Problems and likelihoods of the application of e-learning for self-directed learning

Summary: The objective of this paper is aimed to examine the problems and likelihoods of the application e-learning to the courses in the faculties. The results indicated that the e-learning could address the discontinuity of learning in the course by fragmenting the e-curriculum content into modules, thereby resulting that the course is more flexible and reduce the complexities in the necessary search process, transparency in learning process, and readiness of statistics for analysis, ability to work with data in the unlimited number of times. However, primary obstacles relating to e-learning application include a lack of efficient instructors on each subject. Therefore, educational administrators should take measures to solve problems on educational resources, process applicable to the ultimate goals, the educational institution setting, and the recruitment of qualified personnel to the execution of the e-learning.

Key words: e-learning, problem-solving by e-learning, educational administrators.

Posing problems

The reduced number of sessions is caused by both internal and external factors, such as flood, power failure, participation in activities and traditional
holidays. Offsetting classes are found unavailable to the students owing to the lack of the place and time applicable to the students, as well as the incomplete devotion of the instructors on instructional activities. In such cases, it is required that the students are provided with access to a variety of learning materials at any time, and the role of information technology that enables the student’s self-directed learning and to improve student learning performance in addition to the traditional lecture given by the instructor only, designing and development of online media to promote the learning process more intelligible, and importantly, students are allowed to access to the lectures by repeated listening themselves. In addition, when the online media is designed to be more colorful and attractive, it is more likely to stimulate learner behavior as the main host of self-directed learning that conveys a space of communication, information and knowledge, access to a flexible education system, timetables, scope and space, activity arrangement, and communication between instructors and learners, prompting more flexible performance for scheduled exercises and learning. This process is important, especially for part-time students and the full-time students of different provinces. In the case where the students are activated from at home or dormitory when they are busy with personal business, self-directed learning is feasible in parallel. This could reduce the direct transaction costs and guarantee the fulfillment to the course requirements practically.

The development of informal classroom communication is also important nowadays, it not only provides the students with flexibility but also the learning standard. Importantly, it guarantees the access to sources of learning data and improves the quality of their learning as well as reduces the transaction cost of education [9]. The goal of e-learning focuses on overcoming a distance and the use of new technologies to improve e-learning effectiveness beyond the distance education. E-learning is referred to as a communication between learners and self-directed learners through electronic tools, which are invariable with time and space, specific teaching system corresponds to distance education; distance
learning processes are recognized by learners with confirmation of qualification [1, p.36]. Although e-learning technology provides the advantages when applicable to self-directed learning, it does not mean that the authorities or educational administrators can manage them smoothly, it, however, depends on the organization’s restrictions and major factors and problems in the organizations when implemented.

**Research and publications analysis**

E-learning concentrates on student-centered learning processes and programs are designed to meet the individual needs of the students in assisting them to develop thinking ability, improve creativity and independence to activate them to self-development. The program takes into account the individual student’s benefits and to control its self-directed learning. The students are allowed to adapt courses consistently with their self-directed learning scheme, specifically, a sequence of learning and phases independently; evaluation system is objective and independent from the instructors. It allows students to consult their advising faculty member at any time during the period of study and to reduce problems relating to materials and instructional handbooks procurement, implement new programs effectively, more efficient patterns, methods, tools and techniques in education; depending on the quality of the professional preparation [2] and the advantages of new technologies [4].

However, there are restrictions on the online media application; unavailability and ineffectiveness of faculty members in the instructional preparation in the context of e-learning [5]. The contribution of university administrators, which there are a few of e-learning specialists, to instructors and students in the learning process [6], identifying self-directed learners (it is not guaranteed that this self-directed leaner is working on course content), a lack of external motivation and the lack of control, the lack of necessary regulatory framework, copyright issues, and the reluctance of faculty members to open
resources [7], as well as the reproduction of others’ works without references in the knowledge transfer.

**Main content presentation**

On the Economic and Institutional System course, where the students have faced learning problems in the case of power failure precluding the instructors from teaching, and traditional holidays and festivals, e-learning solution can be applied to the problems below.

*Table 1*

**The possible solutions for e-learning courses**

<table>
<thead>
<tr>
<th>Learning problems</th>
<th>Problem-solving by e-learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of motivation to learn, lack of cognition in acquiring knowledge</td>
<td>Transparency of the learning process, rapid availability of statistics for analysis, and the ability to work with data in the unlimited number of times, ability to define the exact criteria for assessing knowledge acquired by the students in the learning process.</td>
</tr>
<tr>
<td>Discontinuity of course learning due to power failure, loudness of construction and festivals</td>
<td>The possibility of fragmenting the content across the e-curriculum into modules; small data, enabling the students to be more flexible and easier to seek for essential content, Transparency of the learning process, rapid availability of statistics for analysis, and the ability to work with data in the unlimited number of times.</td>
</tr>
<tr>
<td>Low level of autonomy of the students</td>
<td>Personal learning control and follow-up of progress, times, works and movement of each student, able to arrange timetable and advise students.</td>
</tr>
<tr>
<td>Low level of learner’s participation in learning process and the low level of expression as host</td>
<td>Possibility to interactive communication with classmates and teachers in any volume via chat, forum and email, Transparency of the learning process, rapid availability of statistics for analysis, and the ability to work with data in the unlimited number of times.</td>
</tr>
</tbody>
</table>

*Sources [10, p. 178]*

As shown in Table 1, e-learning could be ineffective to solve the problems on the discontinuity of course learning due to power failure, the loudness of construction and festivals. Fragmenting the content across the e-curriculum into small data could be effective that the students are more flexible and easier to seek for essential content, transparency of the learning process, rapid availability of
statistics for analysis, and the ability to work with data in the unlimited number of times. One of the most important components of the e-curriculum is that the students are active with student-centered teaching approach.

The learner preparation is more likely to focus on more independent works. E-learning opportunity involves the ability to organize and activate the most relevant areas of the students, communication, the adaption of the preparation process, and time distribution of the independent study to promote individual’s learning path (optional learning modules and the content pattern of the study, etc.) Therefore, student’s self-discipline and self-control could be key factors to their academic achievement (this is why online learning is ideal for students with limited infrastructure and the continuity of teaching on courses).

However, the introduction of electronic media technology, the university may encounter the obstacles across the courses as follows.

Table 2

<p>| Obstacles to the adoption of electronic media technology experienced by the institutions |
|-------------------------------------|------------------------------------------|</p>
<table>
<thead>
<tr>
<th>Establishment</th>
<th>Human Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data access management for the courses</td>
<td>Lack of support for management where Dean draws attention to e-teaching method based on e-media</td>
</tr>
<tr>
<td>No establishment of advising faculty members to develop electronic media for lecture content</td>
<td>Instructor’s skills and expertise in online media development</td>
</tr>
<tr>
<td>Lack of motivation for teachers and students to use learning data and collaboration</td>
<td>The instructors fail to use their teaching potential to electronic media.</td>
</tr>
<tr>
<td>Absence of the defined criteria on instructional course fragmentation in specialty field</td>
<td>The instructors lack of skills and knowledge of the course and fail to present the examples or materials used in the course content</td>
</tr>
<tr>
<td>Absence of performance appraisal criteria for teachers in the online information disclosure course</td>
<td>Division of works on subjects taught should be based on the publication of the electronic media.</td>
</tr>
</tbody>
</table>

Sources [10, p.176]
Data analysis indicated the determinants of success in adopting the e-learning in the learning process include human resources. The educational administrators (chancellor, dean) lack of preparation and have understated the adoption of e-learning to solve the problems, but it becomes an impeding factor in access to data and equitable distribution of workload as the result of the lack of availability of the faculty members, and the interpersonal relationship between the department and the faculty network. The successful adaptation of e-learning in educational institutions is closely related to the quality of the faculty members on the courses and the respective program development.

**Conclusion and future works**

The implementation of the e-learning in the learning process has resulted in the equitability for learners because the learners are able to access to data and information quickly through mobile devices like smartphones. Advantageously, it reduces losses and motivates the self-directed learning. However, the major barriers facing the organizations implementing the e-learning include are human resources factor and the executive's vision, because they have still lacked measures and methods to initiate the selection of instructional management quality and the determination of key performance indicators for e-learning quality assessment. However, the implementation of e-learning in any educational institution, the institution’s administrator is required to decide or support this technology. [8, p.45] The future research should focus on e-learning quality management based on the use of educational resources, learning to achieve goals, the institutional environment, and the recruitment of the qualified personnel to the execution of e-learning development.

**Acknowledgments**

Thank the Institute of Research and Development Thaksin University’s research funds under the annual budget strategies 2015 for sponsorship to this research project.
References