THE ATTITUDES OF VOCATIONAL STUDENTS AT WIMOL BUSINESS ADMINISTRATION COLLEGE TOWARD INTERNET ONLINE LEARNING

by

Mr. Isarawong Kongmebhol

A Final Report of the Three-Credit Course
CE 6998 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Computer and Engineering Management
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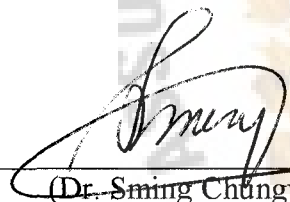
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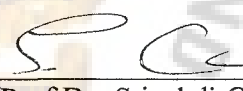Project Advisor   Dr. Sming Chungviwatanant

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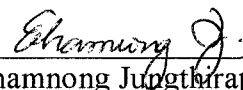
The Graduate School of Assumption University has approved this final report of the
three-credit course. CE 6998 PROJECT, submitted in partial fulfillment of the
requirements for the degree of Master of Science in Computer and Engineering
Management.

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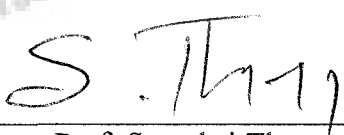# ABSTRACT

This research explored the attitude of students at Wimol Business Administrative College toward the distance learning program, using Internet as a medium (called Internet Online Learning).

The questionnaire used in this study to collect the data in responding the research questions on the agreement of using Internet as a medium in distance learning and satisfaction factors to make a decision to apply in Internet online learning. The collected data were analyzed by using frequency, percentage, crosstab table, and multiple linear regression.

It was found that most of students agreed with using Internet as a medium in online learning. The effective factors in making a decision to apply in Internet online learning were travel, access, time management, and contact.

It was suggested that four main factors (travel, access, time management, and contact) had to be concentrated on launching a new channel of learning. This would help students, who had difficulty to come to school and to access the class, whereas the students needed to manage their own time under the guideline from school, and the Internet service should be provided for students to contact instructors and their colleague.

ACKNOWLEDGEMENTS

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I. INTRODUCTION

The Internet was a worldwide-connected network. Now it could provide many services for our everyday activities such as communication, downloading program, getting information, and doing business.

Some of the education organizations used this technology to raise their service by providing distance learning (called Internet Online Learning). It implied that everyone could learn by himself or herself and everywhere they could access to the Internet.

Most of the big city in Thailand, especially in Bangkok, traffic was always the big problem that wasted a long time for students to go to the school/university. So this should be a good chance for students to have an alternative for learning because the high technology was spreading over country now.

The researcher would collect the information to explore whether students in vocational program satisfy with the Internet as a medium in distance learning.

1.1 Background of the Study

What is Distance Learning?

(1) A distance learning was more than simply a geographic separation of learners and teachers. It was a distance of understandings and perceptions, parting by the geographic distance, which had to be overcome by teachers, learners and educational organizations if effective, deliberate, planned learning was to occur (Moore 1991).

(2) There was a physical distance between the instructors and the students, who were adult learners. The courses were originated on the parent campus, and the students receive through some means of delivery at a remote location (Shomaker 1998).

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(3) The separation of teacher and student and the consequent use of a range of media that enabled the learning process to take place (Taylor 1985).

Distance learning was not a new concept. It had existed for at least a hundred years in one form or another. These were some of the widely used models of distance learning included:

(1)   Word processing.

(2)   Radio.

(3)   Audio cassettes.

(4)   Broadcast television.

(5)   Video Cassettes.

(6)   Video Disc.

(7)   Microcomputers.

(8)   Interactive technology.

(Adams 1985)

Most distance learning programs offered instruction that incorporated combinations of these forms. Like as GSAMS (Georgia Statewide Academic and Medical System) courses were based on a two-way interactive television model that selected the techniques to be used by correspondence, videotape-based, and Internet-based in distance learning models.

1.2 Objectives of the Study

In Thailand, there were some of distance learning programs. But the research focused on Internet Online learning. The study was conducted to explore the attitudes of students at Wimol Business Administration College toward the distance learning program. The research aimed at finding out the answers to the following questions:

(1) Were vocational students interested in Internet online learning?

(2) What were satisfactory factors to make a decision to apply in online learning?

To derive the attitudes of student who was taking vocational program at Wimol Business Administration College. The result of the research would show trend of people thinking about on-line learning by the Internet.

1.3 Importance of the Study

To find out the attitude of the students who took a vocational program with the Online course, should be good for educational organizations to improve the way to serve the students. The Online course could spread the knowledge anywhere that could connect to the Internet and supporting in making a decision in launching a new program for student. It would be possible to use instructional resources from one school to others in teaching courses. To improve educational Quality, distance learning should be considered in its potential to further the mission and goals of an organization or institution as well as to take advantage of any special qualities of the remote location.

1.4 Statement of the Problems and the Hypotheses

Hypotheses

H1: There were significant differences in satisfaction between each faculty.

H2: Students who were working would have more favorable attitude in on-line learning than the ones who were not working.

H3: Students who were familiar with the Internet would have more satisfaction to use an on-line learning than the ones who lacked of Internet skills.

H4: Students who stayed far from school preferred on-line course than the ones who stayed near.

1.5 Research Methodology

The descriptive research was employed in this study to determine the attitude of students of Wimol Business Administration College and the relationship to the other factors. The data for the research was gathered through questionnaire.

1.6 Limitation of the Study

This thesis was limited to the following scope.

The sample of the study would be collected approximately 200 students who enrolled in vocational program in Wimol Business Administration College in second semester of 2001 in Accounting, Marketing, Business Computer, Secretary, Management, Finance and Advertisement.

1.7 Delimitation

The students who were not learning in vocational program and already finish the program in Wimol Business Administration College were excluded.

1.8 Definitions of Term

Distance Learning: it was defined as any formal approaches to learning in which the majority of the instruction occurred while the educator and learner were at a distance from each other

On-line: it was defined as a user which actively used a computer system, especially the Internet, accessible via a computer (or terminal), rather than on paper or other medium.

Internet: it was defined as the largest computer network in the world. A network was a collection of computers that were connected to share information. It offered e-mail, information, programs, entertainment, discussion group, and online shopping. (Marangraphic 1996)

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World Wide Web (WWW): it was defined as the part of the Internet. The web consisted of a huge collection of documents stored on computers around the world. (Marangraphic 1996)

E-Mail (electronic mail): it was defined as the most popular feature on the Internet. It could exchange electronic mail with people around the world. It was fast, easy, inexpensive and saves paper. (Marangraphic 1996)

Bulletin Board, Chat: they were defined as people who could join discussion groups on the Internet to meet people around the world with similar interest. (Marangraphic 1996)

II. REVIEW OF LITERATURE

This review presented research finding and concepts concerning distance learning and the factors that contributed to the success or failure in operating

2.1 History of Distance Learning

Despite its newfound popularity, education at a distance was not new. First came wandering sages, then books and correspondence courses, the written and recorded word, radio, kits of projects and, of late, TV, VCRs, computers and all manner of electronic machinery. Education became a concern of the less privileged in the 19th century when employee began to study as part of employment, as a means of improvement. They were adult learners, different from the children of the past, learning in elite settings. After that there was an invention about studying at home by exchanging letters and discussing guided readings, monitored by frequent tests. The term distance learning was first used in a University of Wisconsin catalogue in 1892 (Shomaker 1998). The development of the distance education mode of teaching proceeded slowly. Teaching consisted largely of printed notes supplemented by face-to-face classes, either at remote study center or at on-campus residential schools. In the early post-war years there was some growth, but it was not until the 1960s that a rapid escalation began (Taylor 1985). In 1960s, the image of distance learning was better, some universities offered full degree programs. After that, the Annenberg CPB New pathways project had recognized the value of teaching designed and organized around the use of video and audiotapes, telephone, computers, e-mail, satellites, microwave, fibre optic, and cable in new formats, telescoping the miles of geographic isolation. With technology improving and information expanding, the convergence was faster than one could contemplate. (Shomaker 1998)

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Some of the programs that were being delivered by higher education institutions through distance learning include (Chute 1998):

(1)   Undergraduate and graduate courses

(2)   Certificate and degree program

(3)   Continuing education

(4)   Staff development and in-service training

Before discussing further about "Distance Learning", it might be more interesting to understand how it could occur. There were two major changes that made it happens. The first had been the invention and proliferation of new technologies to be set alongside the correspondence study guide as well as improvements in ways of teaching by print. The second had been the growth in need- or more precisely "felt need"- for continuing education among adults at all levels. The need appeared to be very large. The need for professional were continuing education, for college level courses, for learning related to family and community concerns, for leisure activities and self-development, and for basic skills. It also appeared that these needs could not be met, nor need to be met, by withdrawing workers and homemakers from their proper places in adult society and sending them back to school. With the aid of modern communications media, education which could be provided at the adult's convenience, when, where, and in whatever ways were the most congenial to the individual. In our colleges, universities, the private home study schools, the armed forced, corporations, and community colleges, and in our media centers, there were many people of great skill who were able, when properly organized, to meet the changing needs of the contemporary adult learners. Organizing and enhancing these skills to meet those needs, was what distance learning is all about (Moore 1987).

2.2 Terminology in the Distance Learning

(1)   A distance that was more than simply a geographic separation of learners and teachers. It was a distance of understandings and perceptions, caused in part by the geographic distance, which had to be overcome by teachers, learners and educational organizations if effective, deliberate, planned learning was to occur. (Moore 1991)

(2)   There was a physical distance between the instructors and the students, who were adult learners. The courses were originated on the parent campus, and the students received through some means of delivery at a remote location. (Shomaker 1998)

(3)   The separation of teacher and student and the consequent use of a range of media that enabled the learning process to take place (Taylor 1985)

2.3 Reasons for Distance Learning

With the baby boom generation no longer providing a seemingly endless supply of students, university and colleges had to find new, non-traditional markets for their services. Increasingly, postsecondary learners would speak multiple languages, living all over the world, and be reached on remote campuses, in government and business work places, and directly in their home. Not only had institutions to develop ways to distribute their basic product "Education" to both traditional and new learner populations, they had to do with shirking budget. Distance learning was a way to meet the changing higher education needs of a dynamic and complex society flexibly (Chute 1998).

The major reason was that the distance learning had provided access to learning to large numbers of people in geographical isolation, social isolation and disadvantage groups. (And that it could be done in a cost-effective manner.) Distance teaching

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techniques could be used to teach people of all ages and to teach courses from a wide range of discipline areas, both vocational and non-vocational. And the last reason was very simple, because it worked by considering the growing number of institution (Taylor 1985).

2.4 Elements or Components of Distance Learning System

Chute (1998) described about the element of distance learning presented here focuses on the people and things that were important elements of the system: learners, content, "process people" (designers, instructors, managers, support staff), communications technologies, and organizational context. When these elements were combined in mutually beneficial and supportive ways, providing for the facilitation and support of the interactions between and among these components, a successful distance learning system was developed.

2.4.1 Learners

It was not just the learners' presence but also the characteristics and needs they brought with them that influenced the design, structure and operation of a distance learning system. These characteristics and needs influence the system as a whole in at least two ways. First, system processes had to be designed to meet learners' needs and take into account their learning characteristics. Second, learner's' thoughts and actions within the system would exert an influence, since any action in one part of the system could not help influencing the other parts. The extent to which learners exerted influence on a distance learning system depended somewhat on the characteristics of the system, such as its size, setting, and purpose.

2.4.2 Content

Content or subject matter was another obvious element of a distance learning system. Content was a main focus or object of both the learner's and the instructor's

activity, and on a superficial level distance learning system might seem to exist for no reason other than to bring learners and content together. However, as with learners, content was a more complex element of the system than one might at first think. Content, like learners, had characteristics and "needs" that influenced the development and operation of a distance learning system.

This intersection of the needs of the content with the capabilities of the technologies had to be an important consideration in designing distance learning systems If decisions about delivery technologies were made without careful consideration of the "needs" of content, the quality of the educational or training activity was likely to suffer, with negative effects on both the learners and the credibility of distance learning as an educational or training alternative.

2.4.3 Organizational Context or Setting

The organizational context of a distance learning program had a strong influence on its ultimate shape or identity. First, this context would determine the purpose or purposes for which people were being brought together to learn a particular content or range of content (e.g., information, knowledge, skills). In purely educational environments, for example, students' learning needs as developing individuals and members of society determined the focus of any educational program, including programs delivered at a distance. These settings both allowed and encouraged the fairly broad range of approaches and outcomes that resulted from differences in students' characteristics, needs, and interests.

Second, the organizational context exerted an influence through its commitment of tangible and intangible resources to a distance education or training program. The extent of philosophical or "moral" support offered by the leadership of an organization had a tremendous impact on both the character and the ultimate success of a program

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within the overall structure of the organization would influence the attitudes of all those in the organization who affected by the program. More pragmatically, the level of leadership support, as reflected in the commitment of financial resources, would determine the types as well as the extent of distance learning programs that could or would be implemented.

2.4.4 Process People

This component included professionals who designed, implemented, managed, and supported the various aspects of a distance learning system. These professionals could be roughly divided into two groups: those directly involved in the learning interaction, such as instructors, and those involved in the support of the system as a whole or the support of specific components of the system. The second group included instructional designers, counselors and other student support staff, administrators and administrative staff, and technical design and support staff. The makeup of this component would change as the distance learning system became mature and changed in response to a constantly changing environment.

2.4.5 Communications Technologies

Obviously, delivery technologies were important elements in a distance learning system. These were the mechanisms that allowed one to extend instruction beyond the confines of the classroom, loosen the constraints traditionally imposed by time and place, and place distant resources within the reach of learners and instructors.

When these four elements were appropriately balanced, they supported and strengthened each other. In other words, it was in the relationship and integration of these elements that the true identity and power of a distance learning system became apparent. Realizing the potential of distance learning required a broader, more comprehensive view of distance learning systems. The system was not a technological

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framework into which learners, content, instructors, and other elements were placed unchanged. On the contrary, each of these elements was an integral, interrelated part of the system and bringing needs as well as contributions to the overall shape and potential of the system.

2.5 Types of Interaction

Moore (1989) explained that distance learning characterized by the separation between learner and instructor. The questions were raised on what level of interaction was essential for effective learning. Distance educators agreed on the importance of three types of interaction, those were learner-content interaction, learner-instructor interaction, and learner-learner interaction. To distinguish among these three types not only would have benefits conceptually, but would also do much to overcome the misunderstandings between educators who used different media.

2.5.1 Learner-Content Interaction

The first type of interaction was interaction between the learner and the content or subject of study. It was the process of intellectually interacting with content that resulted in changes in the learner's understanding, the learner's perspective, or the cognitive structures of the learner's mind.

The oldest form of distance teaching that aimed to facilitate interaction with content was the didactic text. In the medieval times nearly all texts were aimed at instructing, not merely informing, and certainly not at entertaining. In the nineteenth century the use of print for teaching was advanced by the invention of home study guides that accompanied a text, providing explanations of it and directions for its study. In more recent times learners had interacted with content broadcast on radio and television programs, and with electronic recordings on audiotape, videotape, and computer software.

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Some learning programs were solely content-interactive in nature. They were one-way communications with a subject expert (sometimes assisted by an instructional designer), intended to help distant learners in their study of the subject. No other professional teaching expertise was provided, and learning was largely self-directed.

2.5.2 Learner-Instructor Interaction

The second type of interaction, regarded as essential by many educators and as highly desirable by many learners, was the interaction between learner and the expert who prepared the subject material, or some other expert acting as instructor. In this interaction, distance instructors attempted to achieve aims held in common with all other educators. First having planned or been given a curriculum, a program of content to be taught, they seeked to stimulate or at least maintain the student's interest in what was to be taught, to motivate the student to learn, to enhance and maintain the learner's interest, including self-direction and self-motivation.   Then instructors made presentations or caused them to be made. These might be presentations of information, demonstration of skill, or modeling of certain attitudes and values. Next, instructors tried to organize students' application of what was being learned, either the practice of skills that had been demonstrated, or manipulation of infoination and ideas that had been presented. Instructors organize evaluation to ascertain if learners were making progress, and to help decide whether to change strategies. Finally, instructors provided counsel, support, and encouragement to each learner, though the extent and nature of this support varied according to educational level of the learners, the teacher's personality and philosophy, and other factors.

The frequency and intensity of the teacher's influence on learners when there was learner-teacher interaction was much greater than when there was only learner-content interaction. In preparing instruction for learner-content interaction the educator could

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design written and recorded material that aimed at motivating, making presentations, facilitating application, evaluating, and even providing a degree of student affective support. However, the lack of feedback from individual learner to educator made these teaching procedures highly generalized, not individual, leaving ultimate responsibility for maintaining motivation, for interacting with the presentation, for analyzing the success of application, and for diagnosing the difficulty on the learners themselves, requiring a high degree of learner autonomy.

Where interaction between learner and teacher was possible through correspondence or teleconference, the learner came under the influence of a professional instructor and was able to draw on the experience of the professional to interact with the content in the manner that was most effective for that particular individual learner. The long recognized advantage of correspondence instruction was its individual nature. When the correspondence instructor sat with a set of student papers, there was no class, instead, the instructor enters into a dialogue with each individual, perhaps attending to the motivational aspect with one student and to the explanation of a misunderstanding with another. While the students and their instructor were attending to a common piece of presentation (usually in a set text, but quite likely on audio-or videotape), each student's response to the presentation was different, and so the response to each student was different. To some a misunderstanding was explained, to others elaborations were given.

The instructor was especially valuable in responding to the learners' application of new knowledge. Whatever self-directed learners could do alone for self-motivation and interaction with content presented, they were vulnerable at the point of application. They did not know enough about the subject to be sure that they were: (1) applying it correctly, (2) applying it as intensively or extensively as possible or desirable, or

(3) aware of all the potential areas of application. It was for reality testing and feedback that interaction with an instructor was likely to be most valuable.

2.5.3 Learner-Learner Interaction

It was the third form of interaction, a new dimension of distance learning, which would be a challenge to our thinking and practice in the 1990s. This was inter-learner interactive, between one learner and other learners, alone or in group setting, with or without the real-time presence of an instructor. Learner-learner interaction among members of a class or other group was sometimes an extremely valuable resource for learning, and was sometimes even essential.

The principle of specialization of teaching activity and use of communication medium had to be applied to distinguish more deliberately among the three types of interaction described above. Educators needed to organize programs to ensure maximum effectiveness of each type of interaction, and ensured they provided the type of interaction that was most suitable for the various teaching tasks of different subject areas, and for learners at different stages of development (Moore 1989).

In order to induce those three interactions, there was no single super medium. Each communications medium had characteristics that made it especially suited for learners of particular learning styles, for particular fields of knowledge, and for each of the instructor's main activities. Staying with television, for example, it was the preferred medium for transmitting impressions of activities that were too expensive or otherwise unavailable to the learner's own direct experience, such as overseas field visits, microscopic observations, industrial processes, archive film, and interviews with politicians and researchers. Broadcasting was often the most desirable form of television, but sometimes different educational needs required the use of cassettes or disks instead. For distance learning, the learners' needs determined the use of media,

and the media had to be suited to the educational message. Obviously, television was not the appropriate medium for, say, the educational process of learner's self-evaluation. For this process, the distance educator was likely to call on print, perhaps placing a self-testing exercise within a printed study guide. While it was essential that adult and college educators became users, not opposers, of modern communications media, it was also highly desirable that they avoided single medium fixations. Above all, they develop techniques for planning and delivering educational programs that integrated media use to meet well-researched learners' needs.

However, there was a concern that the cost of high quality distance learning course was tremendous. Using a mix of interactive and recorded media, human, and technology-based delivery, was very high and might result in a monopoly market for the producer of that courses.

2.6 Advantages from Distance Learning

The distance learning had widened the vistas of the learning unit and created a worldwide university. Students who had never met were communicating, sharing information, developing ideas and engaging in dialogues about topics in universal application and abstraction that couldn't have been envisioned in ancient Greece (Shomaker 1998).

2.7 Disadvantages from Distance Learning

Distance education was still suffering the disdain heaped on correspondence courses for its isolationist approach. This was compounded by a combination of problems associated with the use of unfamiliar hardware, distance from libraries and the loss of face-to-face contact with students, which both confirmed the ideas of isolationism and reinforced the disdain. Distance learning required trust in the unknown

abilities of the student to assume responsibility for library search, management of study time and problem solving (Shomaker 1998).

2.8 Related Studies

Joanne Dehoney and Thomas C. Reeves (1999) did qualitative study of faculty uses of the Internet at their institution. The goal of the work was to categorize the functions of course Web sites from both researcher and faculty perspectives. Using a qualitative content analysis approach, they first analyzed the functions of 25 publicly accessible course Websites and then interviewed a subset of the sites' authors. Their analysis of the transcripts of five faculty interviewed supported and extended the finding based upon the content analysis of twenty-five class Web pages. Faculty acknowledged both instructional and social benefits derived from their integration of the Web into their traditional courses. Among these benefits were perceived improvements in student attention and time-on-task, fewer requirements for low level communications and enhanced levels of discourse, development of team spirit in classes, and desirable humanizing and equalizing effects. They also found that all sites performed course management functions which were valued by instructors; that a small subset also demonstrated easily implemented, successful, and pedagogically interesting uses of the Web; and that pages in their sample conveyed implicit and explicit social information to students about the class and instructor.

Hilary McLellan (1998) studied model of an Internet-based virtual learning community, with students interacting dynamically with the content, the technology, and, most importantly, each other, offered a powerful and convivial approach to providing education at a distance. The university classes based on over a year of teaching classes entirely via the Internet using bulletin board, electronic mail, and the World Wide Web (WWW), work very effectively as collaborative communities. The

complementary possibilities of both asynchronous virtual learning experiences; students participated in class activities flexibly, at any time of their own choosing and synchronous on-line activities; where all class members were on-line at the same time in a class-wide interactive forum of discussion, questions and answers, brainstorming, and other activities. These Internet-based classes provided a shared experience that was uniquely and deeply participatory and collaborative.

III. RESEARCH METHODOLOGY

This chapter described the methods that were used to attain the objectives of the study. It contained the design of the study, research questions, the subject characteristics, instrumentation, data collection procedures, and the analytical methods.

3.1 Design of the Study

This study made use of the descriptive-correlational method of research. It entailed gathering data and information about vocational students' attitude toward Internet online learning. It also involved correlation analysis to determine the degree of relationship between the selected independent variables and the dependent variables analyzed in the study.

As described by Gay (1996), descriptive research involved collecting data in order to test hypotheses or answer questions concerning the current status of the subject of the study. A descriptive study determines and reports the way things are. One common type of descriptive research involves assessing attitudes or opinions toward individuals, organizations, events, or procedure. While correlational research attempts to determine whether, and to what degree, a relationship exists between two or more quantifiable variables.

Regarding the purpose of finding out the attitude of vocational students at Wimol Business Administration College toward Internet online learning, the study was also intended to describe (a) the relationships between the students' attitudes and some selected demographic feature of the students, (b) significant factors for the students' determination to apply in the Internet online learning.

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3.2 Research Question

This study was designed to answer two research questions already stated in Chapter I which were:

(1)   Were vocational students interested in Internet online learning?

(2)   What were satisfactory factors to make a decision to apply in online learning?

3.3 Descriptions of the Subjects

In the early stage of the research planning period (January 2001), the researcher contacted Wimol Business Administration College and asked for their permission to allow the administration of questionnaire in the Internet Laboratory Room and School Library. The researcher was permitted from Wimol Business Administration College in the middle of January 2001.

The population of this study were vocational students enrolled at Wimol Business Administration College in second semester of 2001. About 2200 students were enrolled in this vocational program. There were two class years, first and second, in eight faculty; accounting, marketing, business computer, secretary, management, finance and advertisement. All population were selected because most vocational students were suitable for the study and the researcher was able to access to the school.

3.4 Instrumentation

3.4.1 Questionnaires

In this study, the questionnaire was administered for two weeks to obtain the data. The written questionnaire was chosen for data collection in this study because it allowed the subjects to respond to the questions anonymously. The respondents remained anonymous because the questionnaires were unspecifically distributed in the

Internet Laboratory Room and School Library. It was assumed that the technique should have made the subjects feel free to answer the questions honestly.

There were two parts of the questionnaire in this study, Part A (Demographic Data of the Respondents) and Part B (Attitude Questions). Part A consisted of three sections: nine demographic questions, three Internet experience questions and two distance learning experience questions. Part B consisted of two sections: two attitude questions in distance learning and eleven questions about factors to apply or not to apply in Internet online distance learning.

The part A of this questionnaire was to ask the subjects to describe about personal information while in part B, the subjects had to respond to the questions as attitude toward Internet Online learning.

The part A of the questionnaire represented the general personal information. There were four main personal information factors to be used in data analysis, (a) distance (assumed from average arrival time of respondents) (b) working experience (c) Internet experience and (d) faculty, in comparing among respondents' attitude in agreement using Internet as a medium for online learning and their four demographic data. In Part B concerned with level of agreement of the factors to apply in Internet online learning. And this part divided into two portions. First portion was for respondents who decided to apply while another was for respondents who decided not to apply. The subjects were asked to respond to answer to the portion they selected. The factors that used in the research were eight factors: travel, access, time management, style, private, modern, cost, and contact.

For the meaning and scope of each factor were described below:

(1) Travel: In the questionnaire travel factor was referred the time saving and the feelings of students not to arrive to school saving in period of time,

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come through the traffic, inconvenient in vehicle and prepare for going to
school.

(2)   Access: The convenient for students to reach the information, course work, and virtual classroom from anywhere not only at the educational institutes or at home, which was not possible in real classrooms.

(3)   Time management: To control speed of learning in each class up to the ability or needs of students. The students should have to control and manage by themselves not like as the traditional class, the speed of class almost controlled by instructors.

(4)   Style: Because of the distance learning used the Internet to be a medium, so the class could used a variety of materials, as WWW and so on. And the contents could be repeated as much as students need.

(5)   Private: To study by themselves alone, not in the same place with others. Students felt free to learn or share the idea in virtual class through Internet more than in traditional class. Sometimes this was not match for students who lacked in the confidence.

(6)   Modern: Satisfaction to use Technology, Internet and computer. Or fell afraid to use technology and not accept the quality of Internet Service.

(7)   Cost: To save cost in learning in distance learning.

(8)   Contact: The students could communicate with instructor via Internet as E-mail, videoconference, and web board while traditional class can communicate with instructor face-to-face in a classroom.

Most factors in the questionnaire were conducted from articles and books in the area of distance learning.

3.4.2 Questionnaire Scoring

In section "Questions about factors to apply distance learning" in Part B, the Likert scale of five scores ranking from 1 to 5 were provided. The respondents were asked to mark "X" on the number indicating the level of agreement with each factor. The scale in each answer was defined as: 1 for strongly disagree (SD), 2 for disagree (D), 3 for neither agree or disagree (N), 4 for agree (A) and 5 for strongly agree (SA).

3.4.3 Questionnaire Administration Procedures

Data were gathered primarily from the questionnaires administered to the vocational student respondents. Questionnaire administration was planned for subjects to spend 15 minutes to complete. To accommodate the administration process, considered by the researcher and school policy, questionnaires were launch in the Internet Laboratory Room and School Library during subjects' usage time in the Internet Laboratory Room or School Library.

3.5 Analysis of Data

All answer were coded and entered into a computer. A second verification was also performed to ensure the correctness of data entry. The analysis of data was carried through the computer program Microsoft Excel and SPSS. For Part A, cross tab table, frequency, and percentage were the statistical methods used for data analysis of research question one. In Part B, the multiple linear regression was the statistical methods for analyze data in order to determine relationships between dependent variable and 8 independent variables. And the 0.05 level of significance ($p < 0.05$) was determined a priori.

The multiple regression was described by Gay (1996), Since a combination of variables usually resulted in a more accurate prediction than any one variable, prediction studies of result in a prediction equation, referred to as a multiple-regression

equation. A multiple-regression equation used variables those were known to predict the criterion individually to make a more accurate prediction; as much as possible, the variables selected should not correlate with each other so that each makes a unique contribution. The regression analysis could be used with data representing any scale of measurement, and it could be used to analyze the result of experimental and casual-comparative, as well as correlational, studies. It determined not only whether variables were related but also the degree to which they were related.

IV. RESULT

This chapter presented the results of the statistical analysis of data collected by using the research instrument described in chapter 3. The results were presented according to the research questions stated in Chapter I and III; starting with the demographic data of the respondents (Part A of questionnaire), and ending with attitude questions (Part **B** of questionnaire).

4.1 Demographic Data

From the total number of approximately 2200 students, 240 students participated in the questionnaire administration. Of 240 respondents, there were forty-two rejected questionnaires because of incomplete. So the responses in this study to be analyzed were a hundred and ninety eight respondents.

Demographic data of the respondents in this study were summarized in Table 4.1. The analysis showed that the ratio of male and female respondent were unequal. About two third of the 198 respondents were female. Most respondents (132 or 66.70%) were between 16 to 20 years of age and 30.30%(60) of respondents were between 21 to 25 years of age. The rest were either less than 16 (1 or 0.5%) or over 25 (5 or 2.5%) years. The most of respondents studied in 5 main faculties in Computer (89 or 44.9%), Hotel (56 or 28.3%), Administer (20 or 10.1%), Marketing (13 or 6.6%), and Accounting (13 or 6.6%). In distance from school, the researcher assumed from average arrival time to school of the respondents so it could be divided into three groups, the near (less than 15 minutes) were 12.6% (25), the moderate (between 16 to 60 minutes) were 63.7% (126), and the far (more than 60 minutes) were 23.7% (47).

About working experience, most of respondents were not working (167 or 84.3%) while working, included part-time and full-time, were only 15.7% (31). From

Table 4.1 it demonstrated that the majority of the respondents had experiences with Internet.

The following diagram summarized the group of respondents in the study.

Table 4.1. Demographic Data Report.

Detail	Group	Frequency	Percent	Cumulative
Age	11-15	1	0.50	0.50
	16-20	132	66.70	67.20
	21-25	60	30.30	97.50
	More than 25	5	2.50	100.00
Sex	Male	67	33.80	33.80
	Female	131	66.20	100.00
Dept	Computer	89	44.9	44.9
	Hotel	56	28.3	73.2
	Administer	20	10.1	83.3
	Marketing	13	6.6	89.9
	Accounting	13	6.6	96.5
	Others	7	3.5	100
Work	Working	31	15.7	15.7
	Not working	167	84.3	100
Internet Experience	Used to	190	96	96
	Never	8	4	100
Period	Near	25	12.6	12.6
	Moderate	126	63.7	76.3
	Far	47	23.7	100

4.2 Result of Data Analysis

The statistical analysis of the data that follow was based on the two research questions postulated in the study.

(1) Were vocational students interested in Internet on-line learning?

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(2) What were satisfactory factors to make a decision to apply in online

learning?

Research question one, was emphasized in Part A, and research question two was

emphasized in Part B of the questionnaire.

4.2.1 Result of Part A

The purpose of this section was to present the comparison of agreement in

Internet online learning with respect to the demographic variables: faculty, distance

from school, working experience, and Internet experience. The frequency, percentage,

and crosstab table were used to determine the relationship between agreement in

Internet online learning and demographic data of respondents.

(1) Attitude between faculty and agreement in Internet online learning

Table 4.2 showed the frequencies and percentage of agreement for

Internet online learning in agree and not agree with faculty. The illustration

in this table showed the agreement of marketing department, ranked first

among the five departments. 100% of marketing members scored within a

group of agree indicating the attitude of total satisfaction toward Internet

online learning. About 95% of three faculty: computer, administer, and

hotel, ranked second third and forth in sequent, this also indicated that the

agreement percentage of faculty tend to be satisfied with Internet online

learning when compared with the 5% who scored within a group of

disagree. The variable with the lowest rank was accounting department,

ranked fifth with only 84.60% of the members agree with using Internet to

be medium for online learning. The result seemed that the accounting

department had different level of agreement in Internet online learning

when compared with others. But in the small size of accounting members, it

was difficult to conclude that there is a significant different between the accounting and the others. So this meant that each faculty member had no different level of agreement in Internet online learning.

Table 4.2. Crosstab Table between Faculty and Agreement in Internet Online Learning.

Facult y	Agree		Disagree		Rank
	F	%	F	%	
Computer	85	95.50%	4	4.50%	2
Administer	19	95.00%	1	5.00%	3
Marketing	13	100%	-	-	1
Hotel	53	94.60%	3	5.40%	4
Accounting	11	84.60%	2	15.40%	5
Others	7	100.00%	-	-	-
Total	188	94.90%	10	5.10%	

Note: F represents frequency distribution

(2) Attitude between distance and agreement in Internet online learning

Table 4.3 showed the frequencies and percentage of agreement for Internet online learning in agree and not agree with distance from school. In this section, the researcher assumed distance from school into three categories: near, moderate, and far. They represented that the respondents who came to school within fifteen minutes were near group, sixteen to sixty minutes were moderate group, and greater than sixty minutes were far group. The illustration in this table showed the agreement of near group, ranked first among the three groups. 100% of near group scored within a group of agree indicating the attitude of total satisfaction toward Internet

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online learning. About 95% of the rest, this also indicated that the agreement percentage of distance tend to be satisfied with Internet online learning when compared with the 5% who scored within a group of disagree. This meant that the distance had no different level of agreement in Internet online learning.

Table 4.3. Crosstab Table between Distance and Agreement in Internet Online Learning.

Distance	Agree		Disagree		Rank
	F	%	F		
Near	25	100.00%	-	-	1
Moderate	118	93.70%	8	6.30%	3
Far	45	95.70%	2	4.30%	2
Total	188	94.90%	10	5.10%	

Note: F represents frequency distribution

(3) Attitude between working and agreement in Internet online learning

Table 4.4 shows the frequencies and percentage of agreement for Internet online learning in agree and not agree with working experience. In this section, the researcher assumed working experience into two categories: working and not working, grouping working from part-time and full-time working. The illustration in this table showed the agreement of both groups; about 95% of respondents, tended to be satisfied with Internet online learning when compared with the 5% who scored within a group of disagree. This meant that the working experience had no different level of agreement in Internet online learning.

Table 4.4. Crosstab Table between Working and Agreement in Internet Online
Learning.

Working	Agree		Disagree		Rank
	F	%	F	%	
Working	29	93.50%	2	6.50%	2
Not Working	159	95.20%	8	4.80%	1
Total	188	94.90%	10	5.10%	

Note: F represents frequency distribution

(4) Attitude between Internet experience and agreement in Internet online

learning

Table 4.5 showed the frequencies and percentage of agreement for

Internet online learning in Agree and Not Agree with Internet experience.

The illustration in this table showed the whole of Never Using Internet

group (100% of this group scored within a group of agree) totally satisfied

toward Internet online learning. About 95% of another group also indicate

that the agreement percentage of Internet experience tended to be satisfied

with Internet online learning when compared with the 5% who scored

within a group of disagree. This meant that the Internet experience had no

different level of agreement in Internet online learning.

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Table 4.5. Crosstab Table between Internet Experience and Agreement in Internet
Online Learning.

Internet	Agree		Disagree		Rank
Experience	F	%	F	%	
Used to	180	94.70%	10	5.30%	2
Never	8	100.00%		-	1
Total	188	94.90%	10	5.10%	

Note: F represents frequency distribution

4.2.2 Result of Part B

The purpose of this section was to present the level of satisfaction factors to make

a decision to apply in online learning. The frequency, percentage, and regression

analysis were used to determine the satisfaction factors to make a decision to apply in

Internet online learning.

The range of scores on the questionnaire was from 1 to 5, with a score of 5 being

the highest level of satisfaction. These scores were grouped into three categories (1-

2,3,4-5) to be determined in this analysis. They were also ranked according to level of

agreement.

The factors that the researcher used in this study to indicate the effect to make a

decision to apply in Internet online learning, were eight factors: travel, access, time

management, style, private, modern, cost, and contact.

The following diagram summarizes the frequencies and percentages of each

factor toward the level of agreement to applying the Internet online learning.

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Table 4.6. Frequency and Percentage of Agreement Level in Internet Online Learning.

| | | Level of Agreement in Applying in Internet online learning | | | | | |
| | | 1-2 | | 3 | | 4-5 | |
		F	%	F	%	F	%
Travel	Apply	3	2.7%	20	17.7%	90	79.6%
	Not Apply	36	42.4%	38	44.7%	11	12.9%
Access	Apply	4	3.5%	22	19.5%	87	77.0%
	Not Apply	56	65.9%	20	23.5%	9	10.6%
Time Management	Apply	7	6.2%	18	15.9%	88	77.9%
	Not Apply	53	62.4%	24	28.2%	8	9.4%
Style	Apply	8	7.1%	10	8.8%	95	84.1%
	Not Apply	14	16.5%	43	50.6%	28	32.9%
Private	Apply	8	7.1%	21	18.6%	84	74.3%
	Not Apply	26	30.6%	33	38.8%	26	30.6%
Modern	Apply	3	2.7%	13	11.5%	97	85.8%
	Not Apply	30	35.3%	22	25.9%	33	38.8%
Cost	Apply	10	8.8%	33	29.2%	70	61.9%
	Not Apply	49	57.6%	23	27.1%	13	15.3%
Contact	Apply	10	8.8%	29	25.7%	74	65.5%
	Not Apply	51	60.0%	22	25.9%	12	14.1%

Note: F represents frequency distribution

This table showed the frequencies and percentage of agreement level in applying in Internet online learning. To compare the level of agreement for the respondents, who decided to apply and not to apply, they were summarized in the same table. To assume that each factor effected to applying decision, the result of two groups of respondents (who decided to apply and not to apply) should be contrast to each other. Like as first group scored within the group (4-5) category while another group scored in the group

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(1-2) category. So the applying decision in Internet online learning varied to this factor.

The illustration about the level of agreement in making a decision to apply Internet online learning with each factor was described below:

(1) The travel factor: 79.6% of respondent, who decided to apply, scored within the group (4-5) category. That was contrast with another group, who decided not to apply, 44.7% of the second group scored within the group (3) category and 42.4% of the second group scored within the group (1-2) category. This also indicated that the travel factor should be one of the effect factors to make a decision to apply.

(2) The access factor: most of respondents (77.0%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, 65.9% of this group scored within the group (1-2) category. This also indicated that the access factor should be one of the effect factors to make a decision to apply.

(3) The time management factor: most of respondents (77.9%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, 62.4% of this group scored within the group (1-2) category. This also indicated that the time management factor should be one of the effect factors to make a decision to apply.

(4) The style factor: most of respondents (84.1%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, 50.6% of this group scored within the group (3) category and 32.9% of this group scored within the group (4-5) category. This indicated that the style factor had no trend, and assumes that this factor was not the factors that effected applying decision.

(5)   The private factor: most of respondents (74.3%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, spread the score into three category as 30.6% within (4-5) category, 38.8% within (3) category, and 30.6% within (1-2) category. This indicated that the style factor had no trend, and assumes that this factor was not the factors that effected applying decision.

(6)   The modern factor: most of respondents (85.8%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, spread the score into three category as 35.3% within (4-5) category, 25.9% within (3) category, and 38.8% within (1-2) category. This indicates that the modern factor had no trend, and assumed that this factor was not the factors that effected applying decision.

(7)   The cost factor: most of respondents (61.9%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, 57.6% of this group scored within the group (1-2) category. This also indicated that the cost factor should be one of the effect factors to make a decision to apply.

(8)   The contact factor: most of respondents (65.5%), who decided to apply, scored within the group (4-5) category. In another group, who decided not to apply, 60.0% of this group scored within the group (1-2) category. This also indicated that the contact factor should be one of the effect factors to make a decision to apply.

The result from Table 4.6 could conclude that there were eight factors to be examined. Three of eight factors (style, private, and modern) could be cut off because they had no trend to indicate the relation to the apply decision for Internet online

learning. While others factors (travel, access, time management, cost, and contact) seemed to have trend to the apply decision. So the researcher selected five factors to be examined by regression analysis to test the relation between five factors and the applying decision.

Table 4.7. Regression Analysis Result between Five Factors and Applying Decision.

Variables	Unstandardized Coefficients		Standardized Coefficients		
	R	Std. Error	Beta	t	Sig.
(Constant)	-0.731	0.064		-11.341	0.00
TRAVEL	0.12	0.018	0.316	6.575	0.00
ACCESS	0.113	0.019	0.326	5.905	0.00
TIME MGT.	0.07629	0.022	0.192	3.403	0.001
COST	0.02764	0.018	0.079	1.552	0.122
CONTACT	0.05824	0.018	0.158	3.218	0.002

Dependent Variable: APPLY

The result of regression analysis showed in the table, which used only five factors to be analyzed in this study. The table was concerned with the parameter of the model. The first part pf the table gave us the individual contribution of each variable to the model. If the 13 values replaced into the equation, it could define the model as in equation (1).

Applying Decision =130 +131 travel + 132 access $\top$ p_3 time management + P4 cost

+ P5 contact

= -0.731 + 0.12 travel + 0.113 access + 0.076 Time management

+ 0.28 cost + 0.058 contact   equation (1)

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The 13 value referred to the relationship between applying decision and each factor. If the value was positive, there was a positive relationship between the dependent variable (applying decision) and each independent variable (travel, access, time management, cost, and contact). For these data all five independent had positive 13 values indicating positive relationships. So each five independent values increased (as agreement in travel, access, time management, cost, and contact factors for applying in the Internet online increase), the applying decision would be increased. And the 13 values told the degree each independent variable affected the outcome if the effects of all other independent variables were held constant.

A t-statistic could be derived that tests whether a 13 value was significantly contributed to the model. Therefore, if the t-test associated with a p value was significant (if the value in the column labeled Sig. is less than 0.05) then the independent variable was making a significant contribution to the model.

The analysis of regression was summarized in Table 4.7. And the result of each factor in the table were described as follows:

(1)　Constant ((3 = -0.731): the value of significant level oft was 0.00, and it was less than 0.05. So the coefficient of constant in the model was significant to the regression model.

(2)　Travel factor 03 = 0.12): This value indicated that as the agreement in travel factor increases, the applying decision increases. And the value of significant level oft was 0.00, and it was less than 0.05. So the travel factor was significant predictor of applying decision.

(3)　Access factor ((3 = 0.113): This value indicated that as the agreement in access factor increases, the applying decision increases. And the value of

significant level of t was 0.00, and it was less than 0.05. So the access factor was significant predictor of applying decision.

(4)   Time management factor (($3 = 0.076$): This value indicated that as the agreement in time management factor increased, the applying decision increased. And the value of significant level oft was 0.001, and it was less than 0.05. So the time management factor was significant predictor of applying decision.

(5)   Cost factor (($3 = 0.28$): This value indicated that as the agreement in cost factor increases, the applying decision increases. But the value of significant level of t was 0.122, and it was greater than 0.05. From this result, regression coefficient of cost factor was rejected. So the regression coefficient of cost factor was 0. And the cost factor was not significant predictor of applying decision.

(6)   Contact (($3 = 0.058$): This value indicated that as the agreement in contact factor increases, the applying decision increases. And the value of significant level of t was 0.002, and it was less than 0.05. So the contact factor was significant predictor of applying decision.

Rejection of cost coefficient in the regression model implied that the cost factor had no significant to the regression model. So in the next step, the rest of independent variables were used in regression analysis, without cost factor to be analyzed.

The result of regression analysis of revised factors was summarizes in the Table 4.8.

Table 4.8. Regression Analysis Result between Four Factors and Applying Decision.

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	-0.725	0.065		-11.227	0.00
TRAVEL	0.13	0.017	0.343	7.604	0.00
ACCESS	0.116	0.019	0.334	6.053	0.00
Time mgnt	0.08251	0.022	0.208	3.727	0.00
CONTACT	0.06387	0.018	0.173	3.59	0.00

Dependent Variable: APPLY

The result from regression analysis of each factor in the Table 4.8 were described as follows:

(1)   Constant (13 = -0.725): the value of significant level of t was 0.00, and it was less than 0.05. So the coefficient of constant in the model was significant to the regression model.

(2)   Travel factor ((3 = 0.13): This value indicated that as the agreement in travel factor increased, the applying decision increased. And the value of significant level oft was 0.00, and it was less than 0.05. So the travel factor was significant predictor of applying decision.

(3)   Access factor ((3 = 0.116): This value indicated that as the agreement in access factor increased, the applying decision increased. And the value of significant level of t was 0.00, and it was less than 0.05. So the access factor was significant predictor of applying decision.

(4)   Time management factor W. = 0.083): This value indicated that as the agreement in time management factor increased, the applying decision

increased. And the value of significant level oft was 0.00, and it was less than 0.05. So the time management factor was significant predictor of applying decision.

(5) Contact (13 = 0.064): This value indicated that as the agreement in contact factor increased, the applying decision increased. And the value of significant level of t was 0.00, and it was less than 0.05. So the contact factor was significant predictor of applying decision.

From the above results of regression analysis in the Table 4.8, it defined the regression model as in equation (2).

Applying Decision = -0.725 + 0.13 travel + 0.116 access + 0.083 Time management + 0.064 contact   equation (2)

From equation (2), there was positive relationship between applying decision and each four factors (travel, access, time management, and contact). So, as level of agreement in travel increased, applying decision increased; as level of agreement in access increased, applying decision increased; as level of agreement in time management increased so do applying decision; and finally more level of agreement in contact would increase applying decision.

V. CONCLUSIONS AND RECOMMENDATIONS

This chapter represents the summary of the study. An overview, summary, and discussion of the study findings were briefly described respectively. This would be followed by the recommendations for further research. The purpose of this study was to determine if vocational students were interested in Internet on-line learning.

The purposes of the study were to explore the attitudes of students at Wimol Business Administration College toward the distance learning program.

The study was designed to answer the following research questions:

(1)   Were vocational students interested in Internet on-line learning?

(2)   What were satisfactory factors to make a decision to apply in online learning?

The questionnaire used in this study was composed of two parts. The first requested demographic data of the respondents in terms of faculty, distance between home and school, working experience, and Internet experience. The second requested the respondents to rate level of agreement in applying in Internet online learning to eight factors. These eight items were travel, access, time management, style, private, modern, cost, and contact.

The data collected were analyzed using the following statistics. In research question I; frequency, percentage, and crosstab table were used to determine relationship between agreement to use Internet as medium of online learning and demographic data of students. And in research question II; frequency, percentage, and multiple linear regression analysis were used to analyze the effect from eight factors to the applying decision in Internet online learning.

5.1 Summary of the Findings

A summary of findings pertaining to each research question follows:

5.1.1 Research Question I

Were vocational students interested in Internet on-line learning?

In this part, the study explored the answers to test four hypothesis as follows:

H1: There were significant differences in satisfaction between each faculty.

H2: Students who were working would have more favorable attitude in on-line learning than the ones who were not working.

H3: Students who were familiar with the Internet would have more satisfaction to use an online learning than the ones who lacked of Internet skills.

H4: Students who stayed far from school prefer on-line course than the ones who stayed near.

Testing Hypothesis

H1: From the result of Table 4.2 it indicated that each faculty had no different level of agreement in using Internet as a medium in online learning. So the hypothesis (H_1) was rejected.

H2: From the result of Table 4.3 it indicated that the distance had no different level of agreement in using Internet as a medium in online learning. So the hypothesis (**H2)** was rejected.

H3: From the result of Table 4.4 it indicated that the working experience had no different level of agreement in using Internet as a medium in online learning. So the hypothesis (H_3) was rejected.

H4: From the result of Table 4.5 it indicated that distance from school had no different level of agreement in using Internet as a medium in online learning. So the hypothesis (H_4) was rejected.

The major of findings that resulted from the present study were as follows:

(1)   There was no significant different between faculty in using Internet as a medium for online learning.

(2)   There was no significant different between working experience in using Internet as a medium for online learning.

(3)   There was no significant different between Internet experience in using Internet as a medium for online learning.

(4)   There was no significant different between distance from school in using Internet as a medium for online learning.

5.1.2 Research Question II

What were satisfactory factors to make a decision to apply in online learning?

As indicated by the regression analysis (Table 4.8), there was positive relationship between applying decision and each four factors (travel, access, time management, and contact). So, as level of agreement in travel increases, applying decision increases; as level of agreement in access increase, applying decision increases; as level of agreement in time management increases so do applying decision; and finally more level of agreement in contact would increase applying decision.

5.2 Discussion

Discussion concerning the results of each research question were as follows:

5.2.1 Research Question I

Were vocational students interested in Internet on-line learning?

The data showed that the students at Wimol Business Administrative College perceived most of students (188 or 95%) agreed with using Internet as a medium in online learning while compared with 5% of them.

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5.2.2 Research Question II

What were satisfaction factors to make a decision to apply in online learning?

The applying decision with Internet online learning was related to the level of four factors, which were travel, access, time management, and contact. And the relation of them was positive, which meant that if level of agreement in each factor increased so as the applying decision.

5.3 Conclusions

Education was a process and a chain of activities in which man was involved through his life. Human resource was important. The way to develop human resource was to improve quality of life and work for people through providing further education. However educational opportunities at the highest level were limited as a result of limited resources. The economical and efficient approach to expand educational opportunities without exceeding limited resources was to democratize education. Distance learning systems facilitated the democratization of higher education in mass society (Unesco 1983).

Just as previous centuries experienced their technological revolutions — the `agricultural' and 'industrial' revolutions that radically changed the worldwide patterns of production and distribution — so the twentieth century was said to be experiencing a `communications revolution' that was affecting the world situation, not least the world of learning. At the center of that 'revolution' were communication technologies. Some are long established, like radio, television and telephones. Others such as satellites, optical fibre, microcomputers and video recording on tape or video disc are quite new. Among the older ones, radio and television broadcasting had been improved, adapted, put to new uses or linked with newer communications technologies. The result was wider distribution, greater accessibility and more clarity, consumer control and

economy. They had also been improved by techniques that enhance recording, text screening and printing and the editing and manipulating of recording. (Adams 1985)

In Thailand, distance learning utilized printed self-instruction course materials accompanied by audio cassettes constitute the principal medium of instruction. These were supplemented by radio and television programmes. Equally important was the provision of a certain degree of personal contact in the form of tutorial sessions held at study centers in every province. (Unesco 1985) From the evolution of communication and technology, the technology was used for distance learning to bridge the geographical gap. It was a dramatically accelerated responsiveness to learners, encompassing worldwide knowledge, idea, and collective thinking Technology provided the ability for dialogue and debate among faculty, students and a global network of scholar and experts, creating a sense of community among the learners and faculty and facilitating collaborative work among students. (Shomaker 1998)

Although the Internet service was first widespread in the universities, now the Internet could be utilized in any level of education, especially in vocational level. The Internet online learning could support in development for vocational education system. So this research focused on the vocational students at Wimol Business Administrative College to explore the attitude of vocational students toward using the Internet as a medium for distance learning, and the significant factors that impacted to make a decision to apply in Internet online learning.

From the result of the research, 95% of students agreed with using Internet as a medium in distance learning with no significant different between the demographic data of vocational students, as each faculty, distance from school, working experience, and Internet experience. So it could conclude that the vocational students at Wimol Business Administrative College agree to use Internet as a medium in distance learning.

With the study of factors to impact with the apply decision in Internet online learning, the satisfaction factors were travel, access, time management, and contact. In travel factor it was referred to the time saving and the feelings of students not to arrive to school saving in period of time, through the traffic, inconvenient in vehicle and prepared to go to school. Travel factors was referred to convenient for students to reach the information, course work, virtual classroom from anywhere not only at the educational institutes or at home, which was not in real classrooms. Time management was to control speed of learning in each class up to the ability or needs of students. The students should have to control and manage by themselves not like as the traditional class, the speed of class almost controlled by instructors. And the contact factor was referred to the ways, that students could communicate with instructor via Internet as E-mail, videoconference, and web board while traditional class can communicate with instructor face-to-face in a classroom.

It seemed that the vocational students focus on the four factors to apply in the Internet online learning. So in the future, the four factors (travel, access, time management, and contact) were the most importance things for creating the Internet online learning for vocational students.

5.4 Recommendations for Future Research

It was suggested that there were four main factors (travel, access, time management, and contact) to be concentrated for launching a new channel of learning. This would help for students, who were difficult to come to school, to access the class. While the students needed to manage their time by themselves with guideline from school. And the Internet service should be provided for students to contact instructors and their colleague.

The result of this study was scoped only in vocational students at Wimol Business Administrative College. To generalize with the vocational students the study should be covered to the vocational institutes throughout Thailand.

APPENDIX A

QUESTIONNAIRE (In Thai)

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VIIIT:;M1411.1f111Lf111U1111VD11D111 liiallt111$1111 1111ïff=t1i11O†111fl6itIll

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18. filutpnynAliuni5Litm1441tionaDA	1	2	3	4	5
19.11311151.1AU1/100114W1	1	2	3	4	5
20. e1111a1f1M4	1	2	3	4	5
21. nf1111.16MArill,a111-1f11711611	1	2	3	4	5
22. ijf1111111ffiflYMMTWODf1171101-1f115TIVI4	1	2	3	4	5
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APPENDIX B

QUESTIONNAIRE (In English)

The Attitudes of Vocational Students at Wimol Business Administration College toward Internet Online Learning

The purpose of this questionnaire is to understand how vocational students at Wimol Business Administration College think about the use of the Internet in distance learning. This questionnaire consists of two parts;

  (3) Respondent's demography
  (4) Attitude measurement.

     If you are a vocational student at Wimol Business Administration College, please take a few minutes to answer the following brief questionnaire

Thank you for your help.

_____

Isarawong Kongmebhol
Graduate Student
MS (CEM)
Assumption University
Add.

Part I: Respondent's demography

Instructions:

There are 13 questions that will be used to interpret the result of the study. Most questions require that you answer by marking "X" in the box, except question 4, 6, and 8 that ask your filling in the blank. Please answer all the questions that pertain to you.

1. Age   11-15 years   16-20 years   1-25 years   ver 25 years

2. Gender: [Male   [Female

3. Year   First year   Second Year

4. Faculty   _____

5. Working   [Part-Time riTot Working
Experience

6. Address   Street   District   _____

7. Arrival By [Pus   Ship/Boat   rain

                FITaxi   FlPrivate Car   ⬜thers

8. Arrival   Hr. _____   Min.
Time (approx.)

9. Have you ever used Internet before?

                [Yes   alo

10. How many hours that you used Internet in a week?

                F10-10   11-20   F121-30   ⌐Myer 30

11. Where to use Internet?

                riSchool   [Home   [Internet Shop

12. Have you ever heard about Distance Learning before?

                [Yes   LIN°

55

13. If you ever heard about Distance Learning, what are the mediums to be used in Distance Learning? (Able to answer more than one answer)

[TV/Radio riTape TIVDO

[Printed Media[CD-Rom riInternet

Part II: Attitude Questions
Instructions:
1. 12 questions are presented that deal with your attitude toward distance learning
2. Please respond to every possible answer by marking a number between 1 to 5.
3. The number indicates the level you agree or disagree with the statement. There is no right or wrong answer.

Example:

How much do you agree with the statement?

SD D N A SA
1 2 X 4 5

Note: SD   Strongly disagree
D   Disagree more than agree
N   Neither agree nor disagree
A   Agree more than disagree
SA   Strongly agree

14. Do you agree to use Internet as a medium for Distance Learning?

[1Agree   [Not Agree

15. If the school launch new program of Internet online learning (Distance Learning using Internet as a medium), do you decide to apply in this program.

[Apply   [Mot Apply

If you decide to apply in Internet online learning, please answer in next page. (Page 3)
Or if you decide not to apply in this program, please answer in Page 4.

If you decide to apply in Internet Online learning, Please answer all question in this page.

What is the level of agreement to make a decision to apply in Internet online learning? (Distance learning with Internet as a medium)

	SD	D	N	A	SA
16. Saving arrival and preparing time for going to school / No need to come to school	1	2	3	4	5
17. Able to access the class from everywhere by Internet	1	2	3	4	5
18. Control the speed of learning by yourself	1	2	3	4	5
19. Able to Manage schedule or time spent in each class by yourself	1	2	3	4	5
20. Repeatable Material so you can study it as much as you need	1	2	3	4	5
21. Privacy study, feel free to sharing idea via e-mail or bulletin board	1	2	3	4	5
22. Variety of material to use in class as html document, e-mail, video conference etc.	1	2	3	4	5
23. Modern Technology	1	2	3	4	5
24. Cost saving	1	2	3	4	5
25. Easily contact to instructor via e-mail, videoconference etc.	1	2	3	4	5

Thank you for your answer
Isarawong K.

If you decide not to apply in Internet Online learning, Please answer all question in this page.

What is the level of agreement to make a decision not to apply in Internet online learning? (Distance learning with Internet as a medium)

	SD	D	N	A	SA
16. Satisfy to come to school	1	2	3	4	5
17. Be used to learn with white board, over head projector in class	1	2	3	4	5
18. Follow each subject up to the instructor's speed (no need to control by yourself)	1	2	3	4	5
19. Prefer to learn in classroom among other Students	1	2	3	4	5
20. Prefer interact with instructor in face-to-face	1	2	3	4	5
21. Lack of confidence when study by Yourself	1	2	3	4	5
22. Lack of computer skill or Internet skill	1	2	3	4	5
23. Low quality in Internet service or difficult to connect the Internet	1	2	3	4	5
24. Difficult to acquire a computer set	1	2	3	4	5

Thank you for your answer
Isarawong K.

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