

Brief Survey of EIT Students who are Undertaking an Advanced Diploma in Engineering Course

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INTRODUCTION

The Engineering Institute of Technology surveyed a range of students across their online advanced diploma courses. Students were chosen at random and at different stages of the course from the current three cohorts of the Advanced Diploma of Electrical Engineering and the current seven cohorts of the Advanced Diploma of Industrial Automation (as at 1st June 2010).

The purpose of the survey was to gauge what students thought of the mode of presentation of the e-learning courses as well as the content. It was also used to gather specific information in regards to students' thoughts on the interactivity of online courses versus face-to-face classroom based courses.

THE SURVEY INSTRUMENT

A total of 66 students across the Advanced Diploma e-learning courses were surveyed. The questionnaire shown in Appendix A was given to each student to fill out and send back. The first part of the survey comprised eight questions which students had to grade from zero to ten. A simple Likert scale was used with ten being considered excellent and 0 being poor.

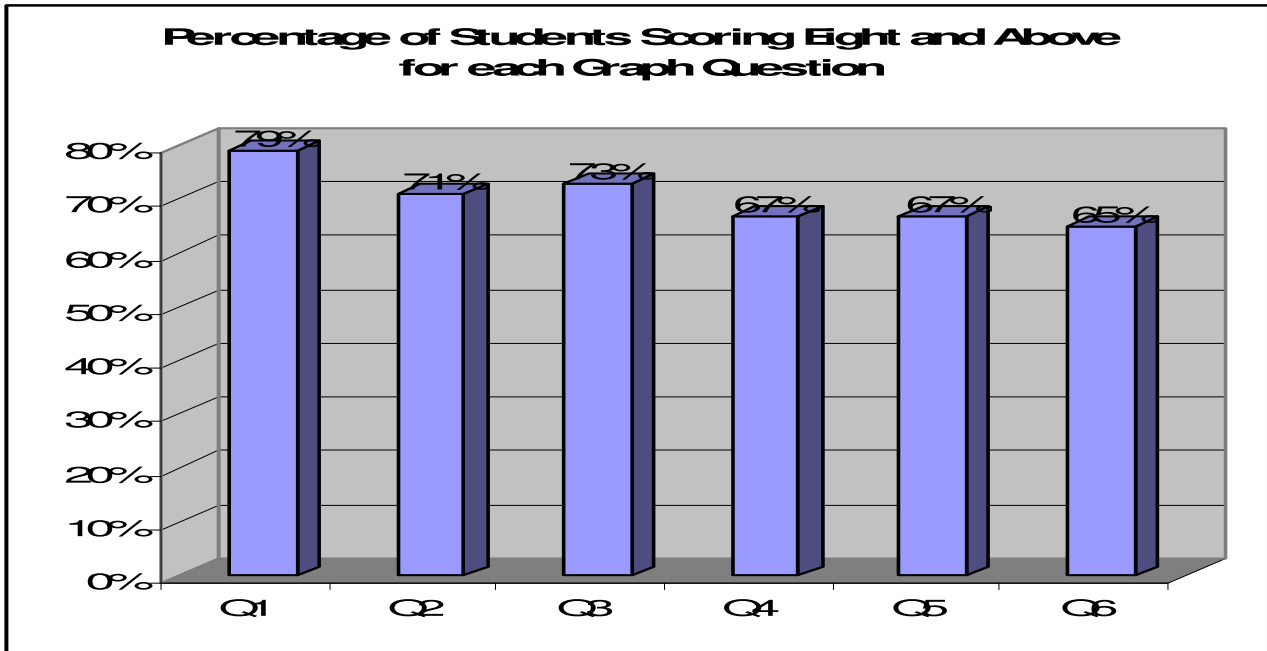
In addition, they were asked three questions, each of which had a choice of four answers to choose from. These questions were structured to gain an understanding on the interactivity of online courses and students' viewpoints on the e-learning mode of delivering courses. The results of these questionnaires and the table are given below.

RESULTS

The following results were obtained from the 66 students who answered the questions.

Percentage	0	1	2	3	4	5	6	7	8	9	10
Subject Matter						1.5%	4.5%	15.2%	30.3%	22.7%	25.8%
Materials Supplied						1.5%	13.6%	13.6%	22.7%	25.8%	22.8%
Presentation Slides				1.5%			7.1%	19.4%	33.0%	21.0%	18.0%
Webcast Software			1.5%	3.0%		1.5%	10.8%	15.2%	22.7%	22.7%	22.7%
Interactivity						3.0%	12.2%	18.3%	24.2%	25.7%	16.6%
Assignments	1.5%			3.0%		3.0%	6.0%	21.2%	31.8%	18.2%	15.3%
Course Structure					3.0%	7.6%	10.6%	15.2%	15.2%	30.3%	18.2%

The percentage of students who scored 8 (considered 'excellent') or above in each question was as follows:



Students were then asked the final three questions (as indicated in Appendix A). In the first question, students were asked what best represented their attitude and viewpoint towards online learning. No student indicated that they were either extremely or somewhat pessimistic or critical. Of the 3 choices left, 1.5% stated they had no opinion either way, 34.5% stated they were somewhat supportive or optimistic and 64% stated they were extremely supportive or optimistic.

In the second question, students were then asked what the overall quality of the online courses they currently were completing was. Again no student stated that it was either extremely or somewhat boring or non-interactive. Out of the total 66 students, 53% said they were somewhat engaging and interactive, 44% stated it was extremely engaging and interactive and 16% were unsure either way.

In the final question, students were asked if in general online courses were more engaging or motivating than face-to-face courses and classroom designs. Out of the total number of students surveyed 16% were unsure, 37% said online courses were not more engaging or motivating and 47% stated that they were more engaging or motivating than face-to-face courses and classroom designs.

CONCLUSION



The following conclusions were drawn from these results. Online courses have the potential to be more engaging and interactive than face to face classroom based ones with 47% of students believing online courses to be more engaging. A quick examination of the scores, suggests a link between the quality of the slides, the software used and materials and the percentage of students awarding a high mark for interactivity. This leads to the conclusion that in order to engage students in their learning there is a need for high quality lecturers, slides, materials and software. Unlike classroom based courses e-learning courses rely solely on the lecturer's interactive and dynamic presentations, quality of the material, software and slides to actively motivate students in their learning process.

Students had extremely supportive and optimistic viewpoints about e-learning leading to the conclusion that online courses would be recommended above classroom based ones amongst the students surveyed. Those students who gave poor scores to the webcast software (1.5% and 3%) had trouble logging into webcasts due to poor internet connections on their end and company firewalls. These factors could have contributed to the low scoring.

Of the 3% of students awarding a 5 for interactivity, over half only attended the minimum lecture (webcast) attendance requirement. This low attendance would mean students relied mainly on recordings of webinars and could be the reason why a low score was awarded in this instance.

The percentage of students awarding an 8 or higher in the graph along with the high results for the better answers for the final three questions demonstrates that amongst the 66 students surveyed most students believe that the courses are structured well, including good quality material, instructors, slides and assignments. It also demonstrates that students find the online learning of the Engineering Institute of Technology's e-learning advanced diploma courses to be of high quality and highly interactive and engaging.

Appendix A

E-Learning Progress Questionnaire

Course Name:

Name: Company: Date:

To help us improve the quality of our E-Learning courses your honest and frank comments will provide us with valuable feedback. Please complete the following:

How would you rate the following so far?

Please place a cross (x) in the appropriate column and make any comments below.		Poor			Average				Excellent			
		0	1	2	3	4	5	6	7	8	9	10
1.	Subject matter presented											
2.	Materials provided (Reading materials, software etc)											
3.	Presentation Slides											
4.	Webcast Software (Elluminate)											
5.	Interactivity (Instructor & other participants)											
6.	Assignments											
7.	Course Structure (Duration, format)											
8.	Other, please specify.....											

1) What best depicts your attitude or viewpoint towards online learning ?

- a) I am extremely critical or pessimistic
- b) I am somewhat critical or pessimistic
- c) I have no opinion one way or another
- d) I am somewhat supportive or optimistic
- e) I am extremely supportive or optimistic

Your

Answer.....
.....

2) What is the overall quality of the online courses you are currently completing ?

- a) Extremely boring/non-interactive
- b) Somewhat boring/non-interactive
- c) Somewhat engaging/interactive
- d) Extremely engaging/interactive
- e) Do not know

Your

Answer.....



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3) In general, are online courses more engaging or motivating than face-to-face courses and classroom designs ?

- a) Yes
- b) No
- c) Don't know

Your

Answer.....

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