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### ABSTRACT

Background: With the growing acceptance of web-enhanced courses, the Physical Therapy Department of the College of Rehabilitation Sciences, implemented the e-Learning Access Program (e-LeAP) of University of Santo Tomas (UST) on some major courses. Objective: To determine the acceptance and attitudes of students on web-enhancing their courses including motivating factors and impediments affecting their usage. *Methodology*: Third, fourth and fifth year UST-PT students in academic year 2006-2007 who satisfied the inclusion criteria were recruited for this study. A questionnaire was formulated based on existing course evaluation forms and focus group discussions and was subjected to content validity by experts in PT education and e-learning. The questionnaire was pilot-tested on five randomly selected participants from each year level. The questionnaires were then handed out during class and returned immediately upon completion. Data was analyzed using mean, frequency, percentage and Chi square test to determine association between the following variables -year level, frequency of usage, technicalities and level of satisfaction to the service delivery. Results: Of the respondents, 63.17% agreed and 13.29% strongly agreed that they are satisfied with the services provided by e-LeAP and 95% recommends its continued use for the next school year. Conclusion: E-Learning is an acceptable and useful supplement to face-to-face delivery of Physical Therapy courses but improvements need to be done for more efficient service delivery. Future studies should be done to objectively measure the direct effects of web-enhanced courses to students' actual class performance and learning.

Keywords: physical therapy; education; e-learning

#### INTRODUCTION

Physical Therapy (PT) students are required to take a 5-year undergraduate degree program before taking the licensure examination and later on practicing the profession. The Bachelor of Science in Physical Therapy (BSPT) curriculum is composed of four years of classroom-based instruction and one year of clinical practicum. Students study general education and professional lecture and laboratory courses totaling 208 units<sup>1</sup> which are mostly delivered using face-to-face methods of teaching, in which the instructor and the students are physically present in the same room, discussing lessons to be learned.

With the emergence of Internet and advancements in the field of educational

technology, more pedagogical strategies are made available to facilitate learning. This brings forth what is now known as e-Learning.

Electronic learning (e-learning) is also known as open learning, distance learning, online learning, and networked learning.<sup>2</sup> It is an alternative form of acquiring and disseminating information by utilizing technology through the use of computers and the World Wide Web to deliver, interact or facilitate information among learners.<sup>3</sup> In short, e-learning is education via computers over the Internet.<sup>4</sup>

In order to provide the entire academic community a technology-based learning, the University of Santo Tomas (UST) launched its e-Learning Access Program (e-LeAP) in August 2001.<sup>5</sup> This was implemented using Blackboard<sup>®</sup> as its Learning Management System.<sup>6</sup> This application software

offers a variety of web-based tools and creates custom learning paths to encourage student participation through communication, collaboration, on-line activities and resources, discussion forum, grade book and evaluation.<sup>7</sup> Having launched the program, UST encouraged all colleges to utilize Blackboard to complement classroom teaching in the different courses.

CRS implemented e-LeAP in 10 major PT courses in the academic year 2006-2007 to keep up with this advancement in order to carry on the high standard and quality of education it has been contributing to PT. These were Therapeutic Exercises 1 and Introduction to Patient Care for the 3<sup>rd</sup> year students; Therapeutic Exercise 2, Therapeutic Exercise 3, Clinical Education, Physical Therapy 4 and PT Seminar for the 4<sup>th</sup> year students; Internship 1, Internship 2 and Decury for the 5<sup>th</sup> year PT students. Instructors of these courses expressed their interest to complement their classroom-based instruction with web-enhancements through the creation of Blackboard<sup>®</sup> course sites.

And after almost one school year of usage, the researchers would like to know the impact this elearning initiatives in the BSPT program has made among the students who are the primary beneficiaries of this project.

#### Web-Enhancing Courses

Blackboard<sup>®</sup> features like Announcement, Staff Information, Course Documents, Class Notes, Online Activities, Discussion Board and Grade book were utilized.

The Announcement section is valuable in disseminating information like schedule changes and updates on contents and grades to all users of the course. The Staff Information portion presents the faculty profile including contact data and consultation hours to the students. The Course Documents segment orients the students to the course description, objectives, outline, schedule, required materials, evaluation procedures, grading system and references. In the Class Notes page, the students see the lectures, hand outs, power point presentations and web links of each topic even before the professor delivers the lecture in the classroom. This facilitates the student-content interaction mode of e-learning. The administration of On-line Activities like assignments, educational web-based games and treasure hunts train the students to explore the almost boundless resources offered by the World Wide Web in search for answers. The Discussion Board provides the venue for the exchange of ideas of all users of the course site. Online discussion can be a great means for student participation in the subject matter.<sup>8</sup> The Grade Book records and shows the scores of the student from quizzes, exams, projects, recitation and assignments. A student can only get to see his or her own scores, so confidentiality is exercised.

#### Objectives

This study primarily aims to determine the general acceptance and attitude among 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> year PT students on the incorporation of webenhancements in their major courses by identifying the underlying dimensions, including motivating factors and impediments, that affect their utilization of the course sites created. This study also intends to establish the correlation among the following variables: frequency of usage, e-learning technology features and infrastructure, and level of satisfaction.

#### Significance of the Study

Through this study, students, the main recipients of this enhancement, will have the opportunity to give their feedback, which will then serve as the basis for planning and implementing improvements on e-Learning applications. With a strong foundation, this could give rise to distance education, whereby students anywhere in the Philippines or even around the world, could take their courses under UST without being physically present. And through this, UST-CRS can and will continuously produce globally competent and highly equipped physical therapists.

#### METHODOLOGY

#### **Research Design**

This study employed a descriptive non-experimental correlational study design through the administration of survey questionnaire. The methodology and procedures have been reviewed and found acceptable on ethical grounds by the Research Ethics Board of the UST Research Center for Health Sciences (RCHS) of the Faculty of Medicine and Surgery. No intervention was involved.

#### Development of the questionnaire

The initial draft of the questionnaire was developed based on existing course evaluation forms and focus group discussion among student researchers involved in the study to identify key themes and issues. The draft then underwent content and construct validation from evaluators composed of UST PT professors and experts in the field of educational technology. Based on their feedback, refinements were made as regards the content and wording of questions including the limiting of the Likert scale to four options (1= strongly agree, 4= strongly disagree) instead of five choices to avoid neutral answers<sup>9</sup>, meaning respondents answering the middle option. The revised questionnaire then underwent pilot testing for clarity, ease of completion and content. This was dispensed to 5 randomly selected subjects from each year level. To determine the internal consistency of the questionnaire, Cronbach's Alpha analysis, which is a numerical coefficient of reliability<sup>10</sup>, was employed and yielded a value of 0.7924-0.8940. In most social science researches a reliability of 0.70 or higher is considered adequate<sup>11</sup>, meaning the reliability of the questionnaire is within acceptable limits. The questionnaire was reviewed and revised accordingly until the instrument was clear and succinct to serve its purpose. This process resulted in the final version (Appendix).

The questionnaire contained three basic sections: (1) general background information, (2) attitudes e-learning and towards (3) overall recommendations. The first section sought information about frequency of usage and availability of internet and web site features mostly utilized. The second part asked respondents to rate their degree of agreement or disagreement to the given statements about readiness and confidence in internet usage, benefits and drawbacks in e-learning and technicalities. Statements were positively and negatively stated to eliminate response bias which is a tendency for respondents to answer most questions in the same way<sup>12</sup> and were randomly presented to determine the consistency of answers.

A 4-point Likert Scale (1= strongly agree, 4= strongly disagree) was used. The last section of the questionnaire sought information about the recommendations of the students on their preferred mode of course delivery and suggestions for further improvement of the course sites.

#### Sample and Sampling Technique

In this study, a purposive sampling was conducted involving the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> year BSPT students of UST, who attended the major courses with webenhancements during the first and second semesters of Academic Year 2006-2007.

Students who were enrolled in the web-enhanced courses, whether passed or failed, were all included in the study. The list of students was obtained from and confirmed by the Registrar's Office of UST.

Those who dropped all the courses with webenhancements and those who never logged into their e-leap accounts were excluded as participants because their experience in the use of e-Learning might not be sufficient enough to support their perceptions in answering the questionnaire. Those who participated in the pilot testing were also excluded to avoid bias since they have already seen and answered the questionnaire. Student researchers were also excluded from the study so as to avoid experimenter bias<sup>13</sup>. Students who were not present during administration were also not included. The flow chart (Figure 1) shows the number of students included in this study.



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#### Distribution and Collection

Upon the approval of the College Dean, the final version of the questionnaire was distributed to the qualified participants last January 4-13, 2007. This gave them adequate time to have enough familiarity on the e-learning initiatives incorporated in their syllabi for the school year 2006-2007. It was handed out to the students in one of their classes and was administered by a faculty member not involved in the study. Completed forms were then collected right away. Only answered questionnaires from those who were present during the administration of the survey were considered.

#### Statistical Treatment

Data were gathered and tabulated for all respondents. General information regarding respondents was tallied using MS Excel ver.2002. The frequency of responses was computed using SPSS version 11.5 for the statements in which the Likert scale was used.

The Chi Square test, with a five percent level of significance, was utilized to ascertain if any association exists between the following: (a) frequency of usage & level of satisfaction and (b) frequency of usage & e-learning features.

#### RESULTS

From a target population of 184, 145 questionnaires were returned, giving a response rate of 78.8%. This response rate is considered excellent<sup>14</sup>. The answered questionnaires were checked for completeness and all were found to qualify for data analysis. Thus, 145 questionnaires were analyzed. Table 1 shows the general characteristics of the respondents as to age and gender.

Figure 2 shows the frequency of usage of e-Learning among the respondents. There were no significant correlation between frequency of usage and year level using the chi-square test (p=0.219); between frequency usage and gender (p=0.515); and between frequency of usage and computer breakdown (p=0.701). Figure 3 shows the days when most respondents use e-Learning.

Results show that all year levels access e-Learning more at their own homes (51.45%). Data show that 26.97% of the respondents chose to access e-Learning in computer shops, 20.75% in campus libraries and 0.83% using mobile phones. Furthermore, majority of respondents have internet connection in their own homes, with 49.30% of the respondents having dial up connections and 35.92% having broadband internet connection. However, 14.79% said that they do not have internet connection in their own homes.

Figure 4 shows the features used by respondents in e-Learning. All of them appeared to use the grade book feature the most and web-links the least. All 5<sup>th</sup> year students used e-Learning to submit tally sheets, Clinical Supervisor /center evaluations. The three features used most in each year level were the following: 3<sup>rd</sup> year- class notes (22.44%), grade book (19.29%), and making course evaluation (13.77%); 4<sup>th</sup> year- grade book (20%), class notes (16.90%), and online examinations (14.14%); and 5<sup>th</sup> year- course evaluation and submitting tally sheets, clinical supervisor/center evaluations both accounting for 14.67% each and discussion (13.78%).

#### Views regarding information presented:

Data show that 62.1% of the third year, 67.9% of the fourth year and 69.7% of the fifth year students say that e-Learning information is clear, reliable (58.6%, 64.8%, 54.5%, respectively) and relevant to their course (51.7%, 67.9%, 78.8%, respectively) as proven by their answers to question number 23. They also disagreed that information provided is incomplete, inaccurate and contains a lot of jargons. The 4<sup>th</sup> (50.9%) and 5<sup>th</sup> (54.5%) year students agreed that the information presented helped them in preparing for their exams. Importantly, information in e-Learning has been shown to be consistent with the Thomasian core values of being competent, compassionate and committed beings as stated by 53.4% of 3rd, 59.3% of 4th and 50.0% of 5<sup>th</sup> year students.

Table 1. General Information from respondents ( N = 145)									
Age	3 <sup>rd</sup> Yr	4 <sup>th</sup> Yr	5 <sup>th</sup> Yr	Total	Percent				
18-19	45	7	0	52	35.86%				
20-21	13	39	25	77	53.10%				
>21	1	7	8	16	11.03%				
Total	59	53	33	145	100%				
Gender									
Male	31	20	15	66	45.52%				
Female	28	33	18	79	54.48%				
Total	59	53	33	145	100%				



Figure 2. Frequency of usage among 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> yr students (n=145)



Figure 3. Days of usage among 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> yr students





## Notions with regard to services & tools provided:

With the services and tools e-Learning has offered, 67.13% of the respondents agreed and 13.29% strongly agreed that they are satisfied with it and they had a positive learning experience in using it (63.89% agreed and 10.42% strongly agreed).

#### **Opinions about technicalities of e-Learning:**

For the 5<sup>th</sup> years, 51.5% of them strongly agreed that there were a lot of system breakdowns while 54.7% of the 4<sup>th</sup> years agreed and 43.1% of the 3<sup>rd</sup> years disagreed. Despite this, they agreed that technical support was provided (51.7%, 50.0%, 56.3%, respectively) as also shown by the responses with statement no. 38. Sixty three point eight percent (63.8%) of the 3rd years and 54.5% of the 5<sup>th</sup> years disagreed that recovery from system breakdowns is fast while 47.2% of the fourth year disagreed and 9.4% strongly disagreed. They also said that technical support was slow where 46.6% of the 3rd years, 43.4% of the 4<sup>th</sup> years and 36.4% of the 5<sup>th</sup> years agreed with the statement. There was no correlation between these technical problems and level of satisfaction (p=0.896).

#### Propositions for improvement:

With the statements in the questionnaire, the top five suggestions that the students strongly agreed upon were the following: free access should be provided to all students; system breakdowns should be minimized; information & instructions should be simple & straight forward; an internet chatting feature should be added; and essential PT information not included in the site should be added (i.e. reflexes, normal range of motion values, manual muscle testing grading and guidelines, and the OINA table which stands for: origin, insertion, nerve supply and action of all the muscles in the human body).

The last part of the questionnaire involved a series of questions involving suggestions and recommendation of students regarding e-Learning. Table 2 shows the suggestions of students on how to improve the services of e-Learning.

The students were also asked if they would still like to have their courses web enhanced for the following school year. The results showed that 95% of the total respondents said yes while 5% said no. Students claimed that web-enhancing their courses helped them learn faster and easier and allowed them to listen to professors without worrying about lecture notes. It also provided more exposure to different courses before classroom lectures are given. E-Learning provided a means for students to interact with professors

## Table2. Suggestions to Improve e-Learning Services

#### 3<sup>rd</sup> year:

- Add chat –Instant Messaging
- Add more videos for reference
- Add more info; more interactive features; more updates; early updates please

#### 4<sup>th</sup> year:

- grades; I mean grades for all subjects not just 2 or 3 or so
- sometimes its quite difficult to access e-leap at home I'm using a dial up I think all notes should be
- uploaded in eleap before its discussed in class so that students could take notes & study in advance
- constant updating could make visiting the eleap site more appealing
- chat feature
- please update the course sites. The site requires internet explorer, cant they make it universal
- for more users too)
- stop using code that is internet explorer only decrease use of flash. Improve discussion board
- interface- use phpBB or similar
- provide more PC's for elearning access

#### 5<sup>th</sup> year:

- faster; less error servers; more function that are up to date; more interactive features between teachers & students
- alert signals to warn students that we forget something to tally/answer a document
- lesser links; faster page download
- teach faculty as to updating site more often
- prevent system breakdowns
- Make it more easily accessible
- Minimize breakdown of the server. Update the web.
- Minimize download time down time of site. Update grade book regularly.
- Update facilities.
- Minimize the use of it. Not very every student can readily access it.
- Provide server maintenance at least once per week or once per month.
- Provide direct links.

and fellow students on academic matters outside the classroom. Finally, the grade book feature helped students become aware of their current class standing. The reason why 5% of the respondents did not want to use e-Learning was because they found it hard to access the site. Also, system breakdowns, lack of internet access and slow loading of the site are reasons why these students prefer not to web-enhance their courses next year. Table 3 summarizes the underlying motivations & impediments in e-Learning utilization.

Table 3. Underlying motivations & impediments in e-Learning utilization					
Impediments					
System breakdowns Lack of free internet access Slow internet connection Time-consuming Slow technical support Infrequent updates Not user-friendly					
1					

#### DISCUSSION

E-Learning has introduced new ways in pursuing different forms of education. It goes beyond lectures provided by professors and veers away from the traditional classroom setting.

Distance learning format in the PT curriculum was initiated in the University of Kentucky in 1991 in response to the demands of the individuals who lived in rural areas to pursue the degree based on continuing education period.<sup>15</sup> This was followed by implementation of several allied health care programs, including programs at Rocky Mountain University, Simmons College, Creighton University, Finch University of Health Sciences, and Temple University of distance-based PT postprofessional doctorates.

A study conducted at Texas Tech University Health Science Center's physical therapy program showed that there is no significant group difference between the mean grade point average and dropout rates of distance-based and classroom-based students, thus, suggesting highquality education for both groups.<sup>16</sup>

Research has also indicated that the instructional format has no significant effect on the manner by which students learn as long as the manner of delivery is appropriate and all students have equal access to it. However, achievement scores on different courses have been found to be significantly higher among students who use distance education as compared to traditional education.<sup>17</sup> This was proven by recent studies, which compared online and classroom-based learning where standardized achievement scores were found to be 5%-10% higher among online graduates in Arizona. Similar results were also obtained from computer-based University of Michigan graduates when compared with fellow students from the same university.18

In the field of medicine in Western Australia, a web-enhanced diagnostic reasoning program intended to help students develop clinical

reasoning in diagnosing their patients was adapted. The results of the study showed improvement in student's ability to identify differential diagnosis, to exclude hypothesis during data gathering, and to monitor the strengths and weaknesses of their clinical reasoning process. Thus, helping students develop higher order skills through practice, feedback and reflection not previously possible.<sup>19</sup>

Research has proven the following advantages of online courses: better learning resources, more flexible pace of learning, greater choice of study time preference, increased self reliance, more tutorials/seminars, and improved computer literacy<sup>20</sup>. Web-enhancement in instructional delivery involves an environment created where learners develop independent learning skills<sup>21</sup> These benefits have made e-Learning interesting and gain the popularity it is now experiencing.

#### Recommendations for improvement of e-LeAP

Third and fourth year respondents show a higher frequency of usage (two-three times per week with Saturday, followed by Friday & Sunday as the days of the week with most frequent usage) as compared to 5<sup>th</sup> year respondents who use e-Learning once or twice per month only, mostly during Sundays followed by Saturday). In line with this, deadlines of online activities (i.e. formative evaluation. assignments, patient tally sheets) should be best set on the days with the most frequency of usage to accommodate the students' availability in accessing e-LeAP.

The duration of usage in accessing e-LeAP per session averages to 34.30 minutes. Within this time span, students should have more or less completed the necessary activities intended for them to do. Thus, the duration of activities posted in e-LeAP should correspond to the time period that most of students visit the site per session to enable them to access, read, understand, execute and finish the needed tasks.

Students complain of the difficulty in accessing e-Learning due to slow internet connection and availability of free internet access. Half of the respondents (51.45%) reported accessing eLearning in their own homes and 41.30% of them have dial up internet connections. Therefore, it would help students in downloading class notes or handouts if file sizes uploaded in e-Learning are small or files may be broken into smaller parts for easy downloading. Only 20.75% of students claim that they access e-Learning in campus libraries, perhaps because of the burden of having to fall in line in order to gain access to the limited number of computer terminals provided. It would benefit the students if more computers with free internet access are provided in order to encourage them to use it more.

Among the features provided by e-Learning, grade book (17.56%) and class notes (16.12%) accounted for the top two features used. A frequently updated grade book provided to all courses can help students be updated in their current class standing without having to go to school and fall in line alphabetically, thereby becoming a good source of feedback regarding their performance in school. This way, confidentiality is also exercised.

The faculty should also be encouraged to upload lecture notes before classroom discussion so that students can benefit from it and prepare for faceto-face setting. Students should also be oriented to less frequently used features such as events calendar, curriculum, e-guidance, on line library, and e-mail by the faculty through activities which require usage of these features in order to increase familiarity and maximize the features.

There is a need for course site developers to prevent too much system breakdowns and hasten their technical support. Also, they are encouraged to create strategies that will allow and encourage students to approach e-Learning in a more meaningful way by promoting active participation in various features. The developers are also advised to re-design the course site to make it more user-friendly.

## CONCLUSION

The feedback given by students showed that webenhancing courses are accepted by majority of them as an adjunct to face-to-face learning. The study tells us that students found e-Learning as a useful tool in their Physical Therapy education. The clear, reliable and relevant information which it presents becomes a valuable asset perceived by students to facilitate learning and improve class performance, including grades. The e-mail and discussion board allow students to interact with each other and with the faculty when outside the campus, thereby facilitating information dissemination and promoting more active participation. However, many students find e-Learning not user-friendly. Too much system breakdowns and slow technical support serve as hindrances in the full utilization of e-Learning by preventing access.

# Limitation & Recommendations for future studies

This study provided valuable information on the usefulness of web-enhanced courses in physical therapy education in a university. However, the study did not objectively measure the direct effects of web-enhanced courses to students' actual performance. Thus, the researchers recommend that experimental studies be conducted investigating the effect of e-Learning on students' performance outcome.

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Please rate the following statements based on your personal experience in using e-Learning. 1 = Strongly agree							
2 = Agree 3 = Disagree							
4 = Strongly disagree							
	1	2	3	4			
1. e-Learning is exciting!	0	0	0	0			
2. Information provided is inaccurate	0	0	0	0			
3. e-LeAP is user-friendly	0	0	0	0			
4. e-Learning should add an internet chatting feature	0	0	0	0			
5. Words, information & instructions should be straightforward	0	0	0	0			
6. I don't like to use e-Learning because I have slow internet connection		0	0	0			
7. e-Learning is regularly updated	0	0	0	0			
8. I am satisfied with the services provided by the site	0	0	0	0			
9. All courses should be web-enhanced	0	0	0	0			
10. Information posted is reliable	0	0	0	0			
11. It serves as quick reference tool for basic PT information	0	0	0	0			
12. Information provided is incomplete		0	0	0			
13. Technical support is provided	0	0	0	0			
14. I don't care about e-Learning		0	0	0			
15. All examination should be provided online	0	0	0	0			
16. There should be more multimedia features than text	0	0	0	0			
17. It presents practice questions to prepare me for exams	0	0	0	0			
18. e-Learning allows me to have better performance in class	0	0	0	0			
19. e-Learning should provide an online student handbook	0	0	0	0			
20. Texts posted are too long	0	0	0	0			
21. e-Learning helps me develop new ideas	0	0	0	0			
22. It is difficult to understand because it incorporates lots of jargons.	0	0	0	0			
23. Physical Therapy related information is irrelevant	0	0	0	0			
24. e-Learning allows me to improve my grades	0	0	0	0			
25. e-Learning doesn't provide sample cases and videos	0	0	0	0			
26. Online training and orientation for students should be provided online	0	0	0	0			
27. There are a lot of system breakdowns	0	0	0	0			
28. Information provided in e-Learning helps me prepare for exams	0	0	0	0			
29. Services and tools are effective in molding thinking skills	0	0	0	0			
30. Facilitator should use e-Learning more often	0	0	0	0			
31. e-Learning tools are complicated	0	0	0	0			
32. I don't like to use e-Learning because the site loads too slow	0	0	0	0			
33. e-Learning enhances my interaction with my classmates	0	0	0	0			
34. My friends serve as my primary source of information of school-related announcements	0	0	0	0			
35. Recovery from system breakdown is fast	0	0	0	0			
36. e-Learning lacks multi-media	0	0	0	0			
37. Instructions on using the services should be provided online	0	0	0	0			

38. Technical help support is not provided.	0	0	0	0	
39. Data provided is clear			0	0	
40. Using e-Learning enhances my education			0	0	
41. System breakdown should be minimized	0	0	0	0	
42. Technical help support is slow	0	0	0	0	
43. I have a negative learning experience with the use of e-Learning			0	0	
44. It facilitates clinical analysis and reasoning skills	0	0	0	0	
45. e-Learning is uninteresting	0	0	0	0	
46. e-Learning provides relevant information related to my course	0	0	0	0	
47. I rely on e-Learning for announcements	0	0	0	0	
48. I am not satisfied with the e-Learning services provided	0	0	0	0	
49. Using e-Learning should be a requirement for all students	0	0	0	0	
50. I get viruses from accessing e-LeAP	0	0	0	0	
51. I have a positive learning experience with the use of e-Learning	0	0	0	0	
52. Essential PT information (i.e. reflexes, N ROM, MMT, OINA) should be provided	0	0	0	0	
53. I prefer a classroom-based training and orientation for student's use of e- Learning	0	0	0	0	
54. There are too many links present in the site.	0	0	0	0	
55. e-Learning is cheap to use	0	0	0	0	
56. e-Learning tools are inadequate to satisfy lesson delivered	0	0	0	0	
57. Free access for e-Learning use should be provided to all students	0	0	0	0	
58. Using e-Learning is a waste of my time		0	0	0	
59. It provides relevant link to the world wide web		0	0	0	
60. Internet connection is fast.		0	0	0	
61. There should be an equal distribution of multimedia & text		0	0	0	
62. There should be more multimedia features than text		0	0	0	
63. e-Learning is consistent in the promotion of Thomasian core values (compassionate, committed, competent)		0	0	0	
Other suggestions to improve e-Learning services					
Would you still like to have your courses web-enhanced for the following school yo	ear?				
Why or why not?					
Would you recommend e-Learning for the next batch of PT students? O Yes O No					
D. Mode of preference of delivery of education: O Face-to-face (Classroom-based) O Web-enhanced O Combination of face-to-face & online					
Would you utilize their suggested services if provided in a manner that meets you	r nee	ds?			