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Strategies for distance learning to increase academic achievement of high school students in risk area of the Southernmost of Thailand

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Abstract

A qualitative approach was employed with 5 steps: (1) a study of environment in tutoring management of high schools in the sensitive areas of southernmost provinces, including the SWOT analysis and the Balanced Scorecard framework, (2) an analysis and synthesis to set the goals of the project, (3) a specification of strategic framework for distance learning system development, (4) a strategic plan developed from a strategic framework , and (5) a proposal of model and strategic plan of high school students academic achievement high school in the sensitive areas.

Keywords: Strategies; Distance Learning, Academic Achievement

1. Introduction

Upper-secondary education takes significant roles in academic preparation of students for their further study in tertiary education, which includes providing students with grounding in the subjects required for the university

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entrance examination and the basis for their university courses. The key factors affecting the quality of education system in the southernmost areas of Thailand are the unrest situation and the education system of Islamic private schools. The Islamic private schools' curriculum covering both general education and religious education inevitably result in the students' insufficient time for general education as compared to learning periods of students in non-Islamic secondary schools. It leads the students in the southernmost regions obtain low learning achievement scores which are below national standards. In order to solve such a problem, technology integration in distance learning, in which the internet network serves as a medium of communication and instruction between teachers and learners, learners and learners, and learners and specialist teachers, anywhere and anytime, is introduced to assist the education management of the schools in the southernmost areas. As a result, students will get more opportunities and equal access in learning, and be able to exchange ideas and share knowledge among one another more rapidly, which then helps develop a learning society.

In the information age and knowledge-based society, students' competencies in new areas that need to be promoted are: (1) reflection, (2) inquiry, (3) technology use, and (4) knowledge construction (Atisabda, 2003). Technology innovation plays an important part in creating more learning environments that have no limits on time and places. The effective new learning environment consists of 4 elements: (1) learner-centered approach, (2) knowledge-centered approach, (3) community-centered approach, and (4) assessment-centered approach (Riel, 2002 and Atisabda, 2003).

The strategic management is the process of internal and external environments analysis to establish strategic plan and goals. The strategic management process consists of three stages: strategy formulation, strategy implementation and strategy evaluation. The strategy formulation includes developing a vision and mission, identifying an organization's opportunity and threats, determining the internal strengths and weaknesses (David, 2005, Wheelen and Hunger, 2002, Pakaphaswiwat, 1998, Decharin, 2001). Based on Kaplan and Norton's strategic management (2004), the Balanced Scorecard is a tool for describing strategies for creating value. It includes: financial perspective, customer perspective, internal perspective, and learning & growth perspective.

Thus, this study is to develop the strategies for distance learning with the purposes of increasing academic achievement of high school students in risk areas of the southernmost provinces of Thailand, preparing students for their further study in higher education, creating new learning environments in knowledge-based society, and promoting learning based on the new learning concept.

2. Objectives of Study

1. To examine the current state and problems in providing distance learning for the upper secondary school students in risk areas of the southernmost provinces of Thailand.
2. To study the guidelines for distance learning with the aim of increasing academic achievement of the high school students in risk areas of the southernmost provinces of Thailand.
3. To develop strategies for distance learning with the purpose of increasing academic achievement of the high school students in risk areas of the southernmost provinces of Thailand.

3. Research Methodology

The research procedure consists of five steps:
Step 1: Examine environments in upper-secondary education management in risk areas in the southernmost area;
    1.1 Analyze external factors including opportunities and threats
    1.2 Analyze internal factors including strengths and weaknesses
Step 2: Analyze and synthesize data in order to determine goals and visions
Step 3: Identify strategic issues for the development of distance learning system for the upper secondary education in risk areas in the southernmost area;
Step 4: Formulate the strategic plan based on strategic issues
    4.1 Construct the draft strategies

4.2 Evaluate and examine the strategies
Step 5:The strategies obtained were analyzed, summarized, and reviewed by a connoisseurship.

4. Findings

Four strategic frameworks were applied based on the Balanced Scorecard for the strategic planning of the distance learning to increase academic achievement of
high school students in risk area of the southernmost of Thailand (Kaplan and Norton, 2004; Tayler , 2007; Aljardeli, Kadeli, & Levy-Tadjine, 2012; Banwet & Deshmush, 2006).

1. Human resources: teachers, resource persons, full-time teachers in schools in the risk areas

2. Customers: students in risk areas in the southernmost provinces who are the target group

3. Curriculum and instruction, instructional media and information technology: curriculum design for supplementary teaching, learning management process, the utilization of instructional media and technology, and learning innovation

4. Internal process: the management of distance learning media centers, and terminal schools

SWOT Analysis

Strengths: Some students showed readiness in learning. Most teachers were able to attract students' interests and make students enjoy learning experiences through their good teaching methods and techniques. Technology innovation played an important part in enhancing learning. Regarding school management, the target schools showed interest and agreed to cooperate on the research project.

Weaknesses: Some students had low learning achievement and lacked basic knowledge, motivation, and technology literacy whereas teachers lacked good skills in teaching lower average students and in technology literacy. There was the gap between university instructors and students. Some instructional media became outdated. Concerning the management, it was found that mixing students of various education levels in the same classroom affected the instructional management, the location of distance learning media centers were not suitable, and there were coordination problems between the supplementary learning center and the terminal schools.

Opportunities: The communities' economic strengths were good. Regarded as the special region, the southernmost areas which border countries attaining some forms of advancement in education got good cooperation from many organizations. As located in the risk areas, such border provinces received strong support for solving any problems.

Threats: Different economic backgrounds affected the participation in activities of teachers and students. The unrest situation in the south also had an impact on the organizing of in-depth activities for developing teachers and students. Moreover, the location of the southernmost provinces proved an obstacle to the field trips/activities in such risk areas.

The strategic frameworks and strategies for distance learning were designed and developed, with the approval of connoisseurs, the research findings were as follows:

Human Resources

Objectives
• To enable teachers to acquire content literacy,
• To enable teachers to acquire technology literacy,
• To enable teachers to understand and apply new instructional approaches.

Strategies
• Seek collaboration with Tutoring schools in developing teachers' tutoring techniques,
• Develop a procedure for the selection of full-time teachers and mentor teachers,
• Promote the cooperation with neighboring countries in enhancing teachers' academic skills development,
• Provide teachers with training in technology innovations for instruction,
• Promote the cooperation between the hub school and terminal schools,

• Organize training programs for staff of the terminal schools regularly,
• Provide teachers with training programs to enhance their skills in teaching students with low academic achievement,
• Encourage teachers to conduct classroom researches,
• Promote the cooperation among schools in order to share knowledge and experiences.

Customers
Objectives
• To increase learners' academic achievement,
• To change students' attitudes towards learning.
Strategies
• Develop a model of tutoring approaches by focusing on the student-centered approach,
• Develop a model of learner grouping,
• Promote collaboration with the tutoring schools in organizing the instructional management in some units in order to generate learning motivation and motivation for students,
• Develop achievement motivation in students participating in the project,
• Promote a peer learning approaches (Share knowledge + Share experiences + Share success)
• Enhance students' learning experiences until their graduation and offer encouragement to students obtaining good academic achievement scores in a form of rewards.

Curriculum/ Instruction/ Instructional Media and Information Technology
Objectives
• To organize suitable instructional approaches in classroom,
• To develop teachers' instructional skills with the utilization of appropriate instructional media and technology innovations.
Strategies
• Implement the integrated instructional approaches, tutoring approaches, and drill & practice approaches,
• Organize both synchronous learning and asynchronous learning for students,
• Develop appropriate technology for learning,
• Develop instructional media and technology promoting distance learning,
• Promote collaboration with the distance learning media center in sharing instructional media with the terminal classrooms,
• Encourage cooperation with the tutoring schools in the support for instructional media, teacher development, and the development of innovative tutoring system.

Internal Process/ Management
Objectives
• To develop classroom management system,
• Promote the cooperation between the hub school and the terminal schools.
Strategies
• Grouping students in tutoring classroom based on their levels of prior knowledge/ class levels,
• Put the proactive public relations of tutoring projects in practices,
• Develop a system for classroom management,
• Organize activities promoting collaboration between the hub school and the terminal schools,
• Collaborate with terminal schools in setting tutoring schedules suitable for the schools.

5. Discussions

Human resource development, one of the strategies, was found to be congruent with Prasit Sangpinit's study (2004) indicating problems of organizing distance general education, particularly the ones concerning teachers at

community learning centers, who still lacked knowledge in how to use technology and instructional media necessary for the teaching and learning management. Instructional materials were insufficient. The teachers expressed their needs in the development of knowledge of curriculum content, teaching skills, and techniques for learning process, as well as innovation and technologies contributing to the effectiveness of teaching. Consequently, based on the problems founded in the studies, the researchers promoted the teacher development in several aspects including providing the teachers at the community learning centers with training programs to enhance their knowledge of the curriculum and instruction as well as the utilization of instructional media, conducting group seminars on techniques for the management of distance learning activities, organizing field trips, and supervising and monitoring the process. After the project, the target group gained knowledge and showed readiness in applying what they had learned and trained for their instruction. It could be concluded that the collaboration of related personnel, particularly teaching staff, was necessary for the human resource development.

The customer strategies were congruent with the findings of Nattapat Wungsrikeaw (2001) who conducted the comparative study of academic achievement on 10th grade students using satellite distance learning media with continuity activities between individual, group of three students, and group of five students. The group of three and five could empower learning more than individual learning. In addition, it was compatible with the concept of creating new learning environments to support effective teaching and learning which focused on learning-centered approach, knowledge-centered approach, community-centered approach, and assessment-centered approach (Riel, 2000 and Atisabda, 2003).

It was found that the strategies on curriculum and instruction, and instructional media and information technology complied with the two studies conducted by Orachorn Janchai (2011) and Pimporn Fonglum (2012). In Orachorn Janchai's research on the development of lower average students' competency by using remedial instruction, data from behavioral observation and students' academic achievement showed the students' higher learning achievement scores, more eagerness in learning, and the increase in their competency after participating in remedial teaching. Similarly, Pimporn Fonglum indicated problems of the instruction concerning the students and the teachers were students' lack of prior knowledge, skills and interest in learning. Besides, the teachers' being strict in classroom, stressful learning atmosphere, no instructional media used in teaching, the teachers' inability to attract students' interest in learning and give clear explanations of the lessons were listed as common problems of learning and teaching. The organizing of remedial instruction once a week was recommended in Fonglum's work. It was also important to create the new learning environments enhancing the students' competencies in such areas as reflection, inquiry, technology-use, and knowledge construction (Atisabda, 2003).

Moreover, strategies on internal process and management corresponded with the previous studies conducted by Kidanan Malithong (2005), Non-formal Education Department (1996) and Somsit Jitstaporn (2002). Malithong made a remark about the timing of interaction in distance learning and suggested that distance learning could be organized in two ways: asynchronous distance learning and synchronous distance learning occurring when the teachers and their students interact in different places but during the same time. In Non-formal Education Department's research, the necessity and advantages of detailed lesson plans and advance preparation of teachers and students at end schools were clearly stated. According to Jitstaporn, when being assigned to do some tasks, students with different learning styles and personalities performed different learning interaction. The observation about students' interaction was made by tracking students' records on the website developed by the researcher as they worked on the tasks assigned throughout the course. Therefore, it was necessary for teachers to be aware of students' learning styles and personalities when organizing learning activities and giving assignments to students.

6. Conclusion

The quality of education in the risk areas of southernmost provinces of Thailand need to be improved in order to support these students to continue their studies in higher education. Technology of distance learning can be an important tool to support and strengthen teaching and learning. The strategies for distance learning to increase academic achievement of high school students in risk areas of the southernmost of Thailand will serve as the guidelines for enhancing the education quality of public schools, private schools, and Islamic private schools, as

well as promoting students' readiness in their further higher education through the use of distance learning technology, strategies encouraging a new approach to learning, and learning network.

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