us that both engagement in learning and commitment to learn are necessary for effective acquisition of knowledge and skills. Thus, to help adult students commit to their learning, teachers need to know the following concepts.

1) It is important for adults to consider the goal as achievable. If the goal is too difficult, learning may not happen. 2) Adults value what they learn. The application to the real world must be clear. 3) Group activities help them to share learning experience. 4) Peer support helps reduce fear and judgment.

**Transformative Learning Theory.**

*The definition of Transformative Learning Theory.*

There are different terms employed to define transformative learning theory. But all of these definitions involve a changing process in a frame of reference (Mezirow, 1991, 1995, 1996; Cranton, 1994, 1996; Mezirow, 2000), a deep shift in thinking, feelings and actions (including the way students understand themselves), and their self-locations.
Transformative learning is about students’ relationships with people and the world, their body awareness, visions, their sense for social justice, and peace and joy (Morrell & O’Connor, 2002). It is also a change of understanding or perspectives resulting from critical reflection on attitudes, beliefs and ideas (King, 2009). The frames of reference mentioned by the above researchers include the perspectives and habits of mind that make learners more inclusive, discriminative, open, and capable emotionally to generate beliefs and opinions in guiding their actions.

**The origins of Transformative Learning Theory.**

This learning theory has been made popular through the work of Mezirow in the 1990s. Mezirow believes that learning happens when students become aware of the assumptions that have constrained the way they see the world and begin to use different ways to rethink the issues and define their worlds differently (Tower & Walker, 2007).

Mezirow. In 1978, Mezirow introduced this transformative learning theory for the first time. His works were mostly related to adult learning, and he became interested in seeking more explanation of how human made meaning of their lives (Taylor, 2006). Finally, he found that transformative learning theory could explain how adults learn (Dirkx & Mezirow, 2006). According to his theory, learning is viewed as the process which students use their existing experience to understand a new experience to guide future actions (Mezirow, 1996).

Mezirow states that transformative learning is basically how students use experiences to make sense of their life. Adults acquire the experiences, including concepts, values, feelings and responses, to form a frame of reference which eventually determine how they live their life. To him, the frame of reference is composed of two dimensions. The first dimension is the *habits of mind.* They refer to broad and abstract ways of thinking, feeling, and acting influenced by the assumptions from a set of codes which could be cultural, social,
educational, economic, political or psychological. Habits of mind are articulated in a specific idea—belief, judgment, attitude, or feeling—that shapes a particular interpretation. The second dimension is a point of view. Points of view can be changed according to the reflection that we make either on the content or process by which we solve problems and modify assumptions.

Dirkx. Adding to the work of Mezirow, Dirkx mentions that transformative learning theory helps students have more understanding of subjectivity. It also helps them reflect on the intellectual, emotional, moral and spiritual dimensions of their presence in the world (Dirkx & Mezirow, 2006). Dirkx argues that transformative learning involves deep learning. Questioning for meanings, purposes and values helps people achieve significant learning (Dirk, 1998).

Cranton. Cranton is another expert who advocates transformative learning theory. She explains that it is significant that learners change the way they interpret their experiences (Cranton, 2006). It’s always hard for people to change their ideas, attitudes, and beliefs. Thus, she suggests teachers to employ questioning strategy that enhances transformative learning. Moreover, she also supports personal reflection along with the questioning strategy to promote learning, including the three types of reflection mentioned by Mezirow (2000): content, process and premise. The use of questioning strategy can change students’ perspectives through critical reflection and through questioning, learners are encouraged to become self-reflective (Cranton, 2006) and engage in deep learning (Dirkx & Mezirow, 2006).

Transformative learning theory examines the method by using critical reflection to challenge students’ beliefs and assumptions (Mezirow, 1978, 1990, 1995). Its process includes the following:

1. A dilemma which is a trigger to review own perspective
2. The context: personal, professional and social factors


Moreover, the process of transformative learning should be of the following (Mezirow, 2000):

- Elaborating existing frames of reference;
- Learning new frames of reference;
- Transforming points of view;
- Transforming habits of the mind.

Besides, some researchers have found three components in the transformative learning process (Merriam & Caffarella, 1995; Mezirow, 1991). These include:

1. **Mental construction of experience.** Perspectives and behaviors will be changed when we get engaged with life experience to make the meaning.

2. **Critical reflection.** Effective reflection produces effective learning (Criticos, 1993). Students must examine their beliefs and assumptions which influence the way they make sense of their experiences. This is the process of critical reflection.

3. **Development/Action.** Students must find out ways to form new roles and actions. Change will occur when they try new knowledge and skills to build new competence and confidence.

Furthermore, Mezirow adds another component on top of the previous ones and gives more elaboration on critical reflection. Below is the explanation of his four components (Mezirow, 2000):

1. **Experience.** The transformative learning process starts with experience because adult students bring to class their life experience.
2. **Critical Reflection.** Students process their experience and the processing of the experience is known as critical reflection. This process allows students to reflect and examine their beliefs and assumptions that impact how students make sense of their experiences. Three types of reflection have been introduced. The first type of reflection is known as the content reflection which refers to the actual experiences students reflect on. The second type is the process reflection which occurs when students process something they are going to do with the experience. Moreover, students can use problem-solving skills to decide how they are going to use the experience. The third type of reflection is called premise reflection which helps students compare and contrast the new experiences with their previous values and beliefs. Students can ask these important questions in regard to this type of reflection: Does this experience concern my beliefs? Does it help transform my beliefs and mindset?

3. **Reflective Discourse.** Students need to be open and objective in analyzing the experience. After they have analyzed their experiences, they are ready for the action. Discourse is a dialogue and it is made to assess reasons to support interpretations by identifying evidence, arguments, and points of view. Students can learn by analyzing the experiences of others until new evidence presents itself (Mezirow, 1997).

4. **Action.** At this type of reflection, students can decide whether they need to take immediate action or delay it.

**The advantages of Transformative Learning Theory.**

It is to provide teachers with the understanding of how adult learners learn and what activities or strategies should be employed to make them achieve better learning. Reflection is one of the most important components of learning for adults (Mezirow, 1975, 1978). Through critical reflection, he believes that students are able to acknowledge, modify their assumptions and expectations that scaffold their points of view as well as influence their thinking, beliefs, attitudes and actions. Besides, transformative learning theory promotes
critical reflection, the engagement in dialogue, individual experience, a more holistic
teaching, endorsement of relationships with students, and learner-centered teaching (Taylor,
2009). This may be that the critical reflection goes well with the employment of learner-
centered teaching approach. The approach promotes the interactions among students and
teacher. Through critical and collaborative discussion, sharing and questioning, learning is
enhanced. Transformative learning through critical reflection promotes student academic
engagement. It is believed that academic engagement enhances student learning. Learning
means transforming their perspectives and understanding. There is a saying that “learning can
take place without teaching but teaching cannot happen without learning; teaching without
learning is just talking” (Angelo & Cross, 1993). Thus, the thread between teaching and
learning is student engagement (Barkley, 2010).

**Research related to Transformative Learning Theory.**

In 2010 Madsen and Cook conducted a study with 294 Emirati female students in
college investigating the potential factors contributing to their transformation during their
college years. The study used transformative learning theory to examine the factors for the
female students’ transformation. An online survey was used to collect the data. The overall
findings displayed that students perceived themselves as having gone through transformative
learning experiences. They significantly changed their ideas, expectations and views through
the experiences they had in their college lives. The experiences they received helped them
reflect on their past behaviors and how their learning experiences influenced them personally.
Moreover, the results also showed that influential individuals, learning assignments and
activities, and outside influences significantly contributed to student transformation
throughout their college years. One significant manifestation in student was that they had an
enriched sense of self-understanding and a better self-realization of their potential. They
thought they had more options for their future.
Constructivist Learning Theory.

Constructivists believe that effective learning comes from active interactions using their own experiences and contexts.

The definition of Constructivist Learning Theory.

Constructivist learning has been defined differently but many constructivist theories agree on four aspects of this concept. These four aspects are elaborated as follows (Good & Brophy, 1994):

- **Learners construct their own meaning.** In this aspect, learners are expected to be active and try to make sense of the information they receive. They discover and create knowledge according to their belief system.

- **New learning builds on prior knowledge.** Due to the fact that students have to make an effort to make sense of the information, they must connect their previous experience to the new information. In this regard, they try to compare and question, challenge and investigate, accept or give away previous experiences in order to construct their new knowledge.

- **Learning is enhanced by social interaction.** Students need the chance to discuss and compare ideas with others. Through the social interaction which usually takes place in small group discussions or whole class activities, students learn to build their new knowledge from others.

- **Meaningful learning develops through “authentic tasks”**. Teachers need to make sure that the materials or activities designed allow students to cope with the challenges they confront daily.

Though using different terms to define constructivist learning theory, researchers have used it as the process of constructing meaning, basically on the way students make sense of their experiences (Merriam, Caffarella, & Baumgartner, 2007; Splitter, 2009) It is more of
learning theory, not teaching theory, thus, the learning environment is learner-centered. In this sense, teachers play significant role in preparing what to teach and the activities assisting students to learn (Proulx, 2006). Moreover, constructivism is considered by many schools as the best method for learning and teaching (Powell & Kalina, 2009).

**The origins of Constructivist Learning Theory.**

Constructivism originates from the work of Piaget who believes that learning is the learners’ responsibility (Danielson, 2007). Instructors are the ones who guide the process but students develop their own understanding through the engagement in the activities. There are two common constructivism theories, one of which is called individual constructivism (also called cognitive constructivism) by Piaget which focuses on individual-made meaning. Another one is called social constructivism by Vygotsky & Dewy. It focuses on the social interaction aspect of constructing knowledge. Constructivists who support Piaget’s idea are interested in individual knowledge, beliefs, self-concept or identity (De Corte, Greer, & Verschaffel, 1996; Paris, Byrnes, & Paris, 2001). Social constructivism by Vygotsky concerns more social interaction, activity and cultural tools that shape the development and learning of the individuals. When students participate in various activities, they receive appropriate outcomes from the collaborative work (Gredler, 2005; Palincsar, 1998).

In the constructivist model, learning is the process of making meaning; thus, the learners interact with the outside world and then use the experience and the learning environment to construct knowledge. Learner-centered approach is essential for constructivism. In addressing the pedagogical needs of the individual and social constructivism, the implications are numerous. These implications include experiential learning, shared and negotiated learning, social contextualization of learning, self-directed learning, group work, creative problem solving, guided discovery and reflective practices (Ashworth, Brennan, Egan, Hamilton, & Saenz, 2004).
Individual constructivists believe that knowledge is constructed from experience. Personal interpretation of knowledge produces learning results and learning is considered as an active process where meaning is made by experience (Smith & Ragan, 2005). However, social constructivists believe that learning is gained through the collaboration among different perspectives. A new design theory basically derives from constructivism and the learning process which this theory is rooted in these three principles by (Richey, Klein, & Tracy, 2011).

**Principle 1: Learning is developed by personal interpretation of experience**

*Developing self-knowledge.* Self-knowledge is the concept of “a self-world” by Duffy and Cunningham (1996). The self-world is called the prior knowledge that people use to construct new knowledge. This prior knowledge includes values, experiences and beliefs (Smith & Ragan, 2005). Self-knowledge includes the awareness of how knowledge construction works which is called “knowing how to know”. This needs to be encouraged and nurtured through learning environments. Constructivist designers allow students to control the learning environments and activities (Duffy & Cunningham, 1996).

*Facilitating learning.* Constructivist designers think that instruction is the process of supporting students to construct knowledge (Duffy & Cunningham, 1996); thus, learners need to be active (Gordon, 2009). To promote active learning environment, teachers need to create an environment which students can: 1) freely ask questions and express their ideas, 2) create their own meaning, 3) share control of the classroom, and 4) develop positive attitudes toward learning. Teachers also need to maximize student interactions and guide them to connect new knowledge to previous ones. They need to frequently assess and offer feedback, respect learners in terms of their ideas, and encourage student autonomy. Moreover, teachers need to prepare activities which are challenging and relevant, and encourage students to engage in higher-level thinking (Shirvani, 2009).
**Principle 2: Learning is an active process occurring in realistic and relevant situations**

*Active learning.* It helps students to interact with the information at a high level, elaborate and interpret it by using their previous knowledge and experiences (Richey, Klein, & Tracy, 2011).

*Authentic and contextualized learning activities.* These activities are coherent, meaningful, and purposeful and are built using everyday language, everyday problems and everyday situations (Brown, Collins, & Duguid, 1998).

**Principle 3: Learning results from an exploration of multiple perspectives**


*Collaborative learning environments.* Students have a chance to share and collaboratively reflect. Cooperative learning allows students to share workload among the group. Moreover, this method allows learners to develop, compare, and understand multiple perspectives on a particular issue (Karagiori & Symeou, 2005). To enrich collaborative learning environments, constructivists recommend these instructional approaches: Authentic Tasks, Social Negotiation, Multiple Representations, Understanding Knowledge Construction, and Student-Centered Instruction (Hoy & Hoy, 2013).

1. *Authentic tasks.* Students should not only be given simple problems but more complex issues to deal with. These complex issues should be embedded in authentic tasks or activities, especially in situations where students will confront in the real world (Needles & Knapp, 1994).

2. *Social negotiation.* Teaching is to develop students’ abilities to create and defend themselves as well as to respect others. In this regard, in order to achieve this
exchange in the teaching and learning process, students must talk and listen to each other (Hoy & Hoy, 2013).

3. Multiple representations. If students experience only one representation of the content, they will oversimplify its application to everyday situations. Revisiting the same materials at different times, for different purposes and from different perspectives helps consolidate knowledge. A good example is the spiral curriculum by Jerome Bruner (1966). Spiral curriculum is a way of teaching which introduces the ‘big ideas’ in early school years, then revisits the subjects in more complex forms over time. Another example is scaffolding by Vygotsky. Scaffolding is a concept of teaching and learning where both teachers and students create meaningful connections between teachers’ knowledge and everyday experience and knowledge of students (McCaslin & Hickey, 2001). According to Vygotsky, a deep understanding of the big ideas requires students to grapple with the problems in their zone of proximal development.

4. Understanding knowledge construction. Students have different assumptions and experiences leading to different knowledge. Instructors need to understand the knowledge construction process and help students understand it so that they are aware of the influences that shape their thinking.

5. Student-centered instruction. Inquiry learning, problem-based learning, cognitive apprenticeship, and cooperative learning are recommended for student-centered approaches (Hoy & Hoy, 2013).

- Inquiry learning. This instructional approach was described by John Dewey in 1910. Constructivists who have adopted this instructional approach include Echevarria (2003) and Lashley, Matczynski, and Rowley (2002). It starts with the presentation of a puzzling event, question or problem posted by teachers and then students work to: 1) formulate hypotheses explaining the event or
solving the problem, 2) collect the data in order to test the hypotheses, 3) draw conclusions, and 4) reflect on the original problem and on the thinking process needed to solve it.

- **Problem-based learning.** Students are given a truly challenging issue which has meaning for them in real life and they collaboratively work out the solutions. In true problem-based learning, the problem is real and students must take actions to solve it (Hoy & Hoy, 2013).

- **Cognitive apprenticeship.** This strategy is rich in information because the instructor has a good knowledge about the subjects. These six features commonly appear in the cognitive apprenticeship model. Firstly, students observe the performance model of an expert (usually the instructor). Secondly, external support is given to students through coaching, tutoring etc., and scaffolding is provided. Thirdly, students articulate their knowledge, expressing their understanding of the content being learned. Fourthly, students reflect on their progress and compare their problem solving with an expert’s performance. Lastly, students explore new ways in applying the content they are learning (Hoy & Hoy, 2013).

- **Cooperative learning.** It is centered on collaboration and cooperation which are very important for instructional practices. There are two characteristics of constructivist teaching, one of which is complex, real-life learning environments and the other is social interaction (Driscoll, 2005). Engaging all group members, placing them in a room, arranging them to sit together, or telling them to work in groups does not mean that they will effectively cooperate. In order to encourage full cooperation among the team members, five important elements will need to be carefully structured: Positive

The advantages of Constructivist Learning Theory.

Teachers are equipped with techniques that assist students to construct new knowledge. Students are responsible for their own learning while teachers are responsible for planning learning activities which actively engage them in the learning process. Thus, this teaching approach will help teachers to align their learning activities with the learning outcomes. The constructivist approach to teaching and learning is believed to prepare students for their life journey. Students in higher education are more self-directed. The activities designed must provide the opportunities for them to actively participate. The opportunities help them develop their understanding of learning and the meaning of the context (Gibbs, 1992). At this stage of life, they have various potential, experiences and mindsets. They have their own mindsets, memories, conscious and subconscious worlds, emotions, imagination and physical body that need to interact with new learning and learning contexts (Merriam, 2001). Thus, the constructivist approach, especially social constructivism by Vygotsky (1978), can develop student confidence, respect for others, etiquettes and social skills among them. Moreover, students can also communicate and exchange their joy and sadness without hesitation. It offers students comfort and peace of mind for working more profoundly and earnestly.

It is assumed that through the constructivist approach, learning is made by doing repeatedly until students become efficient at the knowledge they have constructed. This approach has different forms and activities, such as cooperative learning, experiential learning, problem-based learning and inquiry learning (Hussain & Sultan, 2010). Students construct new knowledge through their past experiences and the engagement in the process of
learning (Li, 2001). Moreover, knowledge is constructed through observation, reflection and interaction with the environments including peers, teachers or technology (Dhindsa & Emran, 2006).

In 2008, Collins conducted a study related to the constructivist approach. He concluded that this approach provides opportunities to students to actively engage in the learning process. Students gain lots of benefits from real-life learning, particularly through projects, site visits, presentations, reflective learning journals, case studies, and group interactions.

**Research related to Constructivist Learning Theory.**

A descriptive study conducted by Hussain (2012) aimed at investigating the significance of using constructivist approach in teaching in higher educational level and the effects of this approach on student social learning. More specifically, Hussain observed the learning of students who were from Master of Arts in Education of the Islamia University of Bahawalpur. These students were from his three different classes of M.A. Education, under the course “Qualitative research methods”. He used constructivist approach for his instructions. The results of his observation showed that students were involving collaboratively and cooperatively in the projects and tasks in order to construct knowledge. Moreover, cooperative and collaborative work helped students to overcome shyness and introversion. They became more independent thinkers and were courageous in taking initiatives in research projects. Besides, they also learned some skills, including social skills, ethics and etiquettes in groups. However, some female students from rural areas still seemed shy when working with their counterparts.

This part presented to the two major theories for the study. The first theory was Instructional Leadership by Murphy and Hallinger (1985) which the researcher believed to be the action taken by the instructional leaders to influence teaching, hence, learning. The
second theory was Outcome-Based Education by Spady (1994). This theory was believed to help lecturers as the approach to designing courses and instructions. Lecturers should have clearer and more systematic approach in designing instructions. This theory was followed by Backward-Process of Curriculum Planning as learning outcome was considered the heart. Adult Learning Theories including Transformative Learning and Constructivist Learning were also introduced. These learning theories would assist lecturers with their designs of learning activities.

Part III: Related Research

This section describes the research that are related with the main theories of Instructional Leadership and Outcome-Based Education (OBE) which are considered as critically important to improving instruction in higher education. Studies that employed Instructional Leadership and OBE, particularly for promoting the teaching and learning, are reviewed and summarized. Moreover, studies on factors affecting instructional leadership practices have been reviewed and summarized in this section too.

Instructional Leadership

Hallinger (2005) conducted an empirical study that aimed at seeking the methods for preparing principals to be instructional leaders. Based on his review of the literature, Hallinger focused on the instructional leadership model by Murphy and Hallinger (1985) which was used by most of the previous empirical studies. Over 110 empirical studies using this model were reviewed and the Principal Instructional Management Rating Scale was used as the instrument to collect the data for this study. The results of this study show that personal antecedents (training and experiences) and context of the school, including level, size, and socio-economic status of the school, affect instructional leadership. However, one thing is certain: instructional leadership really influences the school mission and expectations, curriculum, teaching and teacher learning. Moreover, this type of leadership directly and
indirectly influences student learning and other school outcomes. However, the current findings do not strongly conform to the above results. Instructional leadership was not found strongly practiced by the academic administrators. The school mission, vision, and expectations were set by the top management committee. Only a small proportion of lecturers were invited to sit it. Moreover, the findings indicated that the academic administrations did not have time to observe teaching and provide constructive feedbacks. This would not influence much on student learning.

**Outcome-Based Education**

The aim of OBE is to ensure that students know and be able to perform as a result of their learning experiences (Spady, 1994; Biggs & Tang, 2007). The study by Chan and Chan (2009) aimed at identifying the impact of OBE on student core competencies in an engineering discipline in Hong Kong PolyU. They found that students had positive behaviors toward the approach but it did not have much impact on student learning. Students’ class participation increased. They tended to engage more in classroom activities and had positive attitudes toward feedback from teachers, particularly with regard to their assignments. However, there was no significant difference between OBE and non-OBE students in terms of their achievement. This may be that teachers were still in the transitional period of this paradigm shift in teaching approach. Teachers were still in the process of acquiring OBE techniques and incorporating them into their daily routines. OBE has been introduced in Hong Kong since 2006. The length of the implementation is still short. Therefore, there are still many challenges for teachers to become adept at OBE instructional planning. A more recent study by AN (2014) in the context of the Philippines involved 20 sophomores from the undergraduate program of Accountancy of Lyceum of the Philippines University (LPU)-Batangas in writing discipline (English 2) in 2011-2012. The results showed both positive student behaviors and better performance. Students tended to have more cooperation in class
discussion because they were interested in the lessons. They tended to listen attentively to the teacher. The result also indicated that they became more interested in OBE lessons. They had lots of fun while learning. In regard to their performance, they expressed that they could apply what they learned and they could speak their ideas and put them into writing. Overall, they became more productive students. Another study was held in the University of Technology MARA Sarawak, Malaysia by Akir, Eng and Malie in 2012. They found that the intervention of OBE in teaching led to better student performance. Students became more active in classroom.

Another most recent research aims at introducing strategies and tools for OBE in the context of higher education in India. This research was conducted by Sreekanth, Arjun, and Guruprasad in 2015. It specifically focuses on the engineering education to investigate how the new strategies and tools, which are related to cooperative learning, help the teaching and learning process. The results of the experimentation provide great insights for both teachers and students. In conclusion, the authors suggest that institution which aims at accreditation must comply with OBE which is mostly required by the Indian authorities. OBE is the approach to enhancing Indian students to be globally competent. If the strategies and tools are employed in class, it will surely enhance understanding and the learning environment for students and teachers. Compared with traditional teaching methods, these new strategies and tools can empower teachers with more knowledge. Moreover, students will become better team-workers and more independent thinkers.

In 2008, there was a study on the implementation of OBE in Universiti Putra, Malaysia, focusing on student learning outcomes. The study involved lecturers from the diploma and degree programs of the university. The instrument was developed with two domains, one of which was the teaching and learning taxonomy (cognitive, psychomotor, and affective), and another one was Ministry of Higher Education learning outcomes. The
instrument was to measure the attainment level of the two domains: teaching and learning taxonomy and the learning outcomes developed by the MoHE which had been taught in the semester. The scale was from 1 to 10, where 1 indicated the lowest attainment level of learning outcomes and 10 was the highest. The results showed that cognitive domain was at level 4; psychomotor was at level 4 and affective domain was at level 3. Among the nine learning outcomes established by MoHE (Life Long Learning and Information Management, Communication Skills, Critical Thinking and Scientific Approach, Managerial and Entrepreneurial Skills, Psychomotor, Practical Technical Skills, Knowledge, Social skills and Responsibility, and Professionalism, Values, Attitudes and Ethics), KNOWLEDGE was ranked highest at both semester (8.33 and 8.37) while the lowest rank was MANAGERIAL AND ENTREPRENEURIAL SKILL (5.23 and 5.18). The rest was ranked at high levels of achievement. Thus, it can be concluded that the implementation of OBE in UPM with a focus on student learning outcomes was effective. Instruction is considered improved through the adoption of OBE for the lecturers’ teaching practices (Mohayindin, Suandi, Mustapha, Konting, Kamaruddin, Man, Adam, & Abdullah, 2008).

Factors Affecting Instructional Leadership

The role of academic leaders, principals in school levels, is to support learning activities and promote teachers’ capacity in their professionalism (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Though the core instructional leadership practices are similar from country to country, the way the academic leaders actually implement them may be different (Qian, Walker, & Li, 2017). This means that instructional leadership can work well based on the adaptation of each country and the understanding of the academic leaders to put it wisely into practice. However, studies have revealed some factors affecting instructional leadership practices. The factors refer to the challenges which prevent instructional leadership practices from being well-implemented.
Hallinger & Walker (2017) conducted a very recent study leading learning in Asia, particularly in five countries. The researchers reviewed a series of literature from the ILEA project and came up with a synthesis of the findings among China, Taiwan, Malaysia, Singapore and Vietnam. They discovered that all academic leaders were not truly autonomous in designing their own curriculum, thus, curriculum coordination was constrained by other parties. Moreover, the academic leaders faced the challenges of traditional culture and the demands of new teaching approach (student-centered teaching) in order to raise the quality of teaching and learning. The culture of hierarchy also restricted shared leadership. For example, academic leaders in Malaysia and Vietnam still hold much power in schools. However, the new policies encourage instructional collaboration in which teachers are expected to get involved and develop student success. In Taiwan, China, and Singapore, teachers are actively involved in the improvement of teaching and learning.

Another study by Jabnoun (2009) focused on the economic and cultural factors for university excellence. He investigated the relationship between the number of top ranked universities in the country and factors related to economy and culture. The factors are gross domestic product (GDP), corruption perception index (CPI), power distance (PD) and press freedom (PF). Pearson correlation was used to determine the relationship between the independent variables. After that, regression analysis was used to determine the relationship between dependent variable and independent variables. The study found that economic and cultural factors affect the quality of higher education. Of course, the lack of financial resources would restrict the quality of teaching and research. In terms of culture, power distance reduces the level of shared leadership among the academic leaders and teachers. This is contradictory to instructional leadership practices which encourage teachers to work collaboratively in curriculum planning, instructional design and promoting student learning.
A study by Chen, Sok, and Sok (2007) would help explain more the factors affecting instructional leadership. The study aimed at exploring potential factors which lead to quality for higher education in Cambodia. The five factors include academic curriculum and extra-curricular activities, teachers’ qualifications and methods, funding and tuition fees, facilities, and interactive network. The target institutions were the five top-ranked universities in Cambodia. Questionnaires and desk research were used to collect the data and a descriptive analytical approach was used to describe the factors. The findings from the study indicated that the curriculum is coherent but more extra-curricular activities are needed to assist students in entering the society successfully. The quality of teachers, including qualifications, teaching methods, instructional and research experiences, is still poor. This may be because they don’t have much time to prepare their lessons and guide students due to their teaching jobs in more than one university. This findings were still found in this current study. Lecturers were mostly part-time. They did not have time to prepare for their courses and instructions. This became an issue for the academic administrators to applying their instructional leadership practices and encouraging lecturers to adapt OBE instructions. The study also found that universities lack fund to spend on subscribing journal articles, databases, or buying textbooks and other technological gadgets to support teaching and learning. This would lead to low motivation and commitment for students to learn. The current finding also found that universities lack financial resources and materials for supporting teaching and learning. Moreover, there is little interaction between lecturers and lecturers and between lecturers and students. Low interaction among lecturers were still observed in this current finding. This was because of having insufficient to be together as lecturers taught at different universities. These findings reveal the challenges facing academic leaders in the Cambodian higher education. No matter how much instructional leaders encourage lecturers to employ student-centered instructions, the results are disappointing due
to lecturers working part-time in multiple institutions. They simply do not have enough time to prepare for the instructions and interact more with the leaders. Moreover, the academic leaders may find it difficult to encourage the staff to strive for improvement when there is a lack of supporting facilities. In this sense, it may be impossible for instructional leaders to promote a professional learning community among lecturers since the time to interact among lecturers and students is insufficient.

This part provided some findings of the previous research studies on Instructional Leadership and Outcome-Based Education particularly in higher education level. Moreover, the studies on factors affecting instructional leadership were also reviewed. The research studies which were reviewed were to back up what has been thought to be the drives to promoting teaching and learning. The findings of the previous studies would broaden the researcher’s views on instructional leadership practices and outcome-based education practices and the factors affecting instructional leadership in various contexts.

Chapter Summary

A brief summary of the history of higher education in Cambodia, including the first establishment and the subsequent intermittent development of higher education institutions under various eras of leaderships, provides the historical context for the current study. The more recent situation of higher education in Cambodia as well as the issues of teaching quality have also been discussed. Low quality education is a widespread problem in Cambodia. The researcher believes that teachers play an important role in promoting quality education. Quality instructional design and professional pedagogical knowledge should help address the issues of low teaching quality. Therefore, outcome-based education together with the adoption of backward design process of curriculum planning has been introduced in this study. An overview of these theories, including the definitions, origins and concepts, and
their advantages, has been given. Moreover, some related research has also been reviewed to show that the theories are workable and effective in promoting instructional quality.

Besides, the researcher introduces two adult learning theories, one of which is transformative learning and another one is constructivist learning theory. These theories would help teachers with more updated and appropriate teaching pedagogies to apply in their teaching. Transformative learning theory is the process of changing student’s frame of reference through their critical reflection in the learning activities. Constructivists believe that students can construct their knowledge through the interactions in the learning activities. The concept of designing for instruction is explicitly shown in outcome-based education but planning the learning experiences with different approaches would contribute to better teaching and learning. Lessons must be engaging and effective. The materials planned should be thought provoking, fascinating and energizing and help student to be adequately competent and productive at their workplace (Wiggins & McTighe, 2005).

The role of leadership is also critically important because it influences the behaviors of the subordinates. The researcher introduces instructional leadership to bring positive changes in teaching, hence learning. Instructional leadership is the actions taken by the instructional leader to promote teaching and learning (Murphy & Hallinger, 1985) through establishing and communicating the school goals, managing curriculum and instruction and establishing positive learning climate.

Some research has backed up what has been considered as crucial in promoting quality teaching. It is believed that through a systematic approach in designing the course, units and lessons with the adoption of backward design process of curriculum planning and the support of adult learning theories (transformative learning and constructivist learning) guided by the employment of instructional leadership theory, teaching will surely be enhanced. In conclusion, teachers need these three elements to improve their instructions;
hence, student learning: 1) a systematic approach in instructional planning; 2) pedagogical knowledge which equips them to comply with outcome-based education principles; and 3) the monitoring, mentoring, coaching and motivation offered by the instructional leaders. Outcome-based education places the learning outcomes as the most important stage and the assessment and learning activities are to align with the learning outcomes. Teachers need to understand how adult learners learn and the kinds of activities which promote student learning engagement. To bring about changes in teachers’ attitudes toward outcome-based education and help them perform more effectively, the role of leadership is very important. Leadership influences the way teachers plan their instructions and teach and assess student learning. Moreover, it arouses teachers’ motivation to move beyond what is expected through engaging in professional learning.
CHAPTER III

RESEARCH METHODOLOGY

This chapter entails the process of data collection for the study. Detailed information about the research design, research procedures, population and sample of the study, validity and reliability of the research instrument, collection of data and its analysis and the table of summary of research process are presented in this chapter.

The research design was based on the following research objectives:

1. To explore the expected instructional leadership practices and outcome-based education practices at higher education institutions;
2. To examine the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia;
3. To identify the relationship between the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia;
4. To determine the factors affecting instructional leadership practices at private higher education institutions in Cambodia;
5. To propose an effective instructional leadership model for outcome-based education at private higher education institutions in Cambodia.

Research Design

The researcher utilized an exploratory sequential mixed-methods design as referenced in Cresswell (2012) for this study. The study started by firstly collecting qualitative data and content analysis was used to explore the categories. The results from the qualitative data through content analysis were used to develop a survey instrument to collect quantitative data with respect to research objective two. Means and standard deviation were computed. A mixed-approach methodology was believed to be a useful method allowing the
researcher to have the opportunities to compensate for method weaknesses and balance inevitable method biases (Greene, 2007). Moreover, it also provided an alternative for the researcher to triangulate the data. This way, the analysis could be more comprehensive than a purely qualitative or quantitative research (Cresswell & Clark, 2011; Halcomb & Hickman, 2015). The following is a detailed description of the research methodology for each objective.

**Research Objective One:** To explore the expected instructional leadership practices and outcome-based education practices at higher education institutions.

**Source of Data**

For the content analysis, books and academic articles were consulted to examine the expected instructional leadership practices for outcome-based education. The researcher sourced books and journal articles related to instructional leadership practices and outcome-based education as well as the factors affecting the instructional leadership practices. These sources were from the libraries and online articles. The researcher screened them for key words related to key variables relevant to higher education. However, instructional leadership does not apply only to higher educational, but also school levels. There are many documents (books and articles) about the instructional leadership in the school levels. Thus, the researcher also looked into the leadership at this level that could possible apply to the higher educational level. As a result, 15 books and 188 articles (Refer to the Appendix A and Appendix B) were included in the content analysis. They were all written in English and published by reputable publishers.

**Research Instrument**

In order to collect the data for research objective one, key ideas were identified. A coding system and coding sheet were used to organize data with key topics and ideas. The researcher extracted the key words related to instructional leadership practices and outcome-based education from the selected literature. Then, a thematic analysis of content was done
and the results were used to develop the research instrument (survey) for the second objective of this study.

**Data analysis**

A content analysis was carried out on the data. Content analysis, according to Hsieh and Shannon (2005), was a widely used technique in qualitative research. It was a systematic quantitative analysis of the data (Neuendorf, 2002). The data included printed or online documents, such as books and journal articles (Kondracki & Wellman, 2002).

According to Neuendorf (2017), there are nine steps in the process of content analysis. They are as follows:

Step 1: Theory and Rationales. At this step, key variables were determined for examination.

Step 2: Conceptualizations. The key variables for the study were defined conceptually based on the documents reviews (books and articles).

Step 3: Operationalizations (measures). The data collection was basically from the review of the literature. The key variables needed to be well-measured.

Step 4: Coding scheme. The researcher applied human coding method for the coding process.

Step 5: Sampling. The population was well-defined by the key variables to be studied. All relevant contents (as defined by the variables) selected from the books and articles, became the sample for the analysis.

Step 6: Training and Pilot Reliability. A brief description of the process including the variables used for coding be clearly explained as the coders need to find out whether they agree on the coding of the variables. The codebook or coding form needs to be revised as necessary.

Step 7: Coding. Coding is done independently by coders.
Step 8: Final Reliability. The calculation of the reliability figure (percent of agreement for each variable).

Step 9: Tabulation and Reporting. It’s the last step and final output of the analysis process.

Moreover, according to Bengtsson (2016), content analysis should undergo 4 steps as shown in the following:

Step 1. The decontextualization. At this stage, the researcher is supposed to have the data already and need to read the text to see the whole picture and break it down into smaller meaning units. Each meaning unit contains some insights that the researcher needs.

Step 2. The recontextualization. After identifying the meaning units, the researcher has to check if all aspects of the content have been addressed in response to the aim of the study. To make sure all aspects have been covered, the researcher has to read the text again alongside the list of meaning units.

Step 3. The categorization. At this stage, the meaning units must be condensed before they are grouped into categories. The number of words needs to be reduced without losing the content of the unit. During the process of categorization, themes and categories will be identified.

Step 4. The compilation. After the categorization has been established, the researcher will begin analyzing and writing up the process.

The steps in doing the content analysis by both Neuendorf (2017) and Bengtsson (2016) provided sufficient insights for the researcher to conduct content analysis. The researcher decided to consolidate the 9 steps into 6 to conduct the content analysis for this research. These steps included:

1. Preparing the sources to be analyzed. At this stage, the researcher had defined the key variables to be studied, particularly with the research topic and research objectives.
Under each key variable, specific key words were determined for the researcher to easily screen out the documents. After the key words were determined, the researcher looked for the documents which were relevant. (More details of sources of the content analysis were shown in Appendix B)

- **Sources selection criteria.** The researcher used the following criteria to select the books and articles for the content analysis.

  1. **Year of publication.** The books and articles were published between the years 1994 and 2018. They were considered more up-to-date for the present study.

  2. **Publishers.** They were published by recognized publishers (SAGE, Emerald Insight, ERIC, and others) and in well-known academic journals.

  3. **Language.** The sources must be written in English.

  4. **Emphasis.** They were related to education and focus more on administrators and teachers.

  Figure 7 below shows the number of sources selected according to the years of publication. The result showed that 0.49 percent of the sources were from 1994-1999, only for Outcome-Based Education. More documents published between 2011 and 2015 (33.49 percent) were found while 31.52 percent of them were published between 2006 and 2010. Another large proportion of sources from 2000-2005 was 25.59 percent while 8.82 percent of them were from the most current period of 2016 to 2018.
Figure 7. Year of Publication of the Sources for the Content Analysis.

- **Sample.** Books were selected when relevant keywords were found in the title or introduction. For articles, the researcher consulted three major sources: SAGE, Emerald Insight, and ERIC. Besides, the researcher also got some documents from Google scholars. As a result, 203 articles were selected for the content analysis. Here was the screening process:

1. **Keywords.** The researcher typed the keywords in (SAGE, Emerald Insight, ERIC, and Google scholars) and thousands of articles appeared.

2. **Scanning.** The researcher scanned the title, abstract, and even the introduction for the keywords which were relevant to the variables being studied. The first 200-300 articles were scanned from each source and the selected articles became the sample for the content analysis.

2. Extracting the key words related to the key variables: Information relevant to the key variables was placed in one column of the coding sheet. Authors, date, and page numbers of the extracts from the books and articles were recorded. A reference list was organized with all the sources used for the content analysis.
3. Coding scheme (using coding sheet): A coding sheet was prepared with different columns for the sources, extracts, keywords, codes, and categories. After the extracts were done, the keywords were given to the extracts and placed in a column. Based on the keywords, a code was labelled. The researcher used three types of coding, descriptive (summary in a word or phrase, most often as a noun which represents the topic of a passage of the qualitative data), process (by using gerund “-ing word” to express the action in the data) and holistic (the intention of grasping the themes or issues in the data, taking them as a whole rather than analyzing them line by line). The researcher checked three times for each coding. Finally, the codes were grouped into categories which become the results of the content analysis.

4. Organizing the codes into categories: After the codes were labelled and grouped into categories, the researcher double-checked for accuracy. To check the reliability of the results, the process, including the coding, was checked by the researcher’s advisor.

5. Presenting the results of the content analysis: The presentation of the findings of the content analysis was based on the three variables being investigated: instructional leadership practices, outcome-based education and factors affecting the instructional leadership practices. The researcher applied quantitative content analysis, meaning that the findings were presented in accordance with the categories found. Basically it was calculated by the occurrences (frequency of sources) and expressed as percentage.

6. Validating the results of the content analysis: At this stage, the researcher produced a brief summary of the process, including the presentation of the findings from the content analysis, elaborating in charts with percentages of occurrences by categories. Then the analysis was sent to 15 experts for validation (names and qualifications of experts were shown in Appendix I). The criteria for expert validators were:

   a) Those who hold Ph.D. degree in Education
b) Those who have at least 10 years teaching experiences and in research particularly in higher education.

**Research Objective Two:** To examine the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia.

**Sample and sampling technique**

The research was conducted in five private universities that were established for at least 15 years in Cambodia. According to the statistics of the number of universities in Cambodia from MoEYs (2016), there are 73 private universities across the country. The researcher decided to study private universities due to the following reasons. Firstly, the private sector particularly in higher education constitutes 60.33 percent. They are in an important role to produce manpower for the development of the country. Secondly, the private universities in Cambodia are still relatively new/young; the oldest one is approximately 21 years by 2018. The researcher wanted to know to what extent the leaders of these universities adapted instructional leadership practices and outcome-based education. Thirdly, these private universities had similar disciplines especially in education. All these selected universities offered education discipline. The disciplines were accredited by the Accreditation Committee of Cambodia (ACC).

The researcher used convenience sampling technique for selecting the universities- sampling with the knowledge that the participants were readily available (Mertons, 2015). It is a type of non-random sampling in which members are chosen according to practical criteria, including easy accessibility, geographical proximity, and availability at a given time for the purpose of the study (Etikan, Musa, & Alkassim, 2016).

The researcher used simple random sampling technique to select the lecturers and administrators from all the five private universities. The total number of lecturers in these five universities was approximately 266. All lecturers and ten administrators (two from each
university) were sampled for this study. According to Krejcie and Morgan’s (1970) table, 160 out of a population of 266 is considered a valid sample. The sample size obtained for this study (211) fulfilled the minimum sample size requirement. More details including the names and address of the universities were shown in Appendix L.

Table 7

*Population and the Proportion of Sample*

<table>
<thead>
<tr>
<th>No.</th>
<th>Universities</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University #1</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>University #2</td>
<td>67</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>University #3</td>
<td>40</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>University #4</td>
<td>39</td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>University #5</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>266</td>
<td>211</td>
</tr>
</tbody>
</table>

**Research Instrument**

In order to collect the data with respect to research objective two, the researcher used a survey. The survey was designed based on the results of the content analysis from research objective one. The researcher selected the cross-sectional type of survey design to construct the instrument. It is a type of survey that examines the attitudes, beliefs, opinions or practices of the respondents on certain issues (Cresswell, 2012). In this study, the researcher wanted to explore the perceptions of the lecturers and administrators about the current instructional leadership practices and outcome-based education in private higher education institutions in Cambodia.

Issues about the survey that the researcher needed to consider: choice of population, the design of the survey, logistics of data collection, and how to obtain high response rate. Lecturers and administrators of the school of education from the target institutions were the target population. They were expected to provide their opinions about the instructional practices and outcome-based education within their own institutions. The
researcher used a survey to collect quantitative data on the instructional leadership practices and outcome-based education. According to Cresswell (2012), a survey is a type of instrument design that allows each participant to complete a questionnaire and return it back to the researcher. In the process of designing the survey, the researcher considered carefully whether it measured the variables. Different types of questions (personal, attitudinal, and behavioral questions, and sensitive questions) were included. Strategies for good question construction were employed to make sure that the questions were clear, not repeated, not wordy, not negatively worded, not overlapping, and balanced in response options.

The samples consisted of lecturers and administrators. A set of survey was designed for the lecturers and an interview protocol was extracted from the survey to collect the data from the administrators. The survey was divided into four parts. Part I included demographic information about the lecturers, including their gender, working experiences and highest academic attainment. Part II was for the instructional leadership practices which was defined as the actions of the instructional leaders to promote teaching and learning through the engagement in framing and communicating the academic goals, providing professional development, supervising curriculum development and instruction, and building a supportive and collaborative environment. Part III was about outcome-based education which was defined as the organization of the curriculum development and instructions that centralized on what students need to know and be able to do in the real world. The organization for instructions included the development of curriculum, instruction and assessment which was based on the learning outcomes. Part IV was about the factors affecting instructional leadership practices. These factors were the challenges within the organizational and social contexts. These challenges become the drives to the effective and ineffective implementation of instructional leadership practices in a particular institution. They included time constraints and workload, cooperation, culture and values, qualification,
skills and experiences, organizational structure, funding and facilities, and tasks and roles related to instructional leadership.

Validation of the Survey

After the survey was developed, five experts were invited to check and validate it to establish Item Objective Congruence (IOC). To validate the survey was to check whether it measured what it was supposed to measure (Babbie, 2004)—the degree of instructional leadership and outcome based education implemented in the universities being studied. The researcher revised the survey based on the comments and suggestions from the experts. More details about the experts were shown in Appendix J. Criteria for the expert validators were those who hold Ph.D. particularly in Education and those who received Master of Education with at least 10 years of teaching experience and research particularly in higher education.

Checking the reliability of the survey

The validated and revised survey was pilot-tested with 30 lecturers of one university in Cambodia. Cronbach’s alpha was employed to analyze the reliability of the questionnaire. In the use of survey, it was important for the researcher to make sure that it was always consistent and reliable in measuring what it should (Reynaldo & Santos, 1999). Cronbach’s alpha was originated from the work of Lee Cronbach in 1951 and was used to measure the internal consistency of a test or scale. This internal consistency was determined before a test can be used for a research purpose. Thus, it is a common practice in educational research today to measure the reliability of an instrument (Tavakol & Dennick, 2011).

After the pilot study, the instrument was modified based upon the results. The overall result of the study was .92. The range of Cronbach’s Alpha according to Gliem and Gliem (2003) was defined as follows: above .90 (excellent), above .80 (good), above .70 (acceptable), above .60 (questionable), above .50 (poor), and below .50 (unacceptable). The overall result of this pilot study revealed an excellent rating with an alpha coefficient of .92.
Each construct scored a good rating showing an overall steady internal consistency. Table 8 shows the result of each construct and the overall scored from the pilot study.

Table 8

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Domains</th>
<th>Cronbach’s Alpha Coefficient based on each variables</th>
<th>Cronbach’s Alpha Coefficient based on constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Leadership</td>
<td>Supportive and Collaborative Environment</td>
<td>.78</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>Supervision Curriculum Development and Instruction</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Development</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic Goals</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Outcome-Based Education</td>
<td>Learning outcomes</td>
<td>.76</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>Learning activities</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning assessment</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Factors Affecting Instructional Leadership Practices</td>
<td>Time constraints and workload</td>
<td>.80</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>Cooperation, culture, and values</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Qualification, skills, and experiences</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational structure</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Funding and facilities</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tasks and roles related to instructional leadership</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Overall Reliability Score</td>
<td></td>
<td></td>
<td>.92</td>
</tr>
</tbody>
</table>

The survey used in this study employed a five-point Likert-type scale. According to Joshi, Kale, Chandel, and Pal, (2015), Likert-type scale is a set of items designed for the participants to show their level of agreement on a metric scale. The tendency of choosing this Likert-type scale depends on the construct of the item response which interval scale is used.
Moreover, the measures for an interval scale are mean and standard deviation. Beyond this data set, Pearson’s correlation coefficient (r), regression analysis could be employed. Table 9 shows the corresponding values and interpretation for the Likert-type scale.

Table 9

Likert scale and interpretation

<table>
<thead>
<tr>
<th>Scale</th>
<th>Range</th>
<th>Interpretation for the instructional leadership practices</th>
<th>Interpretation for Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00-1.50</td>
<td>Strongly disagree</td>
<td>Poor</td>
</tr>
<tr>
<td>2</td>
<td>1.51-2.50</td>
<td>Disagree</td>
<td>Fair</td>
</tr>
<tr>
<td>3</td>
<td>2.51-3.50</td>
<td>Undecided</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>3.51-4.50</td>
<td>Agree</td>
<td>Very good</td>
</tr>
<tr>
<td>5</td>
<td>4.51-5.00</td>
<td>Strongly Agree</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Source: Creswell (2012)

**Data analysis**

Means and Standard Deviation were used to analyze the data.

**Research Objective Three**: To identify the relationship between the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia.

**Source of Data**

The researcher used the results from the survey (from research objective two) as the source of data.

**Data analysis**

To analyze the data, the researcher used correlation coefficient to determine the relationship between the two variables: instructional leadership as independent variable and outcome-based education as the dependent variable. It’s important to figure out whether instructional leadership significantly correlated with outcome-based education. Then, the
researcher could extend to another statistical analysis method to further determine which factors significantly affecting instructional leadership.

**Research Objective Four:** To determine the factors affecting instructional leadership practices at private higher education institutions in Cambodia.

**Source of Data**

The researcher used the results from the survey (from research objective two) and interview as the sources of data.

**Data analysis**

The researcher used multiple regression to analyze the data. Multiple regression is used when there are more than two variables, one dependent variable and the others are independent variables. According to McDonald (2014), multiple regression was used to find which independent variables have greater effect on the dependent variable. In this research objective, the researcher wanted to find out among the six factors, which ones had greater effects on instructional leadership. The six factors were the independent variables and instructional leadership was the dependent variable. The interview results were analyzed using content analysis to provide deeper information of the survey.

**Research objective #5:** To propose effective instructional leadership model for outcome-based education at private higher education institutions in Cambodia.

**Source of data**

The results from all the research objectives were used to develop a new instructional leadership model for outcome-based education at the private higher education institutions in Cambodia.
Proposed Instructional Leadership Model

Through the results of all the objectives, the researcher proposed an effective instructional leadership model for enhancing outcome-based education at the private higher education institutions in Cambodia.

Model Validation

To prove whether the new instructional model was valid for private higher education institutions in Cambodia, the researcher used two methods. These two validation methods included validation by experts and model testing.

The proposed instructional leadership model was validated by seventeen experts with diverse education backgrounds (expert details were shown in Appendix K). The criteria for selecting the experts to validate the model were that the participants must receive Ph.D in Education particularly in Curriculum Development or Leadership, and those who received Master of Education with at least 10 years of teaching experiences and research in higher education. The validation was implemented through a survey. Suggestions and comments from the experts were incorporated into the final model.

The finalized model was tested for three months in one private higher education institution in Cambodia. The objective of the test was to check if the model was applicable to be implemented in private higher education institutions in Cambodia. The test involved six phases for a period of three months. Firstly, the researcher discussed the possibility with the acting director of the institute to test the model. As soon as the model testing was allowed to be held, the researcher explained the model to the acting Dean of Academics to ensure the understanding of the model and the purpose of the testing. The acting Dean of Academics performed the instructional leadership while lecturers practiced OBE. Thirdly, a survey (considered as a pre-test) was launched to all the 13 lecturers under the education department. The researcher collected the completed survey and saved the results. Fourthly, the researcher
conducted four workshops with all lecturers and the acting Dean of Academics. Each workshop had a duration of 90 minutes with presentation and discussion. Fifthly, lecturers and the acting dean of academics started to practice the model. The dean of academics practiced his instructional leadership roles while lecturers tried to implement the OBE instructional practices. The researcher was involved in monitoring the implementation of the instructional leadership and OBE instruction. Meetings with lecturers, both in groups and individuals were held to seek their advice on the model and their practices. Challenges were also shared among the teams and between the researcher and lecturers. Finally, the same survey (post-test) was distributed to all the lecturers to obtain the data after completing the workshops.

The pre-test and post-test results were analyzed and Mean scores were calculated. The Mean scores of both pre-test and post-test were computed using a statistical program, and utilized a Paired Samples t-Test as the analytical method. The major purpose of using Paired Samples t-Test to analyze the data was because this analytical method was to find if there was a significant difference between the means of pre-test and post-test. It was to check if both the academic dean and lecturers were able to adapt the dimensional practices of Instructional Leadership and OBE practices.

To further obtain in-depth of opinions of lecturers in regards their OBE adaptation, a formal and informal discussion were held. Within the discussions, lecturers expressed their thoughts in adapting OBE practices. Lecturers also had the opportunity to ask for clarification from the researcher or to throw out their questions and express their understanding. Lecturers’ comments and suggestions were collected to be given to the future implementation of OBE in private higher education institutions in Cambodia.
<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Source of Data or Sample</th>
<th>Data Collection Method or Research Instrument</th>
<th>Method of Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Objective One:</strong> To explore the expected practices of instructional leadership and outcome-based education at higher education</td>
<td>Relevant online or printed books, articles &amp; dissertations published during 1990-2017</td>
<td>Literature Review</td>
<td>Content Analysis (validated by 15 experts)</td>
</tr>
<tr>
<td><strong>Research Objective Two:</strong> To examine the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia</td>
<td>211 lecturers from the five private universities, 10 academic administrators from the five universities</td>
<td>Survey Semi-structured interview</td>
<td>Mean &amp; Standard Deviation</td>
</tr>
<tr>
<td><strong>Research Objective Three:</strong> To identify the relationship between the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia.</td>
<td>211 lecturers from the five private universities</td>
<td>Survey</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td><strong>Research Objective Four:</strong> To determine the factors affecting instructional leadership practices at private higher education institutions in Cambodia</td>
<td>211 lecturers from the five private universities</td>
<td>Survey</td>
<td>Multiple Regression</td>
</tr>
<tr>
<td><strong>Research Objective Five:</strong> To propose an effective instructional leadership model enhancing outcome-based education at private higher education institutions in Cambodia.</td>
<td>The results of research objective 2-4</td>
<td>Model Development</td>
<td>Model Validation by 17 experts Model Testing</td>
</tr>
</tbody>
</table>
CHAPTER IV

RESEARCH FINDINGS

This chapter explains the results of the data analysis according to the nature of the research objectives. This study was a mixed-methods research which both qualitative and quantitative data was collected. The qualitative data was analyzed by Content Analysis and quantitative data was summarized and analyzed by statistical methods including Mean, Standard Deviation, Correlation Coefficient, and Multiple-regression.

The following reports are the findings investigated in the five research objectives.

Research Objective One: To explore the expected instructional leadership practices and outcome-based education practices at higher education institutions.

The following sections of the paper detailed the findings of the content analysis for the expected instructional leadership practices, outcome-based education (OBE) practices, and the factors affecting the instructional leadership practices.

1. Instructional Leadership Practices

Four major dimensions emerged from the content analysis and were variously labelled as (1) Framing and Communicating Goals, (2) Providing Professional Development, (3) Supervising Curriculum Development and Instruction, and (4) Building a Supportive and Collaborative Environment. The findings were consistent with the overall framework of the theory. The only differences were the sequences of the findings that would explain about the degree of importance of performing practices of the instructional leaders to influence teaching and learning. These four dimensions were illustrated in Figure 8.
Building a supportive and collaborative environment. A larger number of the sources (26.60 percent) were identified that described the role of instructional leaders as to build a supportive and collaborative environment. The leaders were described as creating the workplace conditions that would encourage teachers, staff and students to collectively share responsibilities in decision making and developing schools through relationship, collaboration, care, and trust. In this environment, teachers, staff and students felt safe and secure in working and learning.

Supervising curriculum development and instruction. The content analysis results provided a pattern whereby the importance of leaders creating the conditions that encouraged teachers and staff to share responsibilities for student learning was not enough. The leaders supervised curriculum development and instruction. Approximately 18.71 percent of the sources mentioned at this dimension.

Providing professional development. A number the sources (17.24 percent) mentioned the place of leaders in promoting professional development to equip teachers with the skills and ability to develop the curriculum and improve their instruction. The role of the instructional leaders encouraged professional growth, promote the development of a
professional learning community within the school, and to foster a collaborative and professional learning culture. The instructional leaders took initiatives to promote teachers’ professional development through peer coaching, and other professional development forms such as workshops, conferences, and training courses.

**Framing and communicating goals.** Approximately 8.37 percent of the sources indicated that the instructional leaders determined goals that must be in line with the school vision and mission. This goals setting must be in collaboration with teachers and made them known to all parties involved in the institution.

2. **Outcome-Based Education**

The outcome-based education is the current trend of curriculum development which student learning becomes the main focus. The content analysis revealed three different stages which were labelled as (1) Learning Outcomes, (2) Learning Activities and (3) Learning Assessment. The results showed consistent with the overall framework of the theory. These three stages are elaborated in details in Figure 9.

![Outcome-Based Education](image)

*Figure 9. Sources for Outcome-Based Education (Percent).*

**Learning outcomes.** Approximately 17.24 percent of the sources mentioned that in developing curriculum and instruction, student learning was the main focus. The teachers identified what the students were expected to be able to know and do (knowledge, skills and
attitudes) based on their needs and interests. They identified the skills (communication, critical thinking, collaboration and problem solving) that would be included into the course and the formal instructional learning outcomes.

**Learning activities.** Teachers designed the learning activities to achieve the identified outcomes. Designing learning activities was the process of selecting approaches to learning, as well as the tasks and activities for students to be able to achieve the expected learning outcomes. Teachers chose the appropriate learning approaches particularly student-centered one such as cooperative learning, problem-based learning, discovery learning, think-pair share, etc. that would engage learners actively in the learning process. The findings indicated that 18.71 percent of the sources supported this stage.

**Learning assessment.** Approximately 17.78 percent of the sources mentioned the learning assessment. The lecturers used assessment for learning. Moreover, teachers had clearer assessment criteria and chose appropriate assessment methods to measure the identified outcomes. Learners were informed about the criteria and how they would be assessed. Teachers applied formative assessment to ensure learning and for the feedbacks to be given. Summative assessment were used to judge whether students were allowed to pass the course.

3. Factors Affecting Instructional Leadership Practices

Factors that affect instructional leadership practices were identified in over 22.66 percent of the books and articles. The researcher used the same criteria as used with the content analysis of instructional leadership practices to select the sources.

Figure 10 presents the six major factors identified and labelled as: (2) Time Constraints and Workload, (2) Cooperation, Culture, and Values, (3) Qualification, Skills and Experiences, (4) Organizational Structure, (5) Funding and Facilities, and (6) Tasks and
Roles related to Instructional Leadership. Descriptions below entailed each factor obtained from the content analysis.

**Figure 10. Sources for Factors Affecting Instructional Leadership (Percent).**

**Time constraints and workload.** The findings indicated that the biggest factor affecting instructional practices were time constraints and workload. Approximately 11.33 percent of the sources claimed that instructional leaders faced a number of challenges. These challenges included the fulfillment of the demands in which instructional leaders took responsibility for their administrative tasks, managerial roles and the demands for improving teaching and learning, as well as research, and being the change agents. They developed standardized curriculum, own leadership skills and competencies. The instructional leaders were supposed to influence teaching and learning but they were occupied with administrative functions. Their administrative roles were greater than instructional leadership that would affect student learning achievement.

**Cooperation, culture and values.** The second biggest factor for instructional leaders found in the literature was organizational cooperation, culture and values. Approximately 9.35 percent of the sources indicated that instructional leaders faced the challenges when working in hierarchical systems and cultures. This allowed only limited
interactions between the teachers and teachers and, leaders and teachers. Cultural differences triggered hindrance of instructional leadership practices. People tended to have different perspectives and attitudes towards tasks. Changes in people and policies required mutual leadership skills. Asides, some countries had a strong social-context culture that greatly influenced the teaching and learning. However, teachers were not supposed to inflexibly follow traditional ways of teaching since modern teaching and learning approaches were very helpful in promoting academic achievement. Thus, instructional leaders had to be flexible in satisfying dual expectations.

Qualification, skills and experiences. The third factor for instructional leaders was insufficient qualification, skills and experience. Approximately 8.37 percent of the sources showed that instructional leaders faced challenges in leadership. These challenges included the lack of expertise in many aspects including planning skills, leadership skills and curriculum development. Moreover, teachers’ poor quality explained partly to the challenges of the instructional leaders because they could not raise the quality learning unless quality teaching.

Organizational structure. The fourth factor identified was the organizational structure of the institution. Less sources (3.48 percent) were found. According to the content analysis, the leaders implemented the plan organized by the school. They did not have the authority to develop their own curriculum or academic goals. They did even not have the authority to provide professional development activities to the teachers.

Funding and facilities. Funding and facilities were found to be the factor affecting instructional leadership. Approximately 2.95 percent of the sources indicated that the universities had limited financial resources for facilities like subscribing databases, journal articles and periodicals, and buying textbooks and LCD projectors. Though the universities had a library but the materials and books were not up-to-date for the purpose of
teaching and learning and research. The instructional leaders found funding and facilities
critical resources to improve instructional practices, hence, learning. Therefore, the lack of
resources challenged them.

**Tasks and roles related to instructional leadership.** Approximately 1.97
percent of the sources indicated that the instructional leaders were unsure of their roles in
instructional leadership due to having multiple roles. The lack of understanding their roles as
instructional leaders caused them struggle in carrying out their tasks in facilitating teaching
and learning.

**Research Objective Two:** To examine the current instructional leadership practices and
outcome-based education practices at private higher education institutions in Cambodia.

**Demographic Information**

In order to collect the data in response to this objective, the researcher used two
types of instrument: survey and interview. The survey was conducted with lecturers of the
five private universities in Cambodia. Table 11 explains that approximately 266 survey were
launched to all the five universities’ lecturers. The researcher received 219 returned surveys
(82.32 percent) with 211 (79.32) could be counted and the other 8 (3 percent) was partially
completed. The incomplete-returned surveys were not counted. The not-returned surveys
were 47 which was 17.66 percent.
Table 11

*Number and Percentages of Survey Launched and Returned*

<table>
<thead>
<tr>
<th>Surveys</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned Surveys</td>
<td>219</td>
<td>82.32%</td>
</tr>
<tr>
<td>Not-Returned Surveys</td>
<td>47</td>
<td>17.66%</td>
</tr>
<tr>
<td>Counted</td>
<td>211</td>
<td>79.32%</td>
</tr>
<tr>
<td>Not counted</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>266</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The results from the returned surveys showed more male lecturers (approximately 173 = 81.99 percent) than female lecturers (approximately 38 = 18.01 percent) were employed by the selected universities. The lecturers from each university had various teaching experiences. As indicated in the Table 12 below, 10.42 percent (22) of the lecturers had 0-2 years of teaching experiences, 20.85 percent of them worked between 3 to 5 years, 26.07 percent of them worked between 6 to 10 years, 26.54 percent of them worked between 11 to 15 years, and 16.11 percent of them worked from 16 years and above. The results showed that the five universities employed more lecturers who had worked between 6 to 15 years of teaching experience. Smaller percentage of lecturers (10.42 percent) had 0-2 years of teaching experiences. This indicates that lecturers had more experiences in teaching. The results even show that 16.11 percent of the lecturers had more than 16 years of experience.

Table 13 describes the degree and major lecturers are holding. A majority of lecturers hold master degree (157 = 74.41 percent) while 18 percent of them hold bachelor degree. The statistics show smaller number of lecturers hold doctorate degree (only 16 lecturers = 7.58 percent). Out of these 211 lecturers, 146 which is approximately 69.19 percent major in Education. The second larger group is Business Management which is 16.11 percent. The rests are majoring in Computer Science composing of 6.64 percent and other majors composing of 8.06 percent.
Table 12

Demographic Details of the Lecturers

<table>
<thead>
<tr>
<th>Categories</th>
<th>Sub-categories</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>173</td>
<td>81.99%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>38</td>
<td>18.01%</td>
</tr>
<tr>
<td>Working Experiences</td>
<td>0-2 years</td>
<td>22</td>
<td>10.42%</td>
</tr>
<tr>
<td></td>
<td>3-5 years</td>
<td>44</td>
<td>20.85%</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>55</td>
<td>26.07%</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>56</td>
<td>26.54%</td>
</tr>
<tr>
<td></td>
<td>16 years and above</td>
<td>34</td>
<td>16.11%</td>
</tr>
<tr>
<td>Higher Educational Attainment</td>
<td>Bachelor</td>
<td>38</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>157</td>
<td>74.41%</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>16</td>
<td>7.58%</td>
</tr>
<tr>
<td>Field of Study of the highest educational attainment</td>
<td>Education</td>
<td>146</td>
<td>69.19%</td>
</tr>
<tr>
<td></td>
<td>Computer</td>
<td>14</td>
<td>6.64%</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>34</td>
<td>16.11%</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>17</td>
<td>8.06%</td>
</tr>
</tbody>
</table>

The second type of instrument used in this research was interview. The researcher interviewed 10 academic administrators from all the five private universities in Cambodia. Two academic administrators from each university, one dean and one associate dean, were interviewed. Table 13 presented that the academic administrators were all male in gender. Among the 10 Academic Administrators, 20 percent of them hold Ph.D. in Educational Leadership while the rest hold Master in Educational Leadership, TESOL, and General Management. Moreover, 30 percent of them (30) have been working as the deans and associate deans for over 10 years while the other 50 percent (5) have got 5-10 years of experience. Only 20 percent of the academic administrators have 1-5 years of leadership experience.
experience. Table 13 below provides demographic details of the academic administrators being studied.

Table 13

*Demographic Details of the Academic Administrators*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Experiences</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>-30% (3) over 10 years</td>
<td>-20% (2) hold Ph.D. (Educational Leadership)</td>
</tr>
<tr>
<td>(10=100%)</td>
<td>-50% (5) from 5-10 years</td>
<td>-80% (8) hold Master Degree (Education, TESOL, General Management)</td>
</tr>
<tr>
<td></td>
<td>-20% (2) from 1-5 years</td>
<td></td>
</tr>
</tbody>
</table>

**Current Instructional Leadership Practices**

*Survey results.*

The data collected from the five private universities by survey indicated that the current instructional leadership practices were very good (the overall Mean score was 3.63). The findings explained the current instructional leadership practices of the academic administrators of the target universities.

*Framing and communicating goals.*

Table 14

*Mean Score under “Framing and Communicating Goals” Dimension*

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>$M$</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My academic administrators set the academic goals with the collaboration of lecturers.</td>
<td>3.57</td>
<td>Very good</td>
</tr>
<tr>
<td>2</td>
<td>My academic administrators communicate the academic goals to lecturers.</td>
<td>3.64</td>
<td>Very good</td>
</tr>
<tr>
<td>Overall Mean</td>
<td></td>
<td>3.60</td>
<td>Very good</td>
</tr>
</tbody>
</table>

The result shown in Table 14 shows the Mean of the first two items under the Framing and Communicating Goals dimension. The overall Mean indicates “Very good”
category \((M=3.60)\). Item #2 which is about the communication goals shows higher mean \((M=3.64)\) while item #1 shows lower mean \((M=3.57)\).

*Providing professional development.*

Table 15

**Mean Score under “Providing Professional Development” Dimension**

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>(M)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>My academic administrators encourage lecturers to interact professionally to learn from one another.</td>
<td>3.78</td>
<td>Very good</td>
</tr>
<tr>
<td>4</td>
<td>My academic administrators provide opportunities for professional development to lecturers.</td>
<td>3.61</td>
<td>Very good</td>
</tr>
<tr>
<td>5</td>
<td>My academic administrators encourage lecturers to use research to support instructional practices.</td>
<td>3.45</td>
<td>Good</td>
</tr>
<tr>
<td>6</td>
<td>My academic administrators provide opportunities for lecturers to observe one another to improve their instructional practices.</td>
<td>3.25</td>
<td>Good</td>
</tr>
</tbody>
</table>

Overall Mean 3.52 Very good

Table 15 shows that the overall mean is 3.52 which is in “Very good” good category. The highest mean is in item #3 \((M=3.78)\) indicating the encouragement of the academic administrators for lecturers to professionally interact to learn from one another. The lowest mean shows in item #6 \((M=3.25)\) shows in “Good” category in regards the opportunities given to lecturers to observe peers for improved instructional practices.
**Supervising curriculum development and instruction.**

Table 16

Mean Score under “Supervising Curriculum Development and Instruction” Dimension

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>My academic administrators monitor the subject curriculum development.</td>
<td>3.74</td>
<td>Very good</td>
</tr>
<tr>
<td>8</td>
<td>My academic administrators allocate sufficient material resources for instructional practices.</td>
<td>3.55</td>
<td>Very good</td>
</tr>
<tr>
<td>9</td>
<td>My academic administrators provide constructive classroom feedback to lecturers.</td>
<td>3.51</td>
<td>Very good</td>
</tr>
<tr>
<td>10</td>
<td>My academic administrators regularly monitor student learning progress with lecturers.</td>
<td>3.46</td>
<td>Good</td>
</tr>
<tr>
<td>11</td>
<td>My academic administrators encourage lecturers to use continuous learning assessment.</td>
<td>3.74</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Overall Mean 3.60 Very good

The overall results at this dimension show “Very good” category ($M=3.60$). The highest Mean shows at items #7 ($M=3.74$) for the monitoring on the course curriculum development and item #11 ($M=3.74$) for the encouragement for lecturers to use continuous learning assessment. The lowest Mean shows at item #10 ($M=3.46$) which is about the monitoring on student learning progress.

**Building a supportive and collaborative environment.**

Table 17

Mean Score under “Building a Supportive and Collaborative Environment” Dimension

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>My academic administrators listen to the concern of lecturers with a caring manner.</td>
<td>3.70</td>
<td>Very good</td>
</tr>
<tr>
<td>13</td>
<td>My academic administrators ensure an orderly environment for lecturers.</td>
<td>3.70</td>
<td>Very good</td>
</tr>
<tr>
<td>14</td>
<td>My academic administrators build a strong relationship with lecturers.</td>
<td>3.86</td>
<td>Very good</td>
</tr>
<tr>
<td>15</td>
<td>My academic administrators encourage lecturers to share responsibilities to enhance student learning.</td>
<td>3.87</td>
<td>Very good</td>
</tr>
<tr>
<td>16</td>
<td>My academic administrators involve lecturers in decision-making about educational issues.</td>
<td>3.64</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Overall Mean 3.75 Very good
The results demonstrate higher Mean than the others dimensions ($M=3.75$). The highest Mean shows at item #15 ($M=3.87$) indicating the encouragement of the academic administrators for to share responsibilities for student learning. The lowest Mean shows at item #16 ($M=3.64$) showing about the involvement of lecturers in decision making on educational issues.

**Interview results.**

To further explain the results of the survey, the researcher interviewed the academic administrators of all the five selected universities. The interview results did not only explain the depth of the survey results, but tended to elaborate details the consistent and inconsistent perspectives of the populations being studied. This would provide more reliable and accurate information which was intentionally investigated. It would be bias if the perspectives needed came solely from the survey with lecturers while ignoring the academic administrators’.

Table 18

*Summary Table of the Interview Results on Instructional Leadership from Content Analysis*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Most frequent responses</th>
<th>Concluding results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing and communicating goals</td>
<td>(10) Committee joined with some senior lecturers; (10) Meeting</td>
<td>Goals framed by the committee and communicated at meetings.</td>
</tr>
<tr>
<td>Providing professional development</td>
<td>(10) Encouraged lecturers to interact professionally; (10) Workshops provided; (10) Encouraged lecturers to do research</td>
<td>Interaction, workshops, and research</td>
</tr>
<tr>
<td>Supervising curriculum development and instruction</td>
<td>(8) No lesson plan required; (8) Checked syllabus; (9) Lack of regular teaching observation; (9) Formative assessment applied; (10) Allocated sufficient materials</td>
<td>Checked syllabus but not lesson plan. Lack of instructional supervision. Learning assessment checked.</td>
</tr>
<tr>
<td>Building a supportive and collaborative environment</td>
<td>(10) Direct communication in the faculty lounge and personally; (10) Lecturers felt warm and satisfied with the environment; (10) Healthy relationship with lecturers built; (10) Encouraged lecturers to promote learning (shared responsibilities); (10) Encouraged lecturers to give inputs</td>
<td>Healthy relationship and shared responsibilities between the academic administrators and lecturers</td>
</tr>
</tbody>
</table>
Reports below were the results of the interviews with the ten academic administrators from the five universities in Cambodia. The results are presented by the dimensions of the Instructional Leadership found.

**Framing and communicating goals.**

All the academic administrators (10) at the five higher education institutions agreed that their universities used a committee system to decide on the goals, vision, mission and philosophy of the school. The committee was chaired by the dean with the associate deans, the assistant deans and some selected senior lecturers as the members. All the institutions allowed some senior lecturers to sit in the committee. Regarding the goals communication, the administrators of all the universities expressed that all lecturers were informed and reminded about the goals in meetings. Other than this method, training workshops and the academic orientation were the possible chances to remind them about the academic goals.

**Providing professional development.**

The interview results obtained from the academic administrators of the five universities conveyed that the universities provided very few professional development workshops. The results showed that all the academic administrators encouraged lecturers to professionally interact and observe their peers’ teaching in order to learn from one another, and to do action research for improved instructional practices. However, they all agreed that lecturers did not have time to do so. The academic administrators also provided that workshops were given to lecturers. However, most lecturers were part-time. They didn’t have time to join the workshops.
**Supervising curriculum development and instruction.**

All the ten academic administrators said that all course syllabi were checked by the deans and/or associate deans, but no lesson plan checked. They all even said that they allocated sufficient materials for teaching and learning. However, nine of them said that they did not have time to observe teaching and give feedback due to time constraints. Only one academic administrator said that he frequently checked teaching and provided feedback. Moreover, only five administrators said that they checked students’ learning with lecturers and observed how lecturers assessed learning. The rests did not do that.

**Building a supportive and collaborative environment.**

In overall, the interview provided that all the academic administrators had a strong positive relationship with lectures. They also encouraged lecturers to share responsibilities for student learning and involve in decision making process.

**Current Practices of Outcome-Based Education (OBE)**

**Survey results.**

The data collected from the five private universities by survey revealed that the current practices of outcome-based education were very good. The results below explained the current position of outcome-based education in private universities in Cambodia being studied.
### Learning outcomes.

Table 19

**Mean Score under “Learning Outcomes” Stage**

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>I identify students’ skills that should be achieved at the end of the course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.1</td>
<td>Communication</td>
<td>4.04</td>
<td>Very good</td>
</tr>
<tr>
<td>17.2</td>
<td>critical thinking.</td>
<td>3.94</td>
<td>Very good</td>
</tr>
<tr>
<td>17.3</td>
<td>problem solving</td>
<td>3.96</td>
<td>Very good</td>
</tr>
<tr>
<td>17.4</td>
<td>collaboration</td>
<td>4.01</td>
<td>Very good</td>
</tr>
<tr>
<td>18</td>
<td>I consider learning outcome as the heart of the instructional practices.</td>
<td>4.18</td>
<td>Very good</td>
</tr>
<tr>
<td>19</td>
<td>Learning outcome is clearly defined before the activities and assessment methods are designed</td>
<td>3.95</td>
<td>Very good</td>
</tr>
<tr>
<td>20</td>
<td>I set high expectations to encourage students to engage deeply in the learning process.</td>
<td>3.93</td>
<td>Very good</td>
</tr>
<tr>
<td>21</td>
<td>I determine students’ needs which are formulated into the learning outcomes before designing learning activities.</td>
<td>3.89</td>
<td>Very good</td>
</tr>
<tr>
<td></td>
<td>Overall Mean</td>
<td>3.98</td>
<td>Very good</td>
</tr>
</tbody>
</table>

The results indicate in a “Very good” category at this stage ($M=3.98$). The highest Mean shows at item #18 ($M=4.18$) indicating that lecturers considered learning outcomes as the heart of instruction. The lowest Mean shows at item #20 ($M=3.93$) for the high expectation set to encourage students to engage in the learning process.
### Learning activities.

Table 20

**Mean Score under “Learning Activities” Stage**

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>( M )</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>I allow students to collaboratively work to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.1</td>
<td>pose questions</td>
<td>4.16</td>
<td>Very good</td>
</tr>
<tr>
<td>22.2</td>
<td>discuss the problem</td>
<td>4.24</td>
<td>Very good</td>
</tr>
<tr>
<td>22.3</td>
<td>find the solution together</td>
<td>4.25</td>
<td>Very good</td>
</tr>
<tr>
<td>23</td>
<td>I provide opportunities for students to become more independent learners.</td>
<td>4.20</td>
<td>Very good</td>
</tr>
<tr>
<td>24</td>
<td>Students are given sufficient opportunities to apply their learning in their real situations.</td>
<td>3.82</td>
<td>Very good</td>
</tr>
<tr>
<td>25</td>
<td>I encourage students to interact in groups for self-directed learning outside the classroom.</td>
<td>3.96</td>
<td>Very good</td>
</tr>
<tr>
<td>26</td>
<td>I use technology to support my classroom instructions.</td>
<td>4.04</td>
<td>Very good</td>
</tr>
</tbody>
</table>

| Overall Mean | 4.09 | Very good |

Table 20 shows the overall Mean in a “Very good” category (\( M=4.09 \)). The highest Mean shows at item #22.3 (\( M=4.25 \)) for students’ collaboration to work and find solution with others in class. The lowest Mean shows at item #24 (\( M=3.82 \)) indicating the opportunities for students to apply what they have learned into their real life situations.
**Learning assessment.**

Table 21

Mean Score under "Learning Assessment" Stage

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Students are given enough formative feedback for improvement during the course.</td>
<td>3.82</td>
<td>Very good</td>
</tr>
<tr>
<td>28</td>
<td>Students are informed about the criteria on how they will be assessed.</td>
<td>4.00</td>
<td>Very good</td>
</tr>
<tr>
<td>29</td>
<td>I check student learning using different methods including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.1</td>
<td>a. oral presentation</td>
<td>4.14</td>
<td>Very good</td>
</tr>
<tr>
<td>29.2</td>
<td>b. quiz</td>
<td>4.18</td>
<td>Very good</td>
</tr>
<tr>
<td>29.3</td>
<td>c. test</td>
<td>4.24</td>
<td>Very good</td>
</tr>
<tr>
<td>30</td>
<td>I provide remedial lessons if the students perform below the standard.</td>
<td>3.45</td>
<td>Good</td>
</tr>
<tr>
<td>31</td>
<td>I use final exam results to decide whether students are allowed to pass the course.</td>
<td>3.36</td>
<td>Good</td>
</tr>
</tbody>
</table>

Table 21 shows the overall Mean ($M=3.88$) in a “Very good” category at this stage. The highest Mean shows at item #29.3 ($M=4.24$) regards checking student learning using test as the tool. The lowest Mean shows at item #31 ($M=3.36$) showing the use of final exam results to decide for the students to be allowed to pass the course.
Interview results on outcome-based education.

The following reports are the results of the interviews with the five private higher education institutions in Cambodia. The results are basically responding to the questions about the practices of outcome-based education implemented by the lecturers of those institutions. The concluding findings are from the results of the content analysis.

Table 22

Summary Table of the Interview Results on Outcome-Based Education from Content Analysis

<table>
<thead>
<tr>
<th>Stages</th>
<th>Frequent responses</th>
<th>Concluding results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning outcomes</td>
<td>(9) Lecturers used outcomes as the heart of instruction; (6) Outcomes used to design activities and assessment; (6) Administrators were not sure whether outcomes were clearly stated.</td>
<td>Administrators thought that outcomes should be the heart but not sure whether lecturers stated clear outcomes.</td>
</tr>
<tr>
<td>Learning activities</td>
<td>(10) Lecturers used student-centered approach; (7) Insufficient opportunities to apply what learned; (9) Lecturers used technology to support instructions; (7) Encouraged lecturers to professionally interact</td>
<td>Encouraged lecturers to employ student-centered approach, interact professionally, use technology. Insufficient authentic learning practices applied.</td>
</tr>
<tr>
<td>Learning assessment</td>
<td>(4) Feedback given (3) Not sure (2) Never checked; (8) Assessment criteria given to students; (10) Various assessment methods applied; (10) No remedial lessons provided</td>
<td>Didn’t check learning progress with lecturers; assessment applied with criteria given but no remedial lesson given</td>
</tr>
</tbody>
</table>

Learning outcomes.

The interview with the academic administrators provided that nine of them agreed that lecturers considered learning outcomes as the base in designing instructions. However, seven of them expressed that they did not check how lecturers stated the learning outcomes. The rest hesitated to respond to this question. They encouraged lecturers to state learning outcomes clearly but they did check them well. Moreover, all the academic administrators agreed that course learning outcomes were set in by the committee and lecturers were the ones who detailed in the course schedule.
Learning activities.

The interview results show that all the academic administrators agreed that lecturers used student-centered approach instruction. They made students engage in different activities inside or outside the classrooms. They also used technology to support their instruction. However, eight of them were not sure whether students were given opportunities to apply what learned into real situations.

Learning assessment.

The interview results conveyed that six administrators did not check whether lecturers provided timely feedback to students’ learning. Three agreed that lecturers provided feedback in classes. Seven of them agreed that lecturers provided assessment criteria to students and various assessment methods applied while the other three hesitated to provide to information. All the administrators agreed that remedial classes were not provided to students who performed lower than the expected results.

Research Objective Three: To determine the relationship between the current instructional leadership practices and outcome-based education practices at private higher education institutions in Cambodia

Table 23

Correlation Coefficient of Instructional Leadership and Outcome-Based Education

<table>
<thead>
<tr>
<th></th>
<th>IL</th>
<th>OBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Leadership (IL)</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.606**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>211</td>
</tr>
<tr>
<td>Outcome-Based Education (OBE)</td>
<td>Pearson Correlation</td>
<td>.606**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>211</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
Table 23 above indicates that the Pearson correlation coefficient value is .606. According to Evans (1996), the absolute value of $r$ can be explained as follows: .00-.19 “very weak”, .20-.39 “weak”, .40-.59 “moderate”, .60-.79 “strong”, and .80-1.0 “very strong”. Thus, the correlation coefficient value of .606 confirmed that there was a strong positive relationship between instructional leadership practices and outcome-based education. Moreover, the $p$-value for this test as being .000 and thus it was that there was a significant relationship between instructional leadership practices and outcome-based education practices at .01 level of significance.

The researcher looked into more details of the relationship between each dimension of the instructional leadership, outcome-based education, and factors affecting instructional leadership. The Figure 11 below explains the correlation Factors, Instructional Leadership and Outcome-Based Education.

Figure 11: Correlations between Factors, IL, and OBE

Note: ILs- Instructional Leadership; OBE- Outcome-Based Education; QSE- Qualification, Skills and Experience; CCV- Cooperation, Culture, and Values; FF- Funding and Facilities; BSCE- Building a Supportive and Collaborative Environment; SCDI- Supervising Curriculum Development and Instruction, PD- Providing Professional Development; FCG- Framing and Communicating Goals; LO-Learning Outcomes; LA-Learning Activities; LAs-Learning Assessment.
The results of the regression between the Factors and Instructional Leadership pointed out three significant factors affecting the instructional leadership practices within the five universities being studied. These factors included Qualification, Skills and Experiences (QSE), Cooperation, Culture, and Values (CCV), and Funding and Facilities (FF). Among these three factors, QSE was a more significant factor since the Beta value was .335 while the Beta value of CCV was .220 and the Beta value of FF was .171.

The correlation results between Factors and IL was shown in Figure 4.5 showed moderate positive correlation between each category. CCV was seen as the strongest positive and significant correlation with BSCE \( (r = .704, p=000) \). The following factors were found as strong and significant. They included QSE which significantly and strongly correlated with PD \( (r=0.663, p=000) \), QSE significantly and strongly correlated with SCDI \( (r=0.662, p=000) \) and QSE significantly and strongly correlated with BSCE. The rests factors were found as moderate and significant factors. The stronger and significant one was CCV and SCDI \( (r=0.590, p=000) \). The following factors were arranged according to their degree of significance. They were included FF moderately and significantly correlated with SCDI \( (r=0.588, p=000) \), FF moderately and significantly correlated with BSCE \( (r=0.575, p=000) \), BSE moderately and significantly correlated with FCG \( (r=0.567, p=000) \), FF moderately and significantly correlated with PD \( (r=0.561, p=000) \), CCV moderately and significantly correlated with FCG \( (r=0.538, p=000) \), FF moderately and significantly correlated with FCG \( (r=0.521, p=000) \), and CCV moderately and significantly correlated with PD \( (r=0.508, p=000) \).

Asides, the correlation between each dimension of IL and OBE was found. The results showed three levels of correlation (high moderate, low moderate, and weak). They conveyed that SCDI had high moderate and significant correlation with LAs \( (r=0.548, p=000) \). The following categories were found high moderate correlation factors. They included BSCE had high moderately and significantly correlate with LAs \( (r=0.541, p=000) \), BSCE had high
moderate and significant correlation with LA ($r=536$, $p=000$), BSCE had high moderate and significant correlation with LO ($r=.524$, $p=000$) and PD had high moderate and significant correlation with LAs ($r=.509$, $p=000$). The following categories were found low moderate correlation. They included that SDCI had low moderate and significant correlation with LO ($r=.446$, $p=000$), FCG had low moderate and significant correlation with LA ($r=.461$, $p=000$), SCDI had low moderate and significant correlation with LA ($r=.467$, $p=000$), FCG had low moderate and significant correlation with LAs ($r=.437$, $p=000$), PD had low moderate and significant correlation with LA ($r=.429$, $p=000$), and FCG had low moderate and significant correlation with LO ($r=.417$, $p=000$). However, PD was found weak correlation and significant with LO ($r=.385$, $p=000$).

**Research Objective Four**: To determine the factors affecting instructional leadership practices at private higher education institutions in Cambodia.

The data to this particular objective was from the results of the survey with lecturers of the target higher education institutions and the results of the interviews with the academic administrators. The survey results expressed in mean score while the results of the interviews were from the content analysis. The interview was conducted and the results of it were to confirm the survey results. After the results of the survey and interview were reported, the researcher analyzed the data related to factors affecting the current instructional leadership practices of the five private universities in Cambodia. The results of the Factors affecting instructional leadership practices and the results of the current instructional leadership practices were computed applying Multiple Regression.
Survey results.

Time constraints and workload.

Table 24

Mean Score under “Time Constraints and Workload” Factor

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>The academic administrators have sufficient time to supervise instructions through observations.</td>
<td>3.26</td>
<td>Good</td>
</tr>
<tr>
<td>33</td>
<td>The academic administrators spend more time on checking required documents.</td>
<td>3.44</td>
<td>Good</td>
</tr>
<tr>
<td>34</td>
<td>The academic administrators spend more time to manage student discipline than instructional leadership.</td>
<td>3.31</td>
<td>Good</td>
</tr>
<tr>
<td>35</td>
<td>The academic administrators spend more time on personnel management than instructional leadership.</td>
<td>3.47</td>
<td>Good</td>
</tr>
<tr>
<td>36</td>
<td>The academic administrators spend more time on resource management (materials, equipment etc.) than instructional leadership.</td>
<td>3.45</td>
<td>Good</td>
</tr>
</tbody>
</table>

Overall Mean 3.38 Good

The survey results showed moderate practices of the academic administrators. The highest Mean score shows in item#35 which was about the time spent on personnel management rather than instructional leadership. The lowest Mean score was item #32 (M=3.26), showing that lecturers could not tell whether the academic administrators had sufficient time to supervision instruction.
**Cooperation, culture, and values.**

Table 25

*Mean Score under “Cooperation, Culture, and Values” Factor*

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>$M$</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>The academic administrators encourage lecturers to adapt a student-centered teaching approach.</td>
<td>3.91</td>
<td>Very good</td>
</tr>
<tr>
<td>38</td>
<td>The academic administrators have a good relationship with lecturers.</td>
<td>4.05</td>
<td>Very good</td>
</tr>
<tr>
<td>39</td>
<td>The university culture encourages shared responsibilities between lecturers and the academic administrators for student learning.</td>
<td>3.83</td>
<td>Very good</td>
</tr>
<tr>
<td>40</td>
<td>The lecturers willingly adapt the new teaching practices introduced by the academic administrators.</td>
<td>3.67</td>
<td>Very good</td>
</tr>
<tr>
<td>41</td>
<td>The lecturers willingly share responsibilities for student learning.</td>
<td>3.92</td>
<td>Very good</td>
</tr>
</tbody>
</table>

| Overall Mean | 3.87 | Very good |

Table 25 shows higher overall Mean score at this factor. The highest Mean score is item #38 ($M=4.05$) showing that had good relationship with lecturers. The lowest Mean score is in item #40 ($M=3.67$) indicating that lecturers were willing to adapt new teaching practices introduced by the academic administrators.
Qualification, skills, and experiences.

Table 26

Mean Score under “Qualification, Skills, and Experiences” Factor

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>The academic administrators receive sufficient professional development to support their instructional leadership position.</td>
<td>3.46</td>
<td>Good</td>
</tr>
<tr>
<td>43</td>
<td>The academic administrators have the expertise in curriculum development of all subject areas.</td>
<td>3.50</td>
<td>Good</td>
</tr>
<tr>
<td>44</td>
<td>The academic administrators have sufficient experiences in the administrative position.</td>
<td>3.66</td>
<td>Very good</td>
</tr>
<tr>
<td>45</td>
<td>The academic administrators use student achievement data to judge the quality of instructional activities.</td>
<td>3.47</td>
<td>Good</td>
</tr>
</tbody>
</table>

| Overall Mean | 3.52 | Very good |

Table 26 shows moderately high as the overall Mean score is ($M=3.66$). The highest Mean score shows in item #44 ($M=3.66$) in regards the academic administrators’ experiences in the administrative position. The lowest Mean score shows in item #42 ($M=3.46$) indicating the professional development the academic administrators received.

Organizational structure.

Table 27

Mean Score under “Organizational Structure” Factor

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>The academic administrators have authority to set the academic goals in collaboration with the lecturers.</td>
<td>3.65</td>
<td>Very good</td>
</tr>
<tr>
<td>47</td>
<td>The academic administrators’ role is to ensure that the goals set by university are well-achieved.</td>
<td>3.80</td>
<td>Very good</td>
</tr>
<tr>
<td>48</td>
<td>The academic administrators have authority to develop own curriculum.</td>
<td>3.64</td>
<td>Very good</td>
</tr>
<tr>
<td>49</td>
<td>The academic administrators have authority to provide professional development activities for lecturers.</td>
<td>3.74</td>
<td>Very good</td>
</tr>
</tbody>
</table>

| Overall Mean | 3.70 | Very good |

...
Table 27 shows moderately high in overall. The highest Mean is item #47 \( (M=3.80) \) indicating the academic administrators’ role in ensuring the goals of the university to be achieved. The lowest Mean is item #48 \( (M=3.64) \) for the academic administrators’ authority in developing curriculum.

**Funding and facilities.**

Table 28

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>( M )</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>The university has sufficient financial resources to improve instructional practices.</td>
<td>3.41</td>
<td>Good</td>
</tr>
<tr>
<td>51</td>
<td>The university has sufficient budget for materials like journal articles, databases, textbooks and technological support for teaching and learning.</td>
<td>3.31</td>
<td>Good</td>
</tr>
<tr>
<td>52</td>
<td>The university provides space with desks and chairs as office for lecturers to plan for instructions.</td>
<td>3.74</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Overall Mean 3.48 Good

Table 28 indicates moderate overall Mean \( (M=3.48) \) of this factor. The highest Mean is in item #52 \( (M=3.74) \) which shows about the spaces including desks and chairs provided to lecturers for their teaching preparation. The lowest Mean is in item #51 \( (M=3.31) \) conveying about the budget of the universities for the materials like journal articles, databases, textbooks, and technical supports for teaching and learning.
Tasks and roles related to instructional leadership.

Table 29

Mean Score under “Tasks and Roles Related to Instructional Leadership” Factor

<table>
<thead>
<tr>
<th>Items No.</th>
<th>Item Descriptions</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>The academic administrators promote innovative instructional practices.</td>
<td>3.66</td>
<td>Very good</td>
</tr>
<tr>
<td>54</td>
<td>The academic administrators promote the research function in the university.</td>
<td>3.35</td>
<td>Good</td>
</tr>
<tr>
<td>55</td>
<td>The academic administrators discuss with lecturers for better decision making on instructional matters.</td>
<td>3.66</td>
<td>Very good</td>
</tr>
<tr>
<td>56</td>
<td>The academic administrators are more focused on their daily administrative roles than on instructional leadership.</td>
<td>3.60</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Overall Mean 3.56 Very good

Table 29 shows moderate high overall Mean (M=3.56) at this factor. The highest Mean are item #53 (M=3.66) for the innovative instructional practices promoted by the academic administrators and item #55 (M=3.66) shows the decision made in collaboration with lecturers. The lowest Mean is item #54 (M=3.35) indicating the promotion of research function in the university.
Interview results on factors affecting instructional leadership.

The descriptions below report on the findings in regards the factors affecting instructional leadership based on the interviews with the five universities administrative. The concluding results are basically from the results of the content analysis.

Table 30

Summary Table of the Interview Results on Factors affecting Instructional Leadership from Content Analysis

<table>
<thead>
<tr>
<th>Stages</th>
<th>Most frequent responses</th>
<th>Concluding results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints and workloads</td>
<td>(7) Time was insufficient; (7) Checked the required documents; (10) Managed manpower (time consuming)</td>
<td>Checking documents and managing manpower were time consuming.</td>
</tr>
<tr>
<td>Cooperation, culture, and values</td>
<td>(10) Encouraged lecturers to use student-centered approach; (10) Healthy relationship built; (10) Encouraged shared responsibilities for student learning; (10) Lecturers willingly adapted the new approach; (10) Lecturers willingly shared responsibilities to promote learning.</td>
<td>They had healthy relationship with lectures; encouraged them to adapt new approach and shared responsibilities; lecturers were willing to cooperate with the academic administrators</td>
</tr>
<tr>
<td>Qualification, skills, and experiences</td>
<td>(7) Insufficient PD offered; (10) Administrators were expert but not in every subject field; (9) Sufficient experience for leadership position; (5) They used the learning data (from students and lecturers obtained) while (5) said they did not use data to judge the quality of instruction.</td>
<td>They received insufficient PD; they were not expert in every subject; did not use achievement data to judge the quality of instruction. However, they had lots of experiences in leadership.</td>
</tr>
<tr>
<td>Organization structure</td>
<td>(10) The committee members decided on educational issues; (10) Administrators suggested for professional development and develop curriculum</td>
<td>They had the authority to raise the voice up in the committee for framing goals, professional development, and curriculum development.</td>
</tr>
<tr>
<td>Funding and facilities</td>
<td>(7) Sufficient funding because own facilities (campus); (7) No budget for these materials (journal articles, textbooks, database, etc.); (10) Faculty lounge provided</td>
<td>Budget for facilities was sufficient but the materials like database, textbooks, journal articles, were insufficient. Lounged with desks and chairs provided.</td>
</tr>
<tr>
<td>Tasks and roles related to instructional leadership</td>
<td>(10) Encouraged lecturers to use student-centered; (10) Encouraged lecturers to do action research but no time to do it; (10) Inputs received from lecturers; (7) Administrative work was heavier than instructional leadership.</td>
<td>They encouraged lecturers to do research and give inputs for decision making. However, their admin work was heavier than instructional leadership.</td>
</tr>
</tbody>
</table>
**Time constraints and workload.**

The interviews with the academic administrators provided that seven academic administrators mentioned that their time was insufficient to supervise curriculum development and instructions. They were busy with checking documents and managing manpower. These two areas were time consuming. The other three said that they balanced between administrative works and instructional leadership. Moreover, five of them said that they even managed material resources for instructions that occupied their instructional leadership time.

**Cooperation, culture, and values.**

The interview results conveyed that all the academic administrators head healthy relationship with lecturers. They encouraged lecturers to use student-centered approach, share responsibilities for student learning. They all said that lecturers were willing to share responsibilities and adapt new methods introduced.

**Qualification, skills, and experiences.**

The results from the interviews showed that seven academic administrators did not receive sufficient training for their job while the other three expressed trainings provided to help them perform well. The results even confirmed that all the academic administrators had expertise in curriculum development, but not in every subject. Regarding to their experience, nine of them provided that they had experiences in academic leadership and management, while one said still learning. However, all of them agreed that they did not use student achievement data to judge the quality of instruction.
**Organization structure.**

The interviews with the academic administrators revealed that all the universities being investigated had the same system. They formed a committee composing of the vice-president responsible for the academics, dean, associate deans, and some senior lecturers. They met and developed the academic goals. All academic administrators expressed that they had voice in the committee in developing curriculum. They even could suggest the committee for professional development opportunities for lecturers.

**Funding and facilities.**

The interview results provided that seven administrators explained that the university campus belongs to the owner of the university. Thus, they sufficient resources. Three were not so sure about this. Moreover, three administrators said that the universities had sufficient material resources. They even mentioned that they had e-library, and other necessary facilities. However, the other seven did not agree with this. The common responses from all the administrators were that the universities had lounge, desks, and chairs for lecturers to prepare for instructions.

**Tasks and roles related to instructional leadership.**

The results conveyed that all the academic administrators encouraged lecturers to employ student centered approach. They even encouraged lecturers to do action research to improve instruction, but they did not have time to follow up with lecturers. Time was the challenge for them. Eight administrators admitted that they focused more their administrative roles rather than instructional leadership roles while only two said they balanced the two main tasks.
The researcher used Multiple Regression to analyze the relationship between the factors affecting instructional leadership and the actual practices of instructional leadership in the target universities. The results of the data analysis using multiple regress is shown below:

Table 31

The Coefficient of Multiple Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.796</td>
<td>.633</td>
<td>.623</td>
<td>.39717</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), TRIL, TCW, OS, CCV, FF, QSE (**)

b. Dependent Variable: ILs

Note: (**): TRIL (Tasks and Roles related to Instructional Leadership); TCW (Time Constraints and Workloads); OS (Organizational Structure); CCV (Cooperation, Culture, and Values); FF (Fund and Facilities); and QSE (Qualification, Skills and Experience)

The coefficient of multiple regression was $R^2 = .633$. This means that approximately 63.30 percent of the variation in the instructional leadership practice was explained by the factors affecting the instructional leadership. The regression equation appeared to be useful in making the prediction since the value of $R^2$ was moving closer to 1.
Table 32

**Coefficients (Factors affecting Instructional Leadership)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Untstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.462</td>
<td>.195</td>
<td>2.366</td>
<td>.019</td>
<td>.077</td>
</tr>
<tr>
<td>TCW</td>
<td>.047</td>
<td>.058</td>
<td>.046</td>
<td>.818</td>
<td>.415</td>
<td>-.067</td>
</tr>
<tr>
<td>CCV</td>
<td>.235</td>
<td>.070</td>
<td>.220</td>
<td>3.354</td>
<td>.001</td>
<td>.097</td>
</tr>
<tr>
<td>QSE</td>
<td>.301</td>
<td>.068</td>
<td>.335</td>
<td>4.443</td>
<td>.000</td>
<td>.168</td>
</tr>
<tr>
<td>OS</td>
<td>.086</td>
<td>.059</td>
<td>.091</td>
<td>1.460</td>
<td>.146</td>
<td>-.030</td>
</tr>
<tr>
<td>FF</td>
<td>.141</td>
<td>.056</td>
<td>.171</td>
<td>2.522</td>
<td>.012</td>
<td>.031</td>
</tr>
<tr>
<td>TRIL</td>
<td>.064</td>
<td>.082</td>
<td>.063</td>
<td>.778</td>
<td>.438</td>
<td>-.098</td>
</tr>
</tbody>
</table>

Dependent Variable: ILS

The results shown in Table 32 above indicated 95 percent of confidence that the slope for CCV was somewhere between .097 and .373. In other words, it was 95 percent confident that every factor in CCV, the average instructional leadership practice increased between .097 and .373. For QSE, it was 95 percent confident that the slope for QSE was somewhere between .168 and .435. In other words, it was 95 percent confident that every single item in QSE, the average instructional leadership practice increased between .168 and .435. For FF, it was 95 percent confident that the slope for FF was somewhere between .031 and .251. In other words, it was 95 percent confident that every single item in FF, the average instructional leadership practice increased between .031 and .251.

The results also demonstrated that three factors significantly influenced instructional leadership as the B and p-value explained. QSE became a stronger and more significant factor affecting instructional leadership because the B value (B=.301) showed greater and the p-value was smaller .05 level of significance (p=.000 <.05). CCV showed as strong and significant factor affecting instructional leadership as the B value (B=.235) and the
p-value ($p=.001 <.05$ level of significance). Another significant factor was FF as the B value shown ($B=.141$) and the p-value was smaller than .05 level of significance ($p=.012 <.05$).

**Research Objective Five**: To propose effective instructional leadership model for outcome-based education at private higher education institutions in Cambodia.

This objective was to develop an instructional leadership model for outcome-based education which could be applicable to the five private higher education institutions in Cambodia. The model was developed based on the results of four research objectives and the possible desirable elements from the related theories. The new instructional leadership model for outcome-based education was validated by 17 experts. A summary of the model for was provided to the experts for validation. After the validation by experts, the model was adjusted and tested in one higher educational institution in Cambodia. After the model testing, the proposed model was modified and submitted for the approval from the research adviser. In this way, the new instructional leadership model was finalized. This new instructional leadership model was recommended for the universities being studied to implement in the hope that student learning achievement would increase.

**Proposed Instructional Leadership Model for Outcome-Based Education**

The model was developed based on the results of the four objectives and the statistical analysis results. Multiple regression results showed that all instructional leadership dimensions significantly correlated with outcome-based education. The analysis results indicated from moderate to strong effects of instructional leadership dimensions on OBE. The strongest one was the Supportive and Collaborative Environment as the $r$-value show higher ($r=.586$) and p-value was smaller than .05 level of significance ($p=000<.05$). The second strongest one was Curriculum Development and Instruction as the $r$-value also showed high ($r=.533$) and the p-value was also smaller than .05 level of significance ($p=.000 <.05$). The
least one was Academic Goals as the r-value showed lower \( (r=0.481) \) and the p-value was also smaller than .05 level of significance \( (p=0.000<.05) \).

The proposed instructional leadership model for outcome-based education was composed of two parts: Instructional Leadership and Outcome-Based Education. The main emphasis of the model was to promote the adaptation of outcome-based education in the five private universities being studied in Cambodia. The researcher believed that outcome-based education offered a more systematic approach in planning courses and instructions. Once courses and instruction were well-planned utilizing outcome-based education philosophy, learning achievement would be enhanced (D’Andrea, 1999; Tilestone, 2004; Prosser et al., 2006; and Chow & Wong, 2012). In order to promote the adaptation of outcome-based education, instructional leadership played an important role.

Table 33 below shows the details of the proposed instructional leadership model for outcome-based education. The summary process of the proposed instructional leadership model for outcome-based education was provided. Moreover, the meaning and how it was used were presenting in the later part of this chapter.
The goals of this proposed model is to offer the academic administrators a guideline to promote their instructional leadership in order to influence the teaching and learning. The academic administrators can have clearer tasks and directions of what they are doing and where they are moving to. As expected, if the model is well-implemented, instructions will be improved and learning achievement will be greatly obtained. In order to
help the academic administrators and lecturers implement the model effectively, they should follow these strategies.

**Strategy #1: Institutional Commitment**

1. Convince the academic administrators to pay attention to the model particularly on their instructional leadership and OBE.
2. Train the academic administrators the model, include both parts (instructional leadership and outcome-based education) in the trainings. Trainings should not be a one-time off, but series of workshops need to be held helping them experience authentic practices in their instructional leadership roles.
3. Let them see the benefits of the model to their roles that they will be committed to implementing the model.

**Strategy #2: Promoting OBE**

1. As the academic administrators are more familiar with the OBE, they can train lecturers to adapt this approach to design courses and instructions. Training can be in the forms of workshop and seminar, but they need to be in series, not a one-time-off training.
2. From the beginning, the administrators can try out OBE instructions with those lecturers who are willing to adapt this approach. They can share their OBE instructional practices with their peers either in workshops or in experience sharing sessions.
About the Model

Part One: Instructional Leadership (Institutional Level Practices) composed of four dimensions: Supportive and Collaborative Environment, Curriculum Development and Instruction, Professional Development, and Academic Goals. These four dimensions were supported by 11 practices that should bring outcome-based education into existence.

Part Two: Outcome-based education (Instructional Level Practices) composed of three stages: Learning Outcome, Learning Activity, and Learning Assessment. This part was to be implemented by lecturers of the five selected private universities in Cambodia. From these three stages, 6 practices should be effectively implemented by lecturers in designing for curriculum and instructions.

Implications of the Model

Part #1: Instructional leadership (Institutional Level Practices)

The purpose of this part is to help the academic administrators perform their instructional leadership effectively to improve lecturers’ instructional practices. Their performance encourages lecturers to adapt outcome-based education to design curriculum and instructions. As the findings indicated, the academic administrators should provide the following practices.

Supportive and collaborative environment.

1. *Build a good relationship with lecturers.* Both personal and academic concerns of lecturers need to be heard with care and respect. Strong and positive relationship would mean a lot to lecturers as they should be encouraged to share responsibilities for students learning. Such strong relationship is conducive to more cooperation and collaboration among lecturers and with the academic administrators.
2. *Involve lecturers in decision-making about educational issues.* Lecturers are the practitioners and they contribute greatly to students’ learning. Involving them in decision making on educational issues is strongly needed. When lecturers realize the issues, they would be able to work them out themselves more effectively.

**Curriculum development and instruction.**

1. *Monitor curriculum development.* The academic administrators need to thoroughly check syllabus designed by lecturers especially on how they prepare learning experiences and assessment tools to achieve the expected outcomes.

2. *Monitor student learning.* It is important that lecturers and the academic administrators to work together to check student learning progress regularly. This would help lecturers to stay alert with the progress students have made and seek ways to assist students to promote learning achievement.

3. *Observe teaching and provide constructive feedback.* Teaching observation need to be regularly held to ensure well-adaptation of outcome-based education. Constructive feedback shall be given to lecturers timely to ensure improved instructional practices.

**Professional development.**

1. *Provide opportunities for professional training.* It is crucial that lecturers shall be motivated to take initiatives to promote their professional skills as the adaptation of outcome-based education to improve learning takes time.

   Opportunities for professional training, such as workshops, seminars, short- and long-term courses need to be be offered to lecturers.
2. **Encourage professional interaction.** Lecturers should be encouraged to interact professionally within and outside the campus. The interaction should not happen only face to face but also with the assistance of technology. Such interaction greatly appreciates professional learning, especially when sharing with one another the methods applied and how to help students learn better.

3. **Promote peer observation.** Peer observation shall provide added benefits for improved instructional practices. They could learn from others’ teaching and learning experiences in class. It provides opportunities for lecturers to give constructive feedback to one another.

4. **Promote research function.** The academic administrators should raise the awareness of research function among the lecturers. Lecturers should be encouraged to conduct specific action research to improve their instructions. Professional training in research skills should be provided when necessary.

**Academic goals.**

1. **Involve lecturers in framing the academic goals.** To promote a sense of belonging in the institution, lecturers need to get involved in framing the academic goals. Lecturers will actively share goals and willingly collaborate with academic administrators when realizing that the goals belong to them.

2. **Make sure the stakeholders are well-informed of the goals.** The academic administrators shall make sure that all lecturers abide with the set academic goals. All the course syllabi and lesson plans must serve the framed goals. Moreover, students should also be informed of those goals. They need to know what they will achieve throughout the program or courses.

Instructional leadership practices shall be evaluated by collecting the quantitative data from lecturers through a survey. The interviews with the academic administrators and
some lecturers shall be conducted to explore the depth of the practices of instructional leadership in the five private universities in Cambodia.

**Part #2: Outcome-based education (Instructional Level Practices)**

Outcome-based education is a modern and systematic approach in developing curriculum and instructions which puts emphasis on what students will be able to do resulting from the learning experiences and assessments. The researcher has chosen this approach for the current research with the hope to increase student learning achievement. Lecturers of the target universities should have the following practices.

**Learning outcome.**

1. *Formulate students’ needs into specific and measurable learning outcomes.* Lecturers need to determine the needs of the students and formulate these needs into the learning outcomes. As the outcomes are from students’ needs and interests, students will willingly place more efforts and time to achieving them.

**Learning activity.**

1. *Apply student-centered instructions.* Lecturers need to apply student-centered approach when designing learning experiences. If lecturers are not familiar with this teaching and learning approach, training is needed. The approach suggested includes cooperative learning, guided discussion, problem-based learning, collaborative learning, and demonstration.

2. *Provide opportunities for students to apply what they have learned.* Lecturers should prepare the activities which assist students to put what they have learned into practices in real situations.

3. *Promote self-direct learning.* Lecturers need to encourage students to take initiative and responsibility for their own learning. Students can select,
manage, and assess their own learning activities within the parameter of the course goals. They can independently set the learning goals which are aligned with the course or program goals and lecturers shall scaffold, mentor, and advise them accordingly.

**Learning assessment.**

1. *Apply various assessment methods.* Lecturers need to apply both formative and summative assessment methods to check students’ learning and to decide whether students can move to the next level. To employ formative assessment is to check students’ learning progress and seek ways to help them grow. Summative assessment is used to decide whether students have achieved the goals of the program or courses.

2. *Provide sufficient learning feedback.* When formative assessment is applied, the most important thing for lecturers to do is to provide enough learning feedback. This would help students realize the strong and weak points in their learning progress and how much more effort and what kind of experiences are needed to enhance their learning.

To evaluate whether outcome-based education is substantially implemented across the five private universities, the quantitative data shall be collected from lecturers through a survey. Teaching observation needs to be held to investigate the actual practices of outcome-based education. Syllabus and teaching preparation need to be checked thoroughly. Moreover, the interviews with the academic administrators and some lecturers shall be conducted to explore the depth of the practices of outcome-based education in those private universities in Cambodia.
Model Validation by Experts

The proposed instructional leadership model for outcome-based education was validated by seventeen experts in the fields of Educational Leadership and Curriculum Development and Instruction.

The validation through experts was helpful in modifying the proposed instructional leadership model. The results show strong support from the experts of all the practices except one practice in Part One (promote research function). Three experts mentioned that lecturers were part-timers and they had insufficient time to do research. The three experts provided that research function could not help greatly in improving instructional practices but lecturers themselves needed to promote their instructional design; hence, practices. Nine experts suggested that the practices were well-thought but should be restated specifically to fit with outcome-based education.

After the comments and suggestions for changes and restatements of the practices of both parts, the model was modified with two major parts: instructional leadership and outcome-based education. The following descriptions were the modified version of the instructional leadership model for outcome-based education in five private higher education institutions in Cambodia.
Figure 12. The Revised Instructional Leadership Model for Outcome-Based Education for Private Higher Education Institutions in Cambodia

<table>
<thead>
<tr>
<th>Institutional Level Practices</th>
<th>Supportive &amp; Collaborative Environment</th>
<th>Curriculum Development &amp; Instruction</th>
<th>Professional Development</th>
<th>Academic Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Encourage Use of OBE</td>
<td>• Design courses and instructions based on OBE</td>
<td>• OBE trainings</td>
<td>• Goals setting for program outcomes</td>
</tr>
<tr>
<td></td>
<td>• Allow OBE adaption at own pace</td>
<td>• Observe teaching and provide timely feedback</td>
<td>• Team teaching on OBE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide incentives &amp; rewards</td>
<td>• Allow lecturers to teach subject they know best</td>
<td>• Action research on OBE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructional Level Practices</th>
<th>Learning Outcomes</th>
<th>Learning Activities</th>
<th>Learning Assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Specific and measurable learning outcomes</td>
<td>• Student-centered instruction</td>
<td>• Assessment for learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Self-directed learning</td>
<td>• Assessment alignment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Assessment for instructional modification</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Timely feedback</td>
<td></td>
</tr>
</tbody>
</table>

**Promote**

**Student Outcome**
Implications of the Model

The model was modified (shown in Figure 12). The model is composed of two parts: Instructional Leadership for Institutional Level Practices and Outcome-Based Education for Instructional Level Practices. The model explains that Instructional Leadership which is for Institutional Level Practices is expected to be well-implemented in order to promote the second part, Outcome-Based Education (Instructional Level Practices). If these two parts are well-implemented, the ultimate goals of this model which is Student Learning will be enhanced.


This part consists of four dimensions: Supportive and Collaborative Environment, Curriculum Development and Instruction, Professional Development, and Academic Goals. These four dimensions are supported by ten practices to promote the adaptation of outcome-based education in the five private universities in Cambodia. These practices include:

Supportive and collaborative environment.
1. Encourage lecturers to develop and try out the OBE courses.
2. Allow lecturers to adapt the OBE instruction in their own pace.
3. Provide incentives and rewards for lecturers who share their experiences in trying out OBE in designing courses and instructions.

Curriculum development and instruction.
1. Encourage lecturers design courses and instructions using OBE approach. Encourage them to explore and identify various methods of teaching and assessment for supporting lecturers in implementing OBE.
2. Observe teaching and provide timely feedback to lecturers.
3. Lecturers can teach the subjects they know best for they can adapt more easily the philosophy of OBE.
Professional development.

1. Provide opportunities for OBE training to the academic leaders and lecturers of the universities through workshops and seminars.

2. Promote team teaching in OBE, especially in course and instructional design.

3. Encourage lecturers to do action research on OBE in order to promote instructional practices.

Academic goals.

9. Involve lecturers in framing the program outcomes.

10. Make sure the program outcomes are well-informed by stakeholders.

Instructional leadership practices shall be evaluated by collecting the quantitative data from lecturers through questionnaire. The interviews with the academic administrators and some lecturers shall be conducted to explore the depth of the practices of instructional leadership in the five private universities in Cambodia.

Part Two: Outcome-Based Education (Instructional Level Practices).

This part is composed of three stages: Learning Outcome, Learning Activity, and Learning Assessment. It is to be implemented by lecturers of the five selected private universities in Cambodia. From these three elements, 8 practices should be effectively implemented by lecturers.

Learning outcome.

1. Formulate students’ needs into specific and measurable learning outcomes.

Learning content and activity.

1. Apply student-centered instruction when designing for instructions.

2. Encourage students to be self-directed learners.
Learning assessment.

1. Lecturers need to apply the assessment for learning. Assessment is conducted to check students’ learning progress, diagnose their strengths and weaknesses, and seek ways to help them grow.

2. The assessment tasks need to be aligned with the expected learning outcomes and learning experiences designed.

3. The assessment needs to be done and the results of it can be used to modify instructional designs.

4. Provide appropriate and timely feedback on students’ learning.

Model Testing

The revised Model of Instructional Leadership for Outcome-based Education was tested in one higher education institution in Cambodia. The pre-test and post-test results were calculated to find the Mean scores showing the practices of instructional leadership and outcome-based education as indicated in the model. The Means were computed using Paired Samples t-Tests to compare the Means between the pre-test and post-test under Instructional Leadership and Outcome Based Education.

Part #1: Instructional Leadership

Table 34 and 35 present the results comparing the Means from pre-test and post-test under Part #1: Instructional Leadership.

Table 34

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pre-test</td>
<td>2.84</td>
<td>13</td>
<td>.47</td>
<td>.13</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.89</td>
<td>13</td>
<td>.38</td>
<td>.10</td>
</tr>
</tbody>
</table>
Table 34 presents descriptive statistics for the conditions of Pre-Test and Post-Test results about the practices of instructional leadership by the academic administrators. From the Mean, the participants scored higher on Post-Test \((M=3.89)\) than the Pre-Test \((M=2.84)\). The standard deviations explain that the scores in both Pre-Test \((Std.=.47)\) and Post-Test \((Std.=.38)\) are similarly dispersed.

Table 35

The Results of Pre and Post Tests by Paired Samples t-Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest – Posttest</td>
<td>-1.04</td>
<td>.34</td>
<td>.11</td>
<td>-1.28, -.77</td>
<td>-9.26</td>
<td>12</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 35 conveys that the repeated-measures t-test found this difference to be significant since, \(t(12) = -9.26, p = .000 <.05\) level of significance. This is supporting that there is a significant difference between the means of Pre-Test and Post-Test.

**Part #2: Outcome-Based Education**

Table 36

Paired Samples Statistics (Pre-Test and Post-Test)-OBE

<table>
<thead>
<tr>
<th></th>
<th>(M)</th>
<th>(N)</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>3.05</td>
<td>13</td>
<td>.45</td>
<td>.12</td>
</tr>
<tr>
<td>Post-test</td>
<td>3.98</td>
<td>13</td>
<td>.35</td>
<td>.09</td>
</tr>
</tbody>
</table>

Table 36 presents descriptive statistics for the conditions of Pre-Test and Post-Test results about the practices of outcome-based education by the lecturers. From the Mean, the participants scored higher on Post-Test \((M=3.98)\) than the Pre-Test \((M=3.05)\). The standard deviations explain that the scores in both Pre-Test \((Std.= .45)\) and Post-Test \((Std.= .35)\) are similarly dispersed.
### Table 37

*The Results of Pre and Post Tests by Paired Samples t-Test (OBE)*

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pretest – Posttest</td>
<td>-.92</td>
<td>.35</td>
<td>.09</td>
<td>-1.13 to -.71</td>
<td>-9.50</td>
<td>12</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 37 conveys that the repeated-measures t-test found this difference to be significant since, $t(12) = -9.50, p = .000 < .05$ level of significance. This is supporting that there is a significant difference between the Means of Pre-Test and Post-Test under Outcome-Based Education.
CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

The objective of this research was to develop an instructional leadership model for outcome-based education in private higher education institutions in Cambodia. The instructional leadership model was developed based on both qualitative and quantitative data.

CONCLUSIONS

The nature of the research was based on the five research objectives. The conclusion or findings from the objectives are briefly summarized in the following paragraphs:

Objective One: To find out the expected instructional leadership practices in higher education institutions, content analysis was employed. Approximately, 40.87 percent out of the 203 books and articles were read. The results of the content analysis revealed four major constructs for instructional leadership practices in higher education institutions: 1) framing and communicating goals, 2) providing professional development, 3) supervising curriculum development and instruction, and 4) establishing a supportive and collaborative environment.

The results of the content analysis regarding outcome-based education were consistent to the overall framework of the theory. Three categories were found including learning outcomes, learning activities and learning assessment.

Objective Two: A survey was conducted with 211 lecturers of five private universities in Cambodia to collect the data responding to this research objective. The data was analyzed by using Mean.

According to the findings the four dimensions showed very good mean scores. Only some items scored lower. For instance, under “Framing and Communicating Goals”, the mean score of each item was above 3.50 (Agree) which meant “Very good”. This meant that both the academic administrators allowed lecturers to join hands in establishing the academic
goals. The goals were well-communicated to stakeholders. However, the results of the second dimension did not seem to be well-achieved. Two items out of four scored lower than 3.50 (item #5 and #6). This meant that the universities provided some spaces for professional development. Though lecturers were encouraged to conduct action research for better instructional practices, they might not have time to make it. They did not even have time to observe one another for the benefits of their professional learning.

The results revealed that the academic administrators were to supervise curriculum development and instruction. However, lecturers could not decide whether the academic administrators continually monitored student learning progress. This seemed to be negatively performed by the administrators that they did not prioritize learning progress or might not have sufficient time to check learning. The result specifically Item #9 showed a bit higher than “Undecided”. The results conveyed that the academic administrators had very a good relationship with lecturers. This created the environments that were conducive to cooperation and shared responsibilities for instructional practices; hence, student learning.

The results of the survey revealed that lecturers used outcome-based education for their curriculum development and instruction. Almost all the items were scored high-within “Very good” categories, except Item #30 and #31. The result of Item #30 showed that remedial lessons were not given to students who performed below the standard. Lecturers did not use final exam results to pass or fail students. They used other criteria to judge whether students were allowed to move to the next grade. However, the results of the interviews hesitantly provided that outcome-based education was highly implemented in the universities being studied. The academic administrators could not tell exactly whether all the stages of outcome-based education were well-implemented.

**Objective Three:** The results indicated a positive relationship between instructional leadership and outcome-based education. The correlation coefficient value was .606. The p-
value for the test was being .000 and thus, there was a strong evidence that there was a significant relationship between instructional leadership and outcome-based education at .05 level of significance. Thus, it could be concluded that a change in instructional leadership would cause change in the adaptation of outcome-based education among lecturers of the universities being investigated.

Further study on the correlation of each dimension of instructional leadership and outcome-based education, BSCE had stronger correlation with OBE. SCDI also had strong positive relationship with OBE while PD and FCG has the least correlation. Comparing the degree of correlation among the four dimensions of instructional leadership, interestingly, BSCE, SCDI, and PD had stronger correlation with Learning Assessment.

The researcher further studied the correlation of the factors affecting instructional leadership practices with the instructional leadership. The results provided that three factors significantly affected instructional leadership. These factors included Funding and Facilities, Cooperation, Culture, and Values, and Qualification, Skills, and Experience. These factors had strong and positive relationship with instructional leadership. The results showed that Funding and Facilities had stronger relationship with the Supervision of Curriculum Development and Instruction while Cooperation, Culture, and Values had stronger relationship with a Supportive and Collaborative Environment, and Qualification, Skills and Experience had stronger relationship with Professional Development.

**Objective Four:** Results of the content analysis showed six factors affecting instructional leadership practices. These six factors included Time Constraints and Workload, Cooperation, Culture, and Values, Qualifications, Skills, and Experiences, Organizational Structure, Funding and Facilities, and Tasks and Roles related to Instructional Leadership.

The survey was preliminarily conducted with lecturers of the five universities and the interviews were conducted with the academic administrators of the faculty of education of
those five universities. The results found that the academic administrators did not have sufficient time to perform their role as an instructional leader. As shown in Time Constraints and Workload category, the mean scores were lower than 3.50. However, lecturers did not seem to convey all the truth. The mean score fell on “Undecided” category which mean lecturers would not dare to express their ideas honestly on these items.

The survey results found that the academic administrators had encouraged lecturers to adapt student-centered approach for teaching and learning. There seemed to be that the academic administrators established strong relationship with lecturers. This relationship were conducive to shared responsibilities for student learning and willingness to adapting new teaching practices introduced by the academic administrators.

The academic administrators would not receive sufficient professional development during the course of their leadership. Though they had background in curriculum development and supervising instruction, they might not be expert in curriculum development of all the subject areas. The findings showed that the academic administrators had long-term experiences. They were in the position for some time but it did not mean that they had quality experiences in judging quality instructional practices using the data. This might be that the academic administrators used more of their own assumption to judge the quality of instructional activities rather than using scientific data.

Regarding the organization structure, the universities gave more autonomy to the academic administrators. The autonomy given included the authority to establish the academic goals in collaboration with senior lecturers, the authority to develop own curriculum, and the authority to provide professional development for lecturers. The results conveyed that each university had spaces for lecturers to plan for instructions. The spaces were to help lecturers to interact with one another for improved instructional practices. However, regarding the budget, the universities did not have sufficient financial resources to
improve instructional practices. There were insufficient materials like journal articles, database, textbooks, and technological support for teaching and learning.

The academic administrators encouraged lecturers to employ new teaching strategies, to conduct action research, and to involve in decision making process. But in reality, there were no strong evidence showing that lecturers fully employed the teaching and learning approaches especially student-centered approach introduced by the academic administrators. The evidence did not even show how lecturers contributed to any decision making process on educational matter. Asides, the results conveyed action research was promoted but lecturers did not have time to hold it. The results also pointed out that the academic administrators spent more time on their daily administrative role than instructional leadership.

**Objective Five:** The model was developed with two parts, instructional leadership and outcome-based education. Instructional leadership was composed of 11 practices that was to be implemented by academic administrators. These practices were from the current situation appeared in private universities in Cambodia. Outcome-based education was comprised of 8 practices which need to be implemented by lecturers. The model was to offer to the academic administrators employ these practices which were expected to endorse the adaptation of outcome-based education. The model was validated by experts and then implemented in one private higher education institution in Cambodia for three months. The results of the test showed that the new instructional leadership model was applicable in Cambodian higher education context. However, the model would not be fully implemented due to the fact that the academic administrators needed to pay more attention on instructional leadership and lecturers tried to adapt OBE instructions in their own pace. They needed time and space to progressively implement the model.
DISCUSSION

This part of the research discusses the findings of this study relates them to issues discussed in the literature review. The conformity of the findings to the previous research is also discussed here.

The results of the content analysis presented four dimensions which supported the research objective one. These dimensions included 1) framing and communicating goals, 2) providing professional development, 3) supervising curriculum development and instruction, and 4) establishing a supportive and collaborative environment. The findings were consistent to the overall framework of the instructional leadership theory by Murphy and Hallinger (1985), Murphy (1990), Webber (1996), and Qian, Walker, and Li (2017). They claimed that instructional leaders must set the school goals, manage instructional programs and promote school climate. Among the four, more researchers supported that instructional leaders’ role was to establish a supportive and collaborative environment. Lecturers felt that the environment they were working with needed to be friendly and supportive. A culture of collaboration, respect, and sense of value and collective belonging conducive to instructional leadership success needed to be established.

Current Instructional Leadership Practices

The survey results indicated an overall current practice of instructional leadership in the five private universities in Cambodia. The overall mean ($M=3.61$) explained that instructional leadership was not actively practiced. Out of the four dimensions, the academic administrators emphasized more on working environment. They built a strong relationship with lecturers. They might think that relationship promoted shared responsibilities among lecturers for student learning achievement. This finding conformed to what found by Koen and Bitzer (2010). They found that relationship created a sense of trust and purpose. As the leaders had a strong relationship with lecturers, bonds of affiliation were created. Thus,
lecturers were willing to share responsibilities for better instructions and learning. The results also conveyed that the academic administrators listened to the concern of lecturers both academically and personally. This caring manner is conformed to the findings found by Pan, Nyeu, and Chen (2015). The academic administrators paid attention to lecturers at the academic and personal levels. The attention given to lecturers would help determine students’ success in school. The researchers mentioned that if the academic administrators took good care of lecturers, they would take good care of students. Thus, whenever lecturers sought for consultation with academic administrators, they should have a room for them. When listening to their concerns, they could hear their perspectives, reasons, and emotion. The findings also conform to the recommendations by Blasé and Blasé (2000) that the academic administrators should talk to lecturers to promote instructional reflections. Through relationship, the academic administrators could help lecturers set high expectations for students’ success (Gurr, Dryscale, & Mulford, 2007).

The findings indicated that only a small portion of senior lecturers were invited to engage in the formulation of the academic goals. This finding contradicted to what Pan, Nyeu, and Chen (2015) mentioned that the academic administrator had the role to establish the academic goals in collaboration with lecturers. The academic goals needed to be known by stakeholders. Lecturers should have their part in goals setting and should be encouraged to perform teaching based on the goals set. A study by Cotton (2003) suggested that the academic administrator should try to reach out the stakeholders to gain supports and shared responsibilities. Thus, lecturers should be very important stakeholders who can share responsibilities in establishing goals and communicating goals to all parties involved.

The results conveyed that the academic administrators did not have sufficient time to supervise curriculum development and instructions. They encouraged lecturers to employ various activities and continuous learning assessment. However, they had insufficient
time to monitor student learning progress. The results even indicated that the academic administrators did not regularly observe teaching and provide constructive classroom feedback to lecturers. This finding is consistent to the result found by Tanner and McLeod (2006) that the academic leaders did not have much time to supervise instructions. They had lots of workloads on managerial and administrative tasks. This would result in low quality teaching and learning (Eang, 2014; Williams, Kitamura, & Keng, 2015). The central role of instructional leadership was to ensure quality teaching and learning (Mead, 2011; Hallinger & Walker, 2017; Alam & Ahmad, 2017). The presence in classroom and provision of constructive feedback could well-explain the better quality teaching and learning. Thus, the academic administrators should closely supervise the development of curriculum and instruction to promote teaching and learning. This is what Mead (2011) suggests that instructional leaders need to regularly analyze the data with lecturers and help lecturers to modify instructions. Doing so, quality learning would be attained; hence, better student learning.

The findings showed that professional development opportunities were not sufficiently offered to lecturers. Though lecturers were encouraged to professionally interact with one another for better instructional practices, but in reality, they did not interact much. The findings is contradictory to the result found Devos and Bouckenoogh (2009) lecturers should be given the opportunities to interact and share professional expertise and attend professional development programs to promote their profession. Thus, the academic administrators should promote professional development opportunities including creating a community of practices and professional learning community. This would create the chance for lecturers to reflect their current teaching practices, debate issues in meetings and exchange new ideas across the faculty (Gurr-Mark, 2010). The professional learning would promote quality teaching and learning (Gupton, 2010). The findings also indicated that
lecturers did not involve much in research. This might be that lecturers were mostly part-timers (Williams, Kitamura, & Keng, 2015) that they had insufficient time to interact professionally with one another and to do action research to improve instructional practices. Asides, action research was not greatly interested by lecturers. Or may be that the instructional leaders had insufficient time to promote action research or that they did not have much knowledge of research. The finding does not respond to the recommendations by Backor & Gordon (2015) that instructional leaders should lead schoolwide action research and encourage lecturers to fully engage in it both in team and classroom action research. The action research was used to help lecturers to be thoughtful professionals, and to reflect and refine their instructional practices.

Current Practices of Outcome-Based Education

The findings presented that lecturers adapted OBE yet they might not fully-implement this curriculum development and instruction approach. This is consistent to the findings by Lixun (2011) that lecturers confronted the challenges of designing courses and instructions. They were familiar with content-based approach. Moreover, they may not have the knowledge of stating the learning outcomes, instructional strategies that facilitated learning, and the knowledge of designing curriculum based on significant learning, aligning learning activities and assessment methods to learning outcomes. Thus, lecturers should be well-equipped particularly in adapting OBE for their course design and instructions. The OBE training should emphasize on formulating learning outcomes, designing learning experiences, and selecting assessment methods for learning. The adaptation of OBE should have promoted students learning. But Eang (2014) and Williams, Kitamura, & Keng (2015) found that quality learning in Cambodian higher education institutions was still in consideration. Probably, OBE has shortly been introduced to Cambodia. It may take sometimes for lecturers to familiarize themselves with the new approach. This situation
conformed to what Chan and Chan (2009) found on a new outcome-based curriculum in Hong Kong Polytechnic University. They found that there was insufficient evidence showing that OBE promoted student performance. The researchers provided reasons that OBE was just shortly introduced to the university and some teachers might find difficult to implement this OBE philosophy.

The results revealed three factors significantly affected the instructional leadership practices at the private higher education institutions in Cambodia. These three factors included Cooperation, Culture and Values, Qualification, Skills and Experiences, and Funding and Facilities. The findings indicated that the academic administrators had a strong relationship lecturers. However, they might lack of mutual cooperation. This might be that the culture would not allow lecturers to openly discuss with the academic administrators. People in Asia regard relationship as very important. They do not tend to talk or discuss things openly or directly. This result may imply that if lecturers had opinions, they would keep them or might offer them in an indirect way. A hierarchical culture appeared to be existing universities being investigated. This would hinder the possibility of the academic administrators to gain mutual cooperation from lecturers. This is contradictory to what Blasé and Blasé (2000) and Gurr, Drysdale, and Mulford (2007) suggested that lecturers and the academic leadership should have good relationship for better communication. Through the communication, the leaders could make suggestions, give feedback, collect advice and ideas, and help lecturers to set high expectations for students’ success. Another challenge was that lack mutual cooperation might come from organizational structure and culture. As found, the management structure seemed to be top-down, lecturers did not involve much in giving out ideas and sharing responsibilities for learning. This is similar to the following studies. Hallinger and Walker (2017) found that the academic administrators faced the challenge of encouraging teaching staff to shared responsibilities due to strong hierarchical system in
education and culture. Based on the findings of their study within the five nations (China, Vietnam, Taiwan, Singapore and Malaysia), over the past decade each nation had sought to implement different forms of educational decentralization. But the implementation did not seem to move effectively. Thus, the academic administrators faced the challenges of finding the right balance between unitary decision making and the involvement of teachers that would bring effects on teaching and learning. Moreover, lecturers of the five universities may employ exam-oriented teaching rather than seeking students’ special talent. The school may require them to teach for tests. Another study by Quian, Walker, and Li (2017) found that academic administrators needed to balance dual expectations. They conducted a study in China namely as “The West Wind vs the East Wind: Industrial Leadership Model in China”. The findings revealed that the academic administrators balanced dual expectations in a sense that they satisfied both traditional teaching and learning culture and a reformed learning requirement. The traditional learning culture emphasized on examination as the goals for teaching while the more modern learning emphasized on students’ unique talent. This kind of challenge did not only happen in China, but also in other Asian nations. According to Hallinger and Walker (2017), they found that the academic administrators from China, Vietnam, Taiwan, Singapore and Malaysia faced similar challenges. They faced the tension between traditional values and the new demands for education. They also stressed on the traditional exam-oriented teaching and learning culture and the modern educational teaching and learning. The academic administrators found hard to change the mindset of lecturers turning from traditional teaching methodologies to a more student-centered learning approach. Similarly, the academic administrators within the five Cambodian universities being studied may face these challenges too.

The findings explained that the academic administrators did not receive sufficient professional development opportunities to support their instructional leadership practices.
This finding partly conformed to the findings by Hallinger and Walker (2017) that instructional leaders in Vietnam and China received very few training while those who were from Singapore, Taiwan, and Malaysia received extensive trainings. They may not have expertise in developing curriculum in all the subject areas and management skills. They needed to promote their knowledge and skills. This is conformed to the findings of the study by Hallinger (2003) that the academic administrators had limited ability to hire, remove, and manage personnel.

The findings conveyed that lecturers did not dare to say whether the academic administrators used student achievement data to judge the quality of instructional activities. This findings would suggest that the academic administrators had insufficient time to collect student data to make sound decision. They would use simpler strategies, collecting ideas from lecturers or students to judge quality instructions. Or may be that the academic administrators may not know how to use student data to make judgement. This is in line with the study by Timperley (2006) that though student achievement data collected routinely, the academic administrators rarely used these data to make judgements on instructional quality. One of the reasons was that the academic administrators lacked of the knowledge of how to use the data. The major reason of not using the student achievement data was that they did not organize well the data because they may think that the data was not very important. Thus, it was the problem of organization and the perception in relation to such activity.

The results conveyed that the five Cambodian universities had insufficient financial resources to improve instructional practices. They had limited budget for the materials like journal articles, databases, textbooks, and technological support for teaching and learning. These findings still conformed to the study conducted by Chen, Sok, and Sok (2007) in Cambodia. These researchers found that Cambodian universities had limited budget
for the facilities such as subscribing to databases, articles, periodicals, and buying textbooks and LCD projectors. These problems still occur in the Cambodian universities being studied.

The proposed instructional leadership model was validated by seventeen experts who were from the field of education. The experts provided supports to the model and they suggested for both practices of instructional leadership and OBE. The finalized model comprised of two parts (Instructional Leadership and OBE) which formed by 11 practices of Instructional Leadership and 8 practices of OBE.

After finalizing instructional leadership model for outcome-based education with the experts, the model was tested in one higher education institute in Cambodia. The results of the testing computed by SPSS, particularly using Paired Samples t-Test conveyed that there was a significant difference between the means of the pre-test and that of post-test as the p-value ($p=.000 < .05$) was smaller than .05 level of significance. The results explained that the model was applicable in the selected higher education institution in Cambodia. There was an increase in means of pre-test and post-test indicating that both the dean of academics and lecturers tried to implement the instructional practices and OBE instructions. The dean of academics started to implement the four dimensions of instructional practices (11 practices). The results indicated that he had tried very best to adapt the practices into his daily leadership roles. The lecturers also demonstrated their cooperation in adapting OBE into instructional practices.

The instructional leadership model for outcome-based education would be favorably implemented in the five higher education institutions in Cambodia. Though OBE could not be fully implemented, but the academic administrators should allow lecturers to adapt OBE instructions in their own pace. As the academic administrators had to focus more on their instructional leadership roles, OBE would be adapted gradually and progressively.
Recommendations

This research set out to develop an instructional leadership model for outcome-based education that could promote teaching and learning in higher education institutions in Cambodia. The adaptation of outcome-based education in designing course curriculum and instruction is expected to increase learning. However, outcome-based education would not be well-adapted without regular and close monitoring of the academic administrators and the collaboration of students. Thus, the following recommendations are proposed:

Students

Students in the five selected universities may be familiar with teacher-centered approach teaching. If lecturers willingly adapt the outcome-based education approach to designing their course curriculum and instructions, student-centered approach will be more applicable. Students are the center for the learning process.

Students should have sufficient time to take OBE learning. If outcome-based education can be fully-implemented, they need to participate actively in the activities designed. They need to active in participating OBE classroom. They should be sensitive to learning outcomes, activities, and learning assessment as they are the tools helping them learn. Therefore, strong commitment and lots of efforts toward learning need to be in place. They should become self-directed learners as they need to be responsible for own learning. OBE really require students to work hard not only in classroom, but also outside the classroom settings. They should have sufficient opportunities to apply what they have learned into their real life situations.

Students need more time, energy, and intelligence to make their learning achievable. They should not pay attention to the expected outcomes and learning experiences designed only but also the learning assessment. They need the assessment to check their progress and receive constructive feedbacks for further efforts. The assessment allows them
to see themselves the current status and what they should do to achieving the established outcomes. Strong commitment and efforts toward learning need to be in place.

Lecturers

Lecturers should promote own professional knowledge and skills particularly in OBE for course and instructional designs. Aside from workshops or seminars given as professional development opportunities, participating in a professional learning community and establishing a learning culture particularly through doing research to improve own profession. Doing research especially action research would broaden their knowledge and skills particularly outcome-based education and other areas that could be helpful for better instructional practices; hence, students’ learning. Additionally, they should interact professionally with one another for improved OBE instructions. They need to seek for teaching strategies, and assessment methods to obtain the learning outcomes. Moreover, student-centered approach works best with OBE; thus, lecturers should employ in OBE instructions.

They could adapt this approach to designing the curriculum and instruction to enhance student learning. As lecturers need some time to take in OBE, they could adapt this approach at their own pace. OBE may not offer immediate positive results immediately. It takes time to observe the results which is students’ learning achievement. Therefore, lecturers need to be patient and keep their self-efficacy to adapting it and observe student learning progress.

Academic administrators

The academic administrators need to receive sufficient training themselves in OBE as they have to supervise OBE instructions. If they are familiar with OBE, particularly in developing course curriculum and instruction, they can encourage lecturers to develop and
try out the OBE courses. They need to explore and identify various methods of teaching and assessment for supporting lecturers in implementing OBE.

OBE trainings should be provided to all lecturers in the campus and make sure they are encouraged to employ gradually the OBE courses. As they are acquiring how to use OBE, they interact for professional learning among lecturers. Lecturers should be encouraged to conduct research to improve instructional practices. If possible, incentives and rewards should be provided for lecturers who have research tasks done.

The academic administrators should consider of having more full-time lecturers so that they have sufficient time to prepare for instructions. They should allow lecturers adapt OBE at their own pace as lecturers also need to adjust themselves with this new approach. They cannot be expected to fully adopt OBE instructions while they are in the process of acquiring it and time would be a big issue. Moreover, to help them more flexible in adapting OBE for their curriculum development and instructions, lecturers should be assigned to teach the subject they know best. This would help them feel convenient in planning for OBE instructions.

As lecturers need to secure financial support when working in only one institution as a full-time lecturer. The universities could increase university fees in order to offer higher wages to lecturers. The universities need to gain reputation by emphasizing quality learning though university fee is higher. Parents would be interested in better qualification provided to their children rather than money issue.

To successfully implement OBE by lecturers, an additional method is to build up a supportive and collaborative environment where lecturers feel comfortable in adapting its philosophy. Lecturers must be supported well enough, not only in their professionalism but also their mental and spiritual well-being. If lecturers have their time and space to
progressively adapt OBE instructions, surely they would be able to fully implement it in the future.

The academic administrators should consider providing incentives and opportunities for lecturers to share with peer their trials and reflection in teaching the OBE courses. OBE instruction needs stronger commitment of lecturers as every aspect of teaching must be consistent to its principles. Lecturers are encouraged to maintain their regular motivation in trying out OBE instruction. If those who have got more experiences in adapting it, they should be given some incentives to share their experiences with other lecturers in the universities.

The academic administrators should spend more time on instructional leadership than administration work. They need to spare some time to monitor curriculum development including syllabus, instructional materials and instructions. They should interact more with lecturers to learn their teaching and provide constructive and supportive feedback for improved instructional practices.

Higher education institutions in Cambodia

The model can be useful not only for the universities being studied, but also for other private universities in Cambodia. The academic administrators, lecturers, and students may face similar challenges and go through similar practices in leadership, curriculum design and instructions, and learning experiences. Outcome-based education has also been effectively implemented in other faculties (nursing, engineering, language, accountancy, etc.), the instructional leadership model is to influence OBE instructions.
Limitations

The data for this research was obtained from five private higher education institutions in Cambodia. The researcher selected universities which were established for at least 15 years. Initially, twelve universities were contacted. However, the total number of universities that comprise the final data were five. The initial plans were to obtain the cooperation and thus the data, from the total number of specified institutions but due to various issues related to the institutions themselves, the researcher was unable to obtain data from seven institutions.

An additional limitation is related to the process of data collection. As the majority of lecturers were part-time, many were not on campus at the time of data collection. Thus, it was difficult to collect all the surveys. Though, the academic assistant helped launch the survey, additional time was needed for all the surveys to be returned.

A final limitation is related to the possible biasedness of survey responses. Upon check of the survey data, it was found to have some outliers of survey respondents. These were considered “extreme responses” to the survey. Some respondents choose the middle options or the scales around the middle option. Cultural influences on the behaviors of the lecturers to the survey could contribute to these biases. Response biases could also come from sensitive items of the survey.

Future Research

This research was conducted with only five private universities in Phnom Penh, the capital city of Cambodia. If another research related to this topic shall be conducted, the sample should be including some universities at the provinces too. Doing so, the researcher could make better assumption of the findings in regards higher education in Cambodia. Moreover, interviews with some representatives of lecturers should be held to obtain more
accurate information in the areas of instructional leadership, outcome-based education, and the factors affecting instructional leadership practices.
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Index Mundi (2016). *Cambodia Age Structure*.


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   *Educational Leadership, 59*(8), 61-63.


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Vann, M. (2012). *Stakeholders’ perceptions of quality in Cambodian higher education*. (Dotoral Dissertation), school of global studies, social science and planning, RMIT University


APPENDICES

APPENDIX A

Sources for the Content Analysis

**Instructional Leadership**


21 Gardner, J. (2006). *Assessment and learning*. British library cataloguing in publication data, SAGE Publications Ltd, 1 Oliver’s Yard, 55 City Road, London EC1Y 1SP.


38 Jenkins, B. (2009). *What it takes to be an instructional leader*.


**Outcome-Based Education**


**Factors affecting Instructional Leadership**


APPENDIX B

Content Analysis

1. Details of Sources (books and articles) from the Library for the Content Analysis

Note: To select the articles and books as the sample for the content analysis, the researcher uses the following method:

1. Check the title if the key words respond to the key variables being studied.
2. Check the abstract to gain more understanding about the articles; the purposes, the methods used, and the findings.
3. If the titles and abstract can serve the purpose of the study, the researcher select it but if these two do not answer the key variables being investigated yet, the researcher looks in the introduction parts with 2-3 paragraphs. If the key variables can be answered, the article is selected, if not, discarded.
4. Approximately the first 200 articles were checked from each publisher.

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</tr>
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</tr>
<tr>
<td>Published in English language;</td>
<td></td>
</tr>
<tr>
<td>Area of Education, mainly for teachers and administrators</td>
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| Challenges for Instructional Leadership | 11, 743 | 32 | 14 |

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33 (16.25%) | (22.66%) | (28.07%) | 52 (25.61%) | (7.38%) | (100%)
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<td>(31.52%)</td>
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School principals everywhere are responsible for defining their schools’ purpose and direction. However, Chinese school principals are required to carry out the more specific task of officially identifying their school’s unique features (these or distinctive strengths) and designing school-development plans to capitalize on these features. The expectation that principals identify their schools’ unique features is aligned with policy directives under the national curriculum reform. The central government has mandated that schools can no longer be identical; they need to be diversified and distinct, each with unique qualities and strengths.

The principals worked to balance dual expectations when they defined their schools’ purpose and direction. They were required to accommodate both the traditional Confucian emphasis on excelling in exams and the equally powerful new reform requirement that schools cultivate students with unique talents. Identifying and publicizing a school’s “uniqueness” (these, distinctive strength) was expected to construct a positive public image of the school as an exemplary model of the government’s quality-education reform.

It appeared, from this study, that the factors most prominently associated with student-based school outputs were the "Unity of Purpose" and "Collaborative Leadership" process factors related to characteristics of a collaborative school culture. The Unity of Purpose element of school culture describes the degree to which teachers work toward a common mission for the school. This involves an active collaboration amongst parents, teachers, students, support staff, administrators, and the local community toward setting and achieving a common goal. The Collaborative Leadership component describes the degree to which school leaders establish and maintain collaborative relationships with the school staff. The educational leaders seek the input of the school community, value their ideas, and provide venues for their ideas to be expressed.

The ISSPP findings support the existence of essential core leadership practices of direction setting, developing people and redesigning the organization as necessary for improved student achievement but more importantly they reveal that these practices are best realized in ways that are culturally sensitive. Moreover, the ISSPP findings support the idea that, in addition to the core leadership practices, improving the learning environment is a necessary prerequisite for successful school initiatives in challenging, high poverty environments. This was an absolute necessity in the schools studied by the U.S. team, where students and teachers had legitimate concerns about their physical safety. Finally, in at least one case, a significant organization redesign was required in order to promote and maintain a culture of collaborative learning through teacher leadership necessary to sustain student success over time.

The tasks of framing the school goals and communicating the school’s goals in this dimension are two key tasks linking to vision to teaching practices. These two leadership practices emphasize the principal’s role in establishing and articulating a clear school vision with the focus on enhanced student learning. The principal is responsible to collaboratively build an appropriate context-based vision, and ensure it is widely known by other school stakeholders and ascertain that teaching and learning processes are aligned with the vision. It is important to understand the context in Singapore where the school vision is intricately linked. Context typically refers to the initiatives implemented by the MOE for all schools in Singapore.
| A025P137 | The ability to articulate a learning focused vision that is shared by others and to set clear goals creates a base for all other leadership strategies and actions. The principal’s vision and goals should be linked to core values of the school’s leadership team and the school community more broadly. Visions written down on paper only come to life through the routines and actions that are enacted on a daily basis. | Articulate a learning focused vision | Establishing Collective Goals |
| A020P310 | At Bellfield, John was actively involved in all aspects of school life. He was the driving force behind the success of the school. Part of the success was in John's clearly articulated beliefs about important aspects of the school such as expectations, pedagogy, relationships, and school structure, and his ability to align all with this vision. | Articulate beliefs in expectations, pedagogy, relationships, and school structure and align them | Communicating Goals |
| A039P214 | Departmental leadership is the most influential factor in determining the quality of teachers' participation in communities of practice. The extent of mathematics and science teachers' participation in productive communities is, on average, more strongly related to the strength of the department chair’s leadership than to subject differences. Remedial mathematics teachers appear to be the exception, in that departmental leadership is slightly less influential for them. Strong departmental leaders who communicate expectations, establish goals, secure resources, carry out plans, and promote innovation encourage other teachers toward full community participation. This is an important finding, one that highlights the important role that chairs play in shaping the agenda for learning, brokering knowledge and learning opportunities, and motivating teachers for learning work. Strong leaders do not, however, eliminate the disadvantage that African Americans or remedial teachers experience in terms of their legitimate participation. | Communicate expectations, establish goals, | Framing and Communicating Goals |
| A024P13 | A broad reading of the literature on instructional leadership that has emerged over the past twenty-five years would have the instructional leader focus on: creating a shared sense of purpose in the school, including clear goals focused on student learning, fostering the continuous improvement of the school through cyclical school development planning that involves a wide range of stakeholders, developing a climate of high expectations and a school culture aimed at innovation and improvement of teaching and learning, coordinating the curriculum and monitoring student learning outcomes, shaping the reward structure of the school to reflect the school’s mission, organizing and monitoring a wide range of activities aimed at the continuous development of staff, and being a visible presence in the school, modeling the desired values of the school’s culture. | Create a shared sense of purpose in the school | Ensuring the Unity of Purpose |
| A045P667 | Because considerably more happens in schools than the pursuit of explicit goals, even the most goal-focused leaders will need to skillfully manage the constant distractions that threaten to undermine their best intentions. Such distractions, in the form of new policy initiatives, school crises, calls for goal revision or abandonment, and the need to maintain school routines that are not directly goal related, all threaten to undermine goal pursuit. A shared goal focus enables leaders and staff to recognize that they are being distracted and to consciously decide what to do about it. Without that focus, there is no distraction to recognize and the routines and crises come to dominate leaders’ work. | Most goal-focused leaders | Establishing Goals And Expectations |
| B057P10 | Administrators or teacher-leaders have the sole power and responsibility to determine what knowledge accounts as academically valuable and to decide how to transmit this knowledge to students. | Determine the knowledge to be learned | Setting Goals |
| A071P304 | This study aims to investigate first, the leadership profiles of faculty and administration staff of TEIL, and second the relationship among leadership roles and higher education service quality. Findings reveal that faculty recognizes the director and the coordinator as the dominant leadership roles in TEIL. Both roles are characterized by a control orientation, so leaders who emphasize these roles may be stability-oriented and conservative in their decision-making styles. The director clarifies expectations, defines problems, establishes objectives, generates roles and policies and provides instructions. On the other hand, the coordinator is expected to maintain order, structure, schedule and smooth flow of the system. What applies to administrators is that they prefer the producer and coordinator roles. The producer | The director clarifies expectations, defines problems, establishes objectives | Setting goals |
A consistent and shared vision was an inherent part of their leadership approach. The head teachers communicated their personal vision and belief systems by direction, words, and deeds. Through a variety of symbolic gestures and action they were successful at realigning both staff and pupils to their particular vision of the school. The heads in the study did ‘walk the talk’ through the consistency and integrity of their actions, they modelled behavior that led to better enjoyment of and performance in the relevant task or activity.

One of the most obvious ways in which leadership was exercised in the studies is through the discussion, setting and communicating of goals for teacher and student learning. Goal setting works by creating a discrepancy between what is currently happening and some desired future state. When people are committed to a goal, this discrepancy is experienced as constructive discontent that motivates persistent goal relevant behavior. It is this increased attention and effort that leads to better enjoyment of and performance in the relevant task or activity.

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A clearly defined goal was another condition which was found important in order to enable effective distributed leadership to emerge. Teams which had a clear goal were found to be more successful in coordinating their activities and focus their energies in a common direction. A clearly defined goal was also found to enhance a team’s capacity to monitor and feedback on progress, as well as enabling them to engage in adaptive behaviors in case of changes in the team environment. In a number of projects, the lack of clarity regarding the team goal resulted in divergence of activities and a lack of integration, which stifled team progress and frustrated team members. Especially in emergent projects, where team goals were not given by external decision makers, a clearly defined goal played an important role in managing external relationships and securing external support.

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Of central importance within schools that are improving is an alignment to a shared set of values. The heads in the study communicated their personal vision and belief systems by direction, words, and deeds. Through a variety of symbolic gestures and action they were successful at realigning both staff and pupils to their particular vision of the school. The heads in the study did ‘walk the talk’ through the consistency and integrity of their actions, they modelled behavior that they considered desirable to achieve the school goals. They shared a belief and had an optimism that people have untapped potential for growth and development. The heads clearly respected others and modelled teacher leadership through empowering and encouraging others. They also trusted others and required trust from others. They recognized the need to be actively supportive, caring and encouraging as well as challenging and confrontational when necessary. A consistent and shared vision was an inherent part of their leadership approach. The head teachers communicated their
vision through relationships with staff and students and they built these around core values. The vision and practices of these heads were organized around personal values such as the modelling and promotion of respect for individuals, fairness and equality, caring for the well-being and whole development of students and staff, integrity and honesty. It was evident that their leadership values and visions were primarily moral i.e. dedicated to the welfare of staff and students, with the latter at the center. These values underpinned their relationships with staff, students, parents and governors and guided their day to day actions. The heads in the study did display people-centered leadership in their day to day dealings with individuals. Their behavior with others was premised upon respect and trust and their belief in developing the potential of staff and students.
APPENDIX C

Survey Instrument

Dear Respondent,

The following survey is part of the dissertation research on “The Development of an Instructional Leadership Model for Outcome-Based Education for Private Higher Education Institutions in Cambodia”. Any information provided by you will be strictly confidential and used for research purpose only. Thank you for your time and cooperation.

Part I: Demographic Information

**Instruction:** Please put a (√) in the box provided indicating your information in the following items.

1. Gender
   - □ Male
   - □ Female

2. Teaching Experience
   - □ 0-2 years
   - □ 3-5 years
   - □ 6-10 years
   - □ 11-15 years
   - □ 16 years or above

3. Highest Educational Attainment
   - □ Bachelor degree
   - □ Master degree
   - □ Doctorate degree

4. Field of study of the highest educational attainment:
   …………………………………………………………………..

Part II: Please answer this section based on your perception of the academic administrators you are working with. The academic administrators for this study refer to those who work closely with lecturers and students including the academic deans, vice-academic deans, program directors, etc.

**Instruction:** Please put a (√) in the box provided indicating the current instructional leadership practices being implemented by the academic administrators.

```
Strongly disagree Disagree Undecided Agree Strongly agree
```

1 2 3 4 5
<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Current Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Framing and Communicating Goals</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>My academic administrators set the academic goals with the collaboration of lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>2.</td>
<td>My academic administrators communicate the academic goals to lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Providing Professional Development</strong></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>My academic administrators encourage lecturers to interact professionally to learn from one another.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>4.</td>
<td>My academic administrators provide opportunities for professional development to lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>5.</td>
<td>My academic administrators encourage lecturers to use research to support instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>6.</td>
<td>My academic administrators provide opportunities for lecturers to observe one another to improve their instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Supervising Curriculum and Instruction</strong></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>My academic administrators monitor the curriculum development.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>8.</td>
<td>My academic administrators allocate sufficient material resources for instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>9.</td>
<td>My academic administrators provide constructive classroom feedback to lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>10.</td>
<td>My academic administrators regularly monitor student learning progress with lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>11.</td>
<td>My academic administrators encourage lecturers to use continuous learning assessment.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Building a Supportive and Collaborative Environment</strong></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>My academic administrators listen to the concern of lecturers with a caring manner.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>13.</td>
<td>My academic administrators ensure an orderly environment for lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>14.</td>
<td>My academic administrators build a strong relationship with lecturers.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>15.</td>
<td>My academic administrators encourage lecturers to share responsibilities to enhance student learning.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>16.</td>
<td>My academic administrators involve lecturers in decision-making about educational issues.</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>
Part III: This section is based on lecturers’ practices concerning Outcome-Based Education (OBE).

Instruction: Please put a (√) in the box provided indicating the organization of curriculum and instructions centralizing on the learning outcomes.

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Current Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>I identify students’ skills that should be achieved at the end of the course.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. communication</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>b. critical thinking</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>c. problem solving</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>d. collaboration</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>18</td>
<td>I consider learning outcome as the heart of the instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>19</td>
<td>Learning outcome is clearly defined before the activities and assessment methods are designed.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>20</td>
<td>I set high expectations to encourage students to engage deeply in the learning process.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>21</td>
<td>I determine students’ needs which are formulated into the learning outcomes before designing learning activities.</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>

Learning Activities

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Current Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>I allow students to collaboratively work to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. pose questions</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>b. discuss the problem</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>c. find the solution together</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>23</td>
<td>I provide opportunities for students to become more independent learners.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>24</td>
<td>Students are given sufficient opportunities to apply their learning in their real situations.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>25</td>
<td>I encourage students to interact in groups for self-directed learning outside the classroom.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>26</td>
<td>I use technology to support my classroom instructions.</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>

Learning Assessment

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Current Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Students are given enough formative feedback for improvement during the course.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>28</td>
<td>Students are informed about the criteria on how they will be assessed.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>29</td>
<td>I check student learning using different methods including:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. oral presentation</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>b. quiz</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>c. test</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>30</td>
<td>I provide remedial lessons if the students perform below the standard.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>31</td>
<td>I use final exam results to decide whether students are allowed to pass the course.</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>
**Part IV:** This section is about the lecturers’ perceptions of how academic administrators implement practices for instructional leadership.

**Instruction:** Please put a (√) in the box provided indicating the factors affecting instructional leadership practices in your university.

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Current Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Time Constraints and Workload</strong></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>32.</td>
<td>The academic administrators have sufficient time to supervise</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>instructions through observations.</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>The academic administrators spend more time on checking required</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>documents.</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>The academic administrators spend more time to manage student</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>discipline than instructional leadership.</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>The academic administrators spend more time on personnel</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>management than instructional leadership.</td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>The academic administrators spend more time on resource management</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>(materials, equipment etc.) than instructional leadership.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Cooperation, Culture and Values</strong></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>The academic administrators encourage lecturers to adopt a student-centered</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>teaching approach.</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>The academic administrators have a good relationship with</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>lecturers.</td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>The university culture encourages shared responsibilities between</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>lecturers and the academic administrators for student learning.</td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>The lecturers willingly adapt the new teaching practices introduced</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>by the academic administrators.</td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>The lecturers willingly share responsibilities for student learning.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Qualification, Skills and Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>The academic administrators receive sufficient professional development</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>to support their instructional leadership position.</td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>The academic administrators have the expertise in curriculum</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td>development of all subject areas.</td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>The academic administrators have sufficient experiences in the administrative position.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>45.</td>
<td>The academic administrators use student achievement data to judge</td>
<td></td>
</tr>
</tbody>
</table>
the quality of instructional activities.

Organizational Structure
46. The academic administrators have authority to set the academic goals in collaboration with the lecturers.
47. The academic administrators’ role is to ensure that the goals set by university are well-achieved.
48. The academic administrators have authority to develop own curriculum.
49. The academic administrators have authority to provide professional development activities for lecturers.

Funding and Facilities
50. The university has sufficient financial resources to improve instructional practices.
51. The university has sufficient budget for materials like journal articles, databases, textbooks and technological support for teaching and learning.
52. The university provides space with desks and chairs as office for lecturers to plan for instructions.

Tasks and Roles Related to Instructional Leadership
53. The academic administrators promote innovative instructional practices.
54. The academic administrators promote the research function in the university.
55. The academic administrators discuss with lecturers for better decision making on instructional matters.
56. The academic administrators are more focused on their daily administrative roles than on instructional leadership.
APPENDIX D

Sample of Interview Scripts Transcribed

Part I: Demographic Information
Participant #3, University #2. Name: Mr. Sam Sophy, Dean of the Faculty of Education
Mr. Sam Sophy has 11 year experience as a dean of academic. He has received Master Degree in TESOL.

Part II: Instructional Leadership Practices
Framing and Communicating Goals
1. We have faculty committee; management team of the faculty-CDC, curriculum development committee, senior lecturers appointed to be members and set up the academic goals. Teachers were also encouraged to contribute.
2. Meeting is the place which goals communicated to teachers. The meeting conducted every quarter. The lecturers in charge of specific subject orient the goals to students. School open day is a good chance for the university to share the academic goals to students. There are five faculties and each faculty is given the amount of time to present their academic goals. (Faculty of languages; Department of Chinese language; International relations)

Providing Professional Development
3. We have our strategic plan and one of the components is to develop teachers’ professionally.
4. Usually we encourage them to participate in workshop. We have planned to conduct workshops within the semester in the university. We invite experienced guest speakers to share and when the ministry of education conducts workshop, we encourage our lecturers to participate. Another thing is that we encourage them to continue their education. For example, if they continue within the university, we give them some discount for example 50%. We encourage them to take master or PhD in AEU and we offer high rate of payment to those who receive higher qualification. We provide at least one workshop per semester.
5. We need to locate the prioritized areas for example research. Now we lack of professional researcher, so we should prioritize this subject. 70% of lecturers are interested in research workshop. We have a research center here.
6. Usually during the quarterly meeting, we encourage them to share ideas especially those who are teaching similar subjects. They should work together as a team; we normally nominate someone as the head of the team. Based on our experience we also encouraged teachers to observe one another, but it was not very practical due to time constraints.

Supervising Curriculum Development and Instruction
7. Actually we have curriculum development committee comprising some from management team, some from experienced lecturers. At the beginning of the academic year, the committee sits down and talk about the subject that should be revised. Syllabus is appropriate or not; and if we want to develop a new curriculum for a particular subject, we need to sit down and discuss. For the discussion, we provide them some incentives as a part of the encouragement. Lecturers submit syllabus to the dean before using. Some books need to be updated. We encourage innovative education. As society
changes, education should be changed. Usually we have quarterly or semester meeting, and the management team encourages to look at the curriculum and if possible revise them. We encourage teachers to prepare lesson plan but not all of them prepared. But they prepared a lesson note/ sth to teach.

8. Updated materials given to lecturers. The university provides teaching materials for them and they could seek other supporting materials either online or library.

9. Sometimes I go and sit in classroom especially with lecturers who were complained. I also spent some time to observe the teaching of the new lecturers coming in our university. The rest I think they are doing great.

10. We check the student learning progress through lecturers in charge and academic office. We have ongoing assessment and final exams. This is how we monitor them. Lecturers need to be responsible for their student learning progress by daily monitoring. I also check the result of the final exams. We have exam unit and we got invited for the meeting to check the results.

11. Formative assessment (attendance, quiz, midterm, and assignment) and summative assessment applied. Based on the result, lecturers have to provide constructive feedback. If students below the standard, usually we encourage them to provide scaffolding. For example we encourage the better students to help the poorer ones. We usually encourage lecturers to provide constructive feedback immediately. Lecturers in charge closely monitor them providing some sorts of scaffolding techniques. Lecturers have their own ways to help. We also have remedial course for English language; usually conducted in the noon time. It is designed to help students who are behind the expectation. But this is not compulsory.

Building a supportive and collaborative environment

12. We have lecturers’ office; we have someone who is moving around, monitoring and checking lecturers’ attendance.

13. We have the office where we can sit and talk. We keep communicating every day; sharing ideas daily based issues. We not only work together but also live together. By this mean of communicating, they are satisfied with the environment. Not only for teaching but also for social interaction.

14. I have a good relationship with lecturers. A part from work, I try to build up close relationship with them by sitting with them in the faculty lounge trying to hear their concerns in regards their teaching.

15. During the discussion though informal the issues related to teaching and learning. How to teach effectively; how to help poor students; how to deal with the issues. Those should be to common topics for the discussion.

16. Through the informal discussion, lecturers can make suggestions and we can have the decision together on educational issues.

Part III: Outcome-Based Education

Learning Outcomes

17. I think these skills should integrated in the learning process. However, I did not have much time to check their preparation well-enough to figure out whether these skills incorporated into their instructional designs and practices.

18. MoYES encourages all universities to design OB curriculum. In our school now, we encourage all the faculty members to design OBE; When designing the curriculum, we look at the learning outcomes. When we update or revise the syllabus, we need to look
at the learning outcomes. What is the results of our previous implementation; what is good and what is bad.

19. Every semester we conduct M&E (monitoring and evaluation) and we try to identify which is good and bad; what is the percentage of implementation; what should be revised and what should be added.

20. It is easy to encourage lecturers to apply OBE. Two or three strategies: ME, Assessment especially the summative (through the final exam we can know whether the syllabus can be achieved).

21. When we develop curriculum, we have a committee to identify the needs of students from surveying experienced lecturers or conduct literature reviews. We also survey students for the needs that need to be formulated into the learning outcomes.

Learning Activities
22. We encourage communicative language teaching especially the language courses. Student centered approach;
23. Through the approach, students become more independent learners.
24. I think lecturers encouraged students to apply their knowledge learned but we don’t know to what extend they practiced.
25. We encourage lecturers to group students and lecturers work as the facilitators.
26. Yes, they used computer and LCD projector to help their teaching.

Learning Assessments
27. Lecturers gave feedback after the results released. They gave in the whole class, not to individuals.
28. All students were informed about the criteria because lecturers had their syllabus given to students at the beginning of the semester.
29. Lecturers used quiz, homework, mid-term tests, and presentation to check whether students can learn something. These were the methods they used to check students’ learning progress.
30. Remedial lessons are not held by the subject lecturers but the academic office for additional class. The classes were not well-implemented because we had only some lecturers who were available to help.
31. The grading system cover on two parts: on-going assessment and final examination.

Part IV: Factors affecting Instructional Leadership
Time Constraints and Workloads
32. I don’t think I have enough time to supervise instruction. As I am the dean of the academic, I have to be responsible for everything, to make sure that the faculty reaches our set goals. We don’t think we can do everything under the umbrella of the goals because there are a lot of activities. Faculty staff, coordinator, secretary, vice-dean who can help me.
33. We need assistance from those staff to check documents.
34. Students’ discipline is under another department but I’m also responsible for discipline. We’re a part of the department.
35. Personnel management is under my responsiblility. But not very much busy. We have around 60-70 lecturers in my faculty. 70% are part-time. It’s a big deal.
36. My people helped me manage resources.
Cooperation, Culture and Values
37. I encouraged lecturers to employ student-centered approach. They did practice using pair-work, group work, and presentation.
38. I think I have a good relationship with all lecturers. They didn’t have any problem with me. We shared things together and enjoyed the time working together here.
39. Lecturers shared responsibilities to promote learning. They contributed their ideas on how to promote teaching and learning.
40. They applied the new teaching practices in class. As student-centered approach being implemented, more classroom activities practiced by students.
41. They were willing to share responsibilities; lecturers are given more authority to work more with students.

Qualification, Skills, and Experience
42. I don’t think that I have sufficient professional development training. I need more of this.
43. I am not the experts in curriculum development, only the experience. I have been for long enough that I could understand in many aspects.
44. I think I have enough experience working as the dean. There should be no problem for me as being here long enough to carry out responsibilities.
45. I didn’t use much data to judge learning activities due to time constraints. We concluded what we met and made the decision to implement what should be done.

Organization Structure
46. The academic goals developed by the committee and I am one of the members.
47. I have to ensure that the goals must be achieved. As the goals developed by the committee, I am the one who monitor the process towards achieving goals.
48. I have the authority to suggest for revising the curriculum; the committee decides to revise or to accept the suggestions.
49. I also have the authority to provide PD to the faculty members but within the budget.

Funding and Facilities
50. So far we have enough resources, human, material and financial resources. The building belongs to the owner. The university has been here since 2005;
51. I think we have enough budget for journal articles, textbooks, database etc. We have an e-library.
52. The university has a space with desks and chairs provided to lecturers.

Tasks and Roles related to Instructional Leadership
53. I encourage lecturers to promote their teaching through providing them with professional development workshops.
54. We have a research department, but lecturers don’t have time to work on this area.
55. We welcome all the inputs from lecturers to improve student learning.
56. Administrative role is being practiced larger than instructional leadership. (60% for management and 40% for instructional leadership). Actually we have some people who help me.
**APPENDIX E**

**Summary Results of the Survey Validation**

**Part I:** This part includes the items about instructional leadership practices for outcome-based education implemented by the academic administrators of the higher education institutions.

Please determine the content validity score as the following:
Score = 1, if you are sure that this item really measures the attribute.
Score = -1, if you are sure that this item does not measure the attribute.
Score = 0, if you are not sure that the item measures or does not measure the expected attribute.

(Please tick (√) accordingly under the level of appropriateness)

<table>
<thead>
<tr>
<th>No.</th>
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<th>Appropriateness</th>
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<tbody>
<tr>
<td></td>
<td>Framing and Communicating Goals</td>
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<tr>
<td></td>
<td>+1</td>
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</tr>
<tr>
<td>1</td>
<td>My academic administrators set the academic goals with the collaboration of lecturers.</td>
<td>√ √ √ √ √</td>
<td>5</td>
<td></td>
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<tr>
<td>2</td>
<td>My academic administrators communicate the academic goals to lecturers.</td>
<td>√ √ √ √ √</td>
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<tr>
<td></td>
<td><strong>Providing Professional Development</strong></td>
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<tr>
<td>3</td>
<td>My academic administrators encourage lecturers to interact professionally to learn from one another.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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<tr>
<td>4</td>
<td>My academic administrators provide opportunities for professional development to lecturers.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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<tr>
<td>5</td>
<td>My academic administrators encourage lecturers to use research to support instructional practices.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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<tr>
<td>6</td>
<td>My academic administrators provide opportunities for lecturers to observe one another to improve their instructional practices.</td>
<td>√ √ √ √ √</td>
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<tr>
<td></td>
<td><strong>Supervising Curriculum Development and Instruction</strong></td>
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<tr>
<td>7</td>
<td>My academic administrators monitor the curriculum development.</td>
<td>√ √ √ √ √</td>
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<td></td>
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<tr>
<td>8</td>
<td>My academic administrators allocate sufficient material resources for instructional practices.</td>
<td>√ √ √ √ √</td>
<td>5</td>
<td></td>
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<tr>
<td>9</td>
<td>My academic administrators provide constructive classroom feedback to lecturers.</td>
<td>√ √ √ √ √</td>
<td>5</td>
<td></td>
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<tr>
<td>10</td>
<td>My academic administrators regularly monitor student learning progress with lecturers.</td>
<td>√ √ √ √ √</td>
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<tr>
<td>11</td>
<td>My academic administrators encourage lecturers to use continuous learning assessment.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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<tr>
<td></td>
<td><strong>Building Supportive and Collaborative Environment</strong></td>
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<td>12</td>
<td>My academic administrators listen to the concern of lecturers with a caring manner.</td>
<td>√ √ √ √ √</td>
<td>4</td>
<td>√</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>My academic administrators ensure an orderly environment for lecturers.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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<tr>
<td>14</td>
<td>My academic administrators build a strong relationship with lecturers.</td>
<td>√ √ √ √ √</td>
<td>5</td>
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</tr>
<tr>
<td>15</td>
<td>My academic administrators encourage lecturers to share responsibilities to enhance student learning.</td>
<td>√ √ √ √ √</td>
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<tr>
<td>16</td>
<td>My academic administrators involve lecturers in decision-making about educational issues.</td>
<td>√ √ √ √ √</td>
<td>5</td>
<td></td>
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</tr>
</tbody>
</table>
**Part II:** This part includes the items about Outcome-Based Education (OBE) which is expected to be implemented by the lecturers.

Please determine the content validity score as the following:
Score = 1, if you are sure that this item really measures the attribute.
Score = -1, if you are sure that this item does not measure the attribute.
Score = 0, if you are not sure that the item measures or does not measure the expected attribute.
(Please tick (✓) accordingly under the level of appropriateness)

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<td>3</td>
<td>4</td>
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<tr>
<td>Learning Outcomes</td>
<td>I identify students’ skills that should be achieved at the end of the course:</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>a. Communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>b. Critical thinking</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>c. Problem solving</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>d. Collaboration</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I consider student learning as the heart of the instructional practices.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Student learning is clearly defined before the activities and assessment methods are designed.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I set high expectations to encourage students to engage deeply in the learning process.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I determine students’ needs which are formulated into the learning outcomes before designing learning activities.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>In class, I allow students to work collaboratively to:</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>a. pose questions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>b. discuss the problem</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td></td>
<td>c. find solution together</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I provide opportunities for students to become more independent learners.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Students are given sufficient opportunities to apply their learning to their real situations.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I encourage students to interact in groups for self-directed learning outside the classroom.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I use technology to support my classroom instructions.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Learning Assessment</td>
<td>Students are given enough formative feedback for improvement during the course.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Students are informed about the criteria on how they will be assessed.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I check student learning using different methods including:</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>a. oral presentation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>b. quiz</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>c. test</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I provide remedial lessons if the students perform below the standard.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td></td>
<td>I use final exam results to decide whether students are qualified to pass the course.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>
**Part III:** This part includes the items about the Factors affecting instructional leadership practices performed by the academic administrators as instructional leaders.

Please determine the content validity score as the following:
Score = 1, if you are sure that this item really measures the attribute.
Score = -1, if you are sure that this item does not measure the attribute.
Score = 0, if you are not sure that the item measures or does not measure the expected attribute.
(Please tick (√) accordingly under the level of appropriateness)

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<td><strong>Time Constraints and Workloads</strong></td>
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</tr>
<tr>
<td>32</td>
<td>The academic administrators have sufficient time to supervise instructions</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>through observations.</td>
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<tr>
<td>33</td>
<td>The academic administrators spend lots of time on checking required documents.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>34</td>
<td>The academic administrators spend more time to manage student discipline than</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>instructional leadership.</td>
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<tr>
<td>35</td>
<td>The academic administrators spend more time on personnel management than</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>instructional leadership.</td>
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<tr>
<td>36</td>
<td>The academic administrators spend more time on resource management (materials,</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td></td>
<td>equipment etc.) than instructional leadership.</td>
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<td></td>
<td><strong>Cooperation, Culture and Values</strong></td>
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<tr>
<td>37</td>
<td>The academic administrators encourage lecturers to adapt a student-centered</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>teaching approach.</td>
<td></td>
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</tr>
<tr>
<td>38</td>
<td>The academic administrators have a good relationship with lecturers.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>39</td>
<td>The university culture encourages shared responsibilities between lecturers</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td></td>
<td>and the academic administrators for student learning.</td>
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<tr>
<td>40</td>
<td>The lecturers willingly adopt the new teaching practices introduced by the</td>
<td>√</td>
<td>√</td>
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<td>academic administrators.</td>
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<tr>
<td>41</td>
<td>The lecturers willingly share responsibilities for student learning.</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td></td>
<td><strong>Qualification, Skills and Experiences</strong></td>
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<tr>
<td>42</td>
<td>The academic administrators receive sufficient professional development to</td>
<td>√</td>
<td>√</td>
<td>√</td>
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</tr>
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<td></td>
<td>support their instructional leadership position.</td>
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<tr>
<td>43</td>
<td>The academic administrators have the expertise in curriculum development of</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>all subject areas.</td>
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<tr>
<td>44</td>
<td>The academic administrators have sufficient experiences in the administrative</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>position.</td>
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<tr>
<td>45</td>
<td>The academic administrators use student achievement data to judge the quality</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<td></td>
<td>of instructional activities.</td>
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<td><strong>Organizational Structure</strong></td>
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<tr>
<td>46</td>
<td>The academic administrators have authority to set the academic goals in</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td></td>
<td>collaboration with the lecturers.</td>
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</tbody>
</table>
47. The academic administrators’ role is to ensure that the goals set by university are well-achieved.

48. The academic administrators have authority to develop own curriculum.

49. The academic administrators have authority to provide professional development activities for lecturers.

**Funding and Facilities**

50. The university has sufficient financial resources to improve instructional practices.

51. The university has sufficient budget for materials like journal articles, databases, textbooks and technological support for teaching and learning.

52. The university provides space with desks and chairs as office for lecturers to plan for instructions.

**Tasks and Roles Related to Instructional Leadership**

53. The academic administrators promote innovative instructional practices.

54. The academic administrators promote the research function in the university.

55. The academic administrators discuss with lecturers for better decision making on instructional matters.

56. The academic administrators are more focused on their daily administrative roles than on instructional leadership.

**ADDITIONAL COMMENT OF EXPERTS**

No comments presented.
APPENDIX F

INFORMED CONSENT FORM

RESEARCHER: CHHOURN BUN HOEUN
RESEARCH TITLE: The Development of an Instructional Leadership Model for Outcome-Based Education at Private Higher Education Institutions in Cambodia
PROGRAM: Doctor of Philosophy, Educational Leadership
CONTACT DETAILS: 012 961 946/ 093 436 631
hoeun_bun@yahoo.com

The purpose of this research is to develop an instructional leadership model for outcome-based education. The challenges of instructional leaders at the private higher education institutions promoting outcome-based education will be identified.

The aims of this study have been clearly explained to me (both in writing and verbally) and I understand what is wanted of me.

I know that taking part in this study is voluntary and I am aware that I can stop taking part at any time and may refuse to answer any questions.

I understand that any information which I give will be kept strictly confidential and that no name will be used to identify me with this study without my approval.

<table>
<thead>
<tr>
<th>I consent to participating in an interview for this research.</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consent to having my interview being record and a transcript made.</td>
<td>Yes ☐ No ☐</td>
</tr>
</tbody>
</table>

Name:

Signature Date:
Dear Experts,

I am working on my research dissertation project to finish my PhD (Educational Leadership) in Assumption University of Thailand. The research is entitled as “The Development of Instructional Leadership Model for Outcome-Based Education in Private Higher Education Institutions in Cambodia”. The research employs both quantitative and qualitative data were collected through survey and interviews. The purpose of the research is to identify the current practices of instructional leadership, outcome-based education, and factors affecting instructional leadership. Based on the results of the four research objectives, a model of instructional leadership for outcome-based education has been developed. With this, I would like to seek the assistance from you by validating the model of instructional leadership for outcome-based education. Thank you for sharing your expertise.

Candidate

CHHOURN BUN HOEUN, PhD
An Effective Instructional Leadership Model for Outcome-Based Education

<table>
<thead>
<tr>
<th>Supportive and Collaborative Environment</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Build a good relationship with lecturers</td>
<td>• Formulate students’ needs into specific and measurable learning outcomes</td>
</tr>
<tr>
<td>• Involve lecturers in decision-making about educational issues</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum Development and Instruction</th>
<th>Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Monitor curriculum development</td>
<td>• Apply student-centered instructions</td>
</tr>
<tr>
<td>• Monitor student learning</td>
<td>• Provide opportunities for students to apply what learned</td>
</tr>
<tr>
<td>• Observe teaching and give feedback</td>
<td>• Promote self-directed learning</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Professional Development</th>
<th>Learning Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide opportunities for professional training</td>
<td>• Apply various assessment methods</td>
</tr>
<tr>
<td>• Encourage professional interaction</td>
<td>• Provide sufficient learning feedback</td>
</tr>
<tr>
<td>• Promote peer observation</td>
<td></td>
</tr>
<tr>
<td>• Promote research function</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Goals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Involve lecturers in framing academic goals</td>
<td></td>
</tr>
<tr>
<td>• Make sure the goals are well-informed to stakeholders</td>
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</tbody>
</table>

<table>
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<tr>
<th>Learning Activities</th>
<th></th>
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</tbody>
</table>

The model has been developed with two major parts: instructional leadership and outcome-based education. The goal of the model is to promote the adaptation of outcome-based education in the five universities being studied. Outcome-based education is believed to serve the ultimate goal of the model which is students’ learning. To promote the adaptation of outcome-based education, instructional leadership plays an important role.

Instructional Leadership (Part #1) consists of four elements: Supportive and Collaborative Environment, Curriculum Development and Instruction, Professional Development, and Academic Goals. These four elements are supported by 11 practices that shall bring outcome-based education into existence.
Outcome-based education (Part #2) consists of three elements: Learning Outcome, Learning Activity, and Learning Assessment. This part is to be implemented by lecturers of the five selected universities in Cambodia. From these three elements, 7 practices shall be effectively implemented by lecturers in designing for instructions, hence, student learning.

**Implication of the Model**

**Part #1: Instructional leadership**

This part consists of four elements including Supportive and Collaborative Environment, Curriculum Development and Instruction, Professional Development, and Academic Goals. The purpose of this part is to have the academic administrators’ influence teaching and learning through lecturers’ adaptation of outcome-based education. As the findings indicated, the academic administrators should provide the following practices.

**Supportive and collaborative environment.**

1. **Build a good relationship with lecturers.** Both personal and academic concerns of lecturers need to be heard with care and respect. Strong and positive relationship would mean a lot to lecturers as they should be encouraged to share responsibilities for students learning. Such strong relationship is conducive to more cooperation and collaboration among lecturers and with the academic administrators.

2. **Involve lecturers in decision making on educational issues.** Lecturers are the practitioners and they contribute greatly to students’ learning. Involving them in decision making on educational issues is needed. When lecturers realize the issues and they would be able to work them out themselves more effectively.
Curriculum development and instruction.

1. *Monitor curriculum development.* The academic administrators should thoroughly check syllabus designed by lecturers especially on how they prepare learning experiences and assessment tools to achieve the expected outcomes.

2. *Monitor student learning.* It is important that lecturers and the academic administrators work together to check student learning progress regularly. This would help lecturers to stay alert with the progress students have made and seek for ways to assist students to promote learning achievement.

3. *Observe teaching and provide constructive feedback.* Teaching observation should be regularly held to ensure well-adaptation of outcome-based education. Constructive feedback shall be given to lecturers timely to ensure improved instructional practices.

Professional development.

1. *Provide opportunities for professional training.* As found, limited professional development training provided and the challenge of time for lecturers constituted in the five universities being studied. However, lecturers shall take initiatives to sharpen their axes as the adaptation of outcome-based education to improving learning needs time to go through. Professional training opportunities including workshops, seminar, and short-term and long-term courses should be offered to lecturers.

2. *Encourage professional interaction.* Lecturers should be encouraged to interact professionally within and outside the campus. The interaction should not happen only face to face but also with the assistance of technology. Such
interaction greatly appreciate professional learning especially when sharing with one another the methods applied and how to help students learn better. This can be an opportunity for lecturers to learn from one another.

3. *Promote peer observation.* Peer observation shall provide excessive benefits for improved instructional practices. They could learn from the teaching and learning experiences occurring in class and the chance for lecturers to give constructive feedbacks to one another.

4. *Promote research function.* The academic administrators should raise the awareness of research function in assisting lecturers to be able to gain great benefits from it. Lecturers should be encouraged to conduct action research for the benefits to improve their instruction. If research skill is needed, professional training should be held.

**Academic goals.**

1. *Involv lecturers in framing the academic goals.* To promote a sense of self-belonging, lecturers should be involved in framing the academic goals. Lecturers will actively share goals and willingly collaborate with academic administrators when realizing that the goals belong to them.

2. *Make sure the goals are well-informed by stakeholders.* The academic administrators shall make sure that all lecturers are abide with the set academic goals. All the course syllabus and lesson plans must serve the goals framed. The goals may need to be informed by not only lecturers, but students. They need to know what they will achieve throughout the program or courses.
Instructional leadership practices can be evaluated by collecting the quantitative data from lecturers through questionnaire. The interviews with the academic administrators and some lecturers can also be conducted to explore in depth of the practices in the five private universities.

**Part #2: Outcome-based education**

Outcome-based education is a modern and systematic approach to developing curriculum and instructions. The researcher has chosen this approach for the lecturers at the universities being studied to implement with the hope to increase student learning achievement. Lecturers of the target universities should follow these practices.

**Learning outcome.**

1. *Formulate students’ needs into specific and measurable learning outcomes.*
   
   Lecturers should be able to define the needs of the students and formulate these needs into the learning outcomes. As the outcomes are from students’ needs and interests, students would place more efforts to achieving them.

**Learning activity.**

1. *Apply student-centered instructions.* Lecturers should apply student-centered approach when designing learning experiences. If lecturers are not familiar with this teaching and learning approach, training is needed. The approach suggested includes cooperative learning, guided discussion, problem-based learning, collaborative learning, and demonstration.

2. *Provide opportunities for students to apply what they have learned.* Lecturers should prepare the activities which assist students to put what they have
learned into practices in the real situations. In this way, students do not only know the facts, but also apply them in their daily lives.

3. **Promote self-direct learning.** Lecturers should encourage students to take initiative and responsibility for own learning. Students can select, manage, and assess their own learning activities within the course goals designed. Students can independently set the learning goals which are aligned with the course or program goals and lecturers should scaffold, mentor, and advise them accordingly.

**Learning assessment.**

1. **Apply various assessment methods.** Lecturers should be able to apply both formative and summative assessment methods to check students’ learning and to decide whether students can move to the next level. The ability to employ formative assessment is to check students’ learning progress and how to help them grow. Summative assessment is used to decide whether students have achieved the goals of the program or courses.

2. **Provide sufficient learning feedback.** When formative assessment is applied, the most important thing for lecturers is to provide enough learning feedback. This would help students realize the strong and weak points in their learning progress and how much effort and what kind of experiences needed to enhance learning.

3. **Provide remedial lessons.** If the formative assessment results show low for some students, remedial lessons should be offered either initiated by lecturers or by the faculty. As pointed out by the academic administrators of the five universities, most lecturers are part-timers and they teach at different institutions. They do not have time for remedial classes. Thus, the faculty may
think of extra classes with pay for lecturers to provide some remedial classes for those who perform lower the standard. This would help students to obtain the course and program goals.

To evaluate whether outcome-based education is substantially implemented across the five private universities, the quantitative data can be collected from lecturers through questionnaire. Teaching observation need to be held to investigate the actual practices of outcome-based education. Syllabus and lesson preparation need to be checked. Moreover, the interviews with the academic administrators and some lecturers should be conducted to explore in depth of the practices in those private universities.

<table>
<thead>
<tr>
<th>Part</th>
<th>Elements of the Model</th>
<th>Practices</th>
<th>Valid</th>
<th>Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1: Instructional Leadership</td>
<td>Supportive and Collaborative Environment</td>
<td>1. Build a good relationship with lecturers 2. Involve lecturers in decision-making on educational issues</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Curriculum Development and Instruction</td>
<td>1. Monitor curriculum development 2. Monitor student learning 3. Observe teaching and provide constructive feedback</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Professional Development</td>
<td>1. Provide opportunities for professional training 2. Encourage professional interaction 3. Promote peer observation 4. Promote research function</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Academic Goals</td>
<td>1. Involve lecturers in framing the academic goals 2. Make sure that the goals are well-informed by stakeholders</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>#2: Outcome-Based Education</td>
<td>Learning Outcomes</td>
<td>1. Formulate students’ needs into specific and measurable learning outcomes</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Learning Activity</td>
<td>1. Apply student-centered instruction 2. Provide opportunities for students to apply what they have learned 3. Promote self-directed learning</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td>Learning Assessment</td>
<td>1. Apply various assessment methods 2. Provide sufficient learning feedback</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Comments: (Please include your comments to the model here, if it should be edited.)

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Expert’s Personal Information

Name: ……………………………………………………

Highest degree of educational attainment: …………………………………………………
University you obtained the degree: ……………………………………………………………

Position: ……………………………………… Institution: ………………………………………

Years of experience: …………………………………………………

Signature: …………………………… Date: …………………………………………………
APPENDIX H
Survey (Model Testing)

Dear instructors,

The following survey is a part of my research entitled “The Development of an Instructional Leadership Model for Outcome-Based Education in Private Higher Education Institutions in Cambodia”. The survey is aimed at seeking your information regarding to your current practices of outcome-based education and your academic administrator’s practices on instructional leadership. Any information provided by you will be strictly confidential and used for research purpose only. Thank you very much for your time and cooperation.

CHHOURN BUN HOEUN, PhD Candidate

Part I: Demographic Information

Instruction: Please put a (√) in the box provided indicating your information in the following items.

1. Gender
   □ Male □ Female

2. Teaching Experience
   □ 0-2 years □ 3-5 years □ 6-10 years □ 11-15 years □ 16 years or above

3. Highest Educational Attainment
   □ Bachelor degree □ Master degree □ Doctorate degree

4. Field of study of the highest educational attainment:
   …………………………………………………………………..

Part II: Please answer this section based on your perception of the academic dean you are working with.

Instruction: Please put a (√) in the box provided indicating the current instructional leadership practices being implemented by the academic dean.

1 2 3 4 5

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
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</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Practices</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Supportive and Collaborative Environment</strong></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>My academic dean has a good relationship with me.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>6</td>
<td>My academic dean listens to my concerns with care.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>7</td>
<td>My academic dean encourages me to share responsibilities for student learning.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>8</td>
<td>My academic dean involves me in decision making about educational issues.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>9</td>
<td>My academic dean encourages me to try out OBE courses.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>10</td>
<td>My academic dean allows me to adapt OBE instruction in my own pace.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>11</td>
<td>My academic dean allows me to teach the subject which I know best.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Curriculum Development and Instruction</strong></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12</td>
<td>My academic dean always checks my course syllabus.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>13</td>
<td>My academic dean frequently checks students’ learning progress with me.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>14</td>
<td>My academic dean regularly observes my teaching.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>15</td>
<td>My academic dean gives me constructive feedback after teaching observation.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>16</td>
<td>My academic dean encourages me develop curriculum using OBE approach.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>17</td>
<td>My academic dean explore various methods of teaching and assessment for supporting me in implementing OBE.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>18</td>
<td>My academic dean provides incentives for me to share with peer the trials in teaching OBE.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Professional Development</strong></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19</td>
<td>My academic dean provides opportunities for professional development to me.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>20</td>
<td>My academic dean encourages me to interact professionally with other instructors to learn from one another.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>21</td>
<td>My academic dean encourages me to observe other instructors to improve my instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>22</td>
<td>My academic dean encourages me to use research to support my instructional practices.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>23</td>
<td>My academic dean provides me OBE training.</td>
<td>□ □ □ □ □</td>
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<tr>
<td>24</td>
<td>My academic dean promote team teaching in OBE, especially in course design.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>25</td>
<td>My academic dean promotes action research in OBE.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td></td>
<td><strong>Academic Goals</strong></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>26</td>
<td>My academic dean allows me to collaboratively frame the academic goals.</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>27</td>
<td>My academic dean ensures that everyone is well-informed about the academic goals.</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>
**Part III:** This section is based on instructors’ practices concerning Outcome-Based Education (OBE).

**Instruction:** Please put a (√) in the box provided indicating the organization of curriculum and instructions centralizing on the learning outcomes.

<table>
<thead>
<tr>
<th>No.</th>
<th>Survey Items</th>
<th>Practices 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Learning Outcomes</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>28</td>
<td>I determine students’ needs before designing course syllabus.</td>
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<tr>
<td>29</td>
<td>The needs of the students are formulated into learning outcomes.</td>
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<tr>
<td>30</td>
<td>My course learning outcomes are specific.</td>
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<tr>
<td>31</td>
<td>My course learning outcomes are measurable.</td>
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<tr>
<td>32</td>
<td>I consider learning outcomes as the heart of instructions.</td>
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<tr>
<td></td>
<td><strong>Learning Activities</strong></td>
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<tr>
<td>33</td>
<td>I allow students to work collaboratively in class.</td>
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<tr>
<td>34</td>
<td>I provide students with the opportunities to be more independent learners.</td>
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<tr>
<td>35</td>
<td>Students are given sufficient opportunities to apply what they have learned in their real situations.</td>
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<tr>
<td>36</td>
<td>I seriously design learning activities to ultimately serve the learning outcomes.</td>
<td></td>
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<tr>
<td>37</td>
<td>I identify the learning contents for achieving the learning outcomes.</td>
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<tr>
<td></td>
<td><strong>Learning Assessment</strong></td>
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<tr>
<td>38</td>
<td>To check students’ learning progress, I use various assessment methods included:</td>
<td></td>
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</tr>
<tr>
<td>38.1</td>
<td>quiz</td>
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<td>38.2</td>
<td>assignment</td>
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<tr>
<td>38.3</td>
<td>homework</td>
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<tr>
<td>38.4</td>
<td>oral presentation</td>
<td></td>
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<tr>
<td>39</td>
<td>I meet students individually to give learning feedback after the assessment.</td>
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</tr>
<tr>
<td>40</td>
<td>I provide sufficient learning feedback to the class after the assessment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>I use summative assessment to judge whether students can be allowed to go to the next level.</td>
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<td></td>
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</tr>
<tr>
<td>42</td>
<td>I seriously design learning assessment to ultimately measure the learning outcomes.</td>
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<td></td>
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</tr>
<tr>
<td>43</td>
<td>I seriously design learning assessment to measure learning activities.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>44</td>
<td>I match the assessment tasks with the intended learning outcomes of a course.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>45</td>
<td>I ensure the consistence among the learning outcomes, learning contents, learning methods, and assessment tasks of a course.</td>
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</tr>
<tr>
<td>46</td>
<td>I apply student feedback to modify teaching.</td>
<td></td>
<td></td>
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</tbody>
</table>
## APPENDIX I

**List of Experts for the Content Analysis Validation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qualification</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Tep Mongkul</td>
<td>Ph.D. in Education</td>
<td>USA</td>
</tr>
<tr>
<td>2</td>
<td>Pech Seang</td>
<td>Ph.D. in Education</td>
<td>Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>3</td>
<td>Karen Walker</td>
<td>Ph.D. in Education</td>
<td>Flinders University, Australia</td>
</tr>
<tr>
<td>4</td>
<td>John Walker</td>
<td>Ph.D. in Education</td>
<td>Flinders University, Australia</td>
</tr>
<tr>
<td>5</td>
<td>Wan Y Tak</td>
<td>Ph.D. in Education</td>
<td>University of Munich, Germany</td>
</tr>
<tr>
<td>6</td>
<td>Josephine Kwong</td>
<td>Master in Education</td>
<td>Hong Kong (Over 20 years of school leadership experiences and research)</td>
</tr>
<tr>
<td>7</td>
<td>Debbie Choice</td>
<td>Master in Education</td>
<td>Hong Kong (Over 20 years of school leadership experiences and research)</td>
</tr>
<tr>
<td>8</td>
<td>Khat Korop</td>
<td>Ph.D. in Education</td>
<td>University of Melbourne, Australia</td>
</tr>
<tr>
<td>9</td>
<td>Haing Sivpheng</td>
<td>Master in Education</td>
<td>Australia (Over 15 years of teaching and research experiences)</td>
</tr>
<tr>
<td>10</td>
<td>Pang Iwah</td>
<td>Ph.D. in Education</td>
<td>University of Hong Kong</td>
</tr>
<tr>
<td>11</td>
<td>Sanhei Nhor</td>
<td>Ph.D. in Education</td>
<td>University of Science, Malaysia</td>
</tr>
<tr>
<td>12</td>
<td>Sun Somara</td>
<td>Master in Education</td>
<td>Royall University of Phnom Penh, more than 15 years of experiences in teaching and leadership, and research. Pursing PhD in Education in Cambodia</td>
</tr>
<tr>
<td>13</td>
<td>Oum Sokha</td>
<td>Ph.D. in Education</td>
<td>De La Sale University of the Philippines, the Philippines</td>
</tr>
<tr>
<td>14</td>
<td>Ban Vibol</td>
<td>Master in Education</td>
<td>University of Auckland, New Zealand, 15 years of teaching and research experiences.</td>
</tr>
<tr>
<td>15</td>
<td>Saut Sopheakpanha</td>
<td>Master in Education</td>
<td>University of Auckland, New Zealand, over 10 years of teaching and research experiences.</td>
</tr>
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</table>
APPENDIX J

List of Experts for the Instrument Validation

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qualification</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. Wan Yee Tak</td>
<td>Ph.D in Education</td>
<td>University of Munich, Germany</td>
</tr>
<tr>
<td>2</td>
<td>Tep Mongkul</td>
<td>Ph.D. in Education</td>
<td>USA</td>
</tr>
<tr>
<td>3</td>
<td>Pech Seang</td>
<td>Ph.D. in Education</td>
<td>Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>4</td>
<td>Dr. Oum Sokha</td>
<td>Ph.D in Education</td>
<td>De La Sale University of the Philippines, the Philippines</td>
</tr>
<tr>
<td>5</td>
<td>Khat Korop</td>
<td>Ph.D. in Education</td>
<td>University of Melbourne, Australia</td>
</tr>
</tbody>
</table>
# APPENDIX K

## List of Experts for the Model Validation

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qualification</th>
<th>Degree received</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Pech Seang</td>
<td>Ph.D. in Education</td>
<td>Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>2</td>
<td>Wan Y Tak</td>
<td>Ph.D. in Education</td>
<td>University of Munich, Germany</td>
</tr>
<tr>
<td>3</td>
<td>Khat Korop</td>
<td>Ph.D. in Educational Leadership</td>
<td>University of Canberra, Australia</td>
</tr>
<tr>
<td>4</td>
<td>Pang Iwah</td>
<td>Ph.D. in Educational Leadership</td>
<td>University of Hong Kong</td>
</tr>
<tr>
<td>5</td>
<td>Sanhei Nhor</td>
<td>Ph.D. in Educational Leadership</td>
<td>University of Science, Malaysia</td>
</tr>
<tr>
<td>6</td>
<td>Tep Mongkul</td>
<td>Ph.D. in Education</td>
<td>USA, 14 years of teaching experience in higher education institutions</td>
</tr>
<tr>
<td>7</td>
<td>Karen Walker</td>
<td>Ph.D. in Education</td>
<td>Flinders University of South Australia</td>
</tr>
<tr>
<td>8</td>
<td>John Walker</td>
<td>Ph.D. in Education</td>
<td>Flinders University of South Australia</td>
</tr>
<tr>
<td>9</td>
<td>Kit Mui Juanita</td>
<td>Ph.D. in Family &amp; Marriage Counseling</td>
<td>University of Hong Kong, working as a lecturers for 29 years</td>
</tr>
<tr>
<td>10</td>
<td>Vong Meng</td>
<td>Ph.D. in Linguistics</td>
<td>Cambodia and working a lecturers for over 20 years</td>
</tr>
<tr>
<td>11</td>
<td>Josephine Kwong</td>
<td>Master in Education (Curriculum Development)</td>
<td>Hong Kong (Over 20 years of school leadership experiences and research)</td>
</tr>
<tr>
<td>12</td>
<td>Debbie Choice</td>
<td>Master in Education (Special Education Curriculum Development)</td>
<td>Hong Kong (Over 20 years of school leadership experiences and research)</td>
</tr>
<tr>
<td>13</td>
<td>Ban Vibol</td>
<td>Master in Educational Leadership</td>
<td>University of Auckland, New Zealand, over 10 years of teaching and research experiences.</td>
</tr>
<tr>
<td>14</td>
<td>Sun Somara</td>
<td>Master in Educational Leadership</td>
<td>Royal University of Phnom Penh, more than 10 years of teaching experiences in Higher Education</td>
</tr>
<tr>
<td>15</td>
<td>Phun Sopheak</td>
<td>Master of Education</td>
<td>University of Melbourne, Australia and working as a lecturers for more than 15 years</td>
</tr>
<tr>
<td>16</td>
<td>Yin Phallip</td>
<td>Master of Education</td>
<td>Assumption University of Thailand and more than 20 years of teaching experience in university level</td>
</tr>
<tr>
<td>17</td>
<td>Sok Savanchandara</td>
<td>Master Degree in Educational Leadership</td>
<td>The University of Cambodia, more than 10 years of teaching experience in higher education, and 6 years of leadership experience in higher education</td>
</tr>
<tr>
<td>No.</td>
<td>Higher Education Institutions</td>
<td>Remarks</td>
<td>Address</td>
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</tr>
<tr>
<td>1</td>
<td>Western University</td>
<td>University #1</td>
<td>#15, St.528, Sangkat Boeung Kak 1, Khan Toulkok, Phnom Penh, Cambodia</td>
</tr>
<tr>
<td>2</td>
<td>Asia Euro University</td>
<td>University #2</td>
<td>#826, Kampuchea Krom Blvd, Teuk Laak 1, Khan Toulkok, Phnom Penh, Cambodia</td>
</tr>
<tr>
<td>3</td>
<td>Panhasastra University of Cambodia</td>
<td>University #3</td>
<td>#92-94, Maha Vithei Samdech Sotheary, Phnom Penh, Cambodia</td>
</tr>
<tr>
<td>4</td>
<td>University of Cambodia</td>
<td>University #4</td>
<td>Northbridge Road, Sangkat Teuk Thla, Khan Sensok, Phnom Penh, Cambodia</td>
</tr>
<tr>
<td>5</td>
<td>Phnom Penh International University</td>
<td>University #5</td>
<td>#36, St. 169, Sangkat Veal Vong, Khman 7 Makara, Phnom Penh, Cambodia</td>
</tr>
</tbody>
</table>
BIOGRAPHY

NAME&SURNAME: BUN HOEUN CHHOURN

DATE OF BIRTH: 28/ July/1979

POSITION: Director of Asia Human Resource Development Institute in Cambodia

EDUCATION:

2002-2006 Completed Bachelor of Education, Majoring in Teaching English as a Foreign Language (TEFL) at the Royal University of Phnom Penh

2008-2010 Completed Master of Education, Educational Leadership at the Royal University of Phnom Penh

WORK EXPERIENCE:

1999-2008 Lecturer, Asia Human Resource Development Institute in Cambodia (Asia HRDI)

2008-present Director, Asia Human Resource Development Institute in Cambodia (Asia HRDI)

PUBLICATIONS:
