

ABSTRACT

Title of Dissertation : Distance Learning: A Case Study of Ramkhamhaeng
and Sukhothai Thammathirat Open Universities

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Distance education system is the diversity of the traditional classroom education. It serves the education for the needs of adults and disable or handicapped persons at the earlier period. Correspondence is the primary instructional delivery method. Radio and television broadcasting are the powerful tools for instructional delivery in the later time. Today, the advanced telecommunication technology enhances the education in more widespread areas than ever before. Distance learning is the subset of distance education. Distance learning utilizes the development of telecommunication and computer advancement to achieve the new paradigm of education. Information technology (IT) plays the vital roles to delivery data and information into the multi forms of texts, sound, image and motion. Distance learning employed the capability of information technology (IT) to facilitate the various forms of communication with the miracle and unpredicted outcomes of education as well as the speedy boundless information.

Two open universities in Thailand employ the distance learning system to serve the education, namely Ramkhamhaeng University (RU) and Sukhothai Thammathirat Open University (STOU). Ramkhamhaeng University (RU) serves the distance learning system in parallel form of education where both face-to-face classroom and self-study education are facilitated. Sukhothai Thammathirat Open University (STOU) serves the distance learning system in the distinctive form which based on individualized study or self-directed study.

The main objective of this research is to evaluate the effectiveness of distance learning administration, comparing with RU and STOU, as the impact of the outputs in terms of the students' learning satisfaction and the students' educational effectiveness. The research based on the Gooler's criteria of distance learning administration effectiveness, evaluating on the students' aspects.

The Gooler's seven criteria include access, relevancy to needs and expectations, the quality of the program offered, learner outcomes, effectiveness and efficiency, impact, and generation of knowledge. The acceptability is also included to evaluate the effectiveness of distance learning administration as the outcome.

The research has reviewed various factors in distance learning both qualitative and quantitative perspectives of education as well as the development of distance education and its history.

Three crucial elements to the successful distance education are considered. They are instructional design, technology, and supports. These three elements are used as the influential factors to examine the effectiveness of distance education in this research.

In order to assess the learning satisfaction, the measurement was evaluated on the educational supports, the technological supports, and the educational costs and time spent. The educational supports include the curriculum, faculty, student, and service and staff supports. Technological supports involved the instructional delivery modes, the efficiency of the computer-mediated communication (CMC), human-computer interaction (HCI), and technological utilization.

The measurement of educational effectiveness dealt with the influential factors including the information technology (IT) capability of access, efficiency, and effectiveness. Moreover, the research also studied students' needs and learning barriers, the educational environment, as well as the students' personal information.

This study utilized factor analysis to examine the construct validity of the measurement scales and it also enables us to determine the weight of individual variable, and reduce the number of variables to a set of meaningful interpretation. Reliability was used to check the consistent of variables and the validity of constructs on the measurement scale.

Multiple regression was utilized to determine the causal relationship of the independent variables to the dependent variable. Path analysis was employed to examine the path both in direct and indirect relationships among variables with the standardized coefficient beta values in order to form the path diagram of the causal model.

According to the research results, the research found that the human-computer interaction (HCI) has strongly direct effect on increasing the RU graduate students' learning satisfaction as well as computer-mediated communication (CMC) and the educational supports (curriculum supports, faculty and service supports). This claimed that RU distant graduate students prefer to study with the teacher-student interaction mode, either via the teleconferencing (HCI) or interaction via computer (CMC) such as e-mail and Internet searching. For the STOU graduate students who are self-directed study students, the research indicated that the curriculum supports, the faculty supports with counseling, as well as the interaction with the teacher (HCI) such as telephone and e-mail, are the factors strongly affecting on the students' learning satisfaction.

For the educational effectiveness, the variables such as IT efficiency, access and its effectiveness, learning evaluation, students' expectation and needs, are influencing the educational effectiveness to the RU graduate students as well as the number of dependents. While the IT efficiency, learning evaluation, context of instruction, and number of dependents affect the educational effectiveness to the STOU graduate students. We can conclude that the IT efficiency, learning evaluation and number of dependents are the major independent variables strongly direct affecting to increase the educational effectiveness to both RU and STOU graduate students.

At the undergraduate studies level, the research results determine that curriculum and student supports, instructional delivery modes, and computer-mediated communication (CMC) are the independent variables direct effecting to increase the RU undergraduate students' learning satisfaction. For the STOU undergraduate students, the faculty and student supports, computer-mediated communication (CMC), and human-computer interaction (HCI) are the independent variables direct affecting to increase the STOU undergraduate students' learning satisfaction.

According to the learning satisfaction aspect, the RU undergraduate students - as the self-study students - can also study real time via satellite at the regional campuses. Thus, the curriculum and student supports (learning materials, cassette tape, etc.), the instructional delivery modes and computer-mediated communication (CMC) increase the satisfaction of the students' learning. While the faculty counseling and student supports, human-computer interaction (HCI) and computer-mediated communication (CMC) are satisfying the STOU undergraduate students' learning. Since both RU and STOU undergraduate distant students are self-study students, so we can point out that the student supports and CMC are the necessary and independent variables direct affecting to both RU and STOU undergraduate students.

For the educational effectiveness, IT effectiveness has strong direct effect on both RU and STOU undergraduate students as well as IT accessibility and students' needs have direct effect on the RU students. While the students' expectation has strong effect on the STOU undergraduate students' educational effectiveness.

According to the integrated research results, the RU graduate students' learning satisfaction has direct effect on the effectiveness of distance learning administration at the value of 0.509 while there is no students' learning satisfaction effects on the STOU graduate students. This can be explained that because STOU graduate students are self-directed students and seldom meet their teachers whereas RU graduate students are compulsory to attend class every time. Therefore, the direct effects of the learning satisfaction and the educational effectiveness on the effectiveness of DL administration of RU graduate students are high to 0.509 and 0.656 respectively. The STOU graduate students' educational effectiveness has direct effects on the effectiveness of distance learning administration at the values of 0.478. However, the RU and STOU undergraduate students' learning satisfaction have strong direct effects on the effectiveness of distance learning administration at the values of 0.523 and 0.528 respectively. The RU and STOU undergraduate students' educational effectiveness have direct effects on the effectiveness of distance learning administration at the values of 0.513 and 0.591 respectively.