

Evaluation of eLearning for Best Practice 906.704

Final Report

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EXECUTIVE SUMMARY

This study was undertaken as part of the course Evaluation of eLearning for Best Practice, part of the Graduate Certificate in Applied eLearning¹. This evaluation has taken place during the first semester of 2009, and is a summative effectiveness evaluation of existing delivery methods with a view to redeveloping the course in a blended delivery format.

This study looked at the present implementation of the CCNA courses at the Manukau Institute of Technology.

The answers to an anonymous questionnaire and the opinion of colleagues and expert has been use to collect information.

The evaluation has fulfilled the purpose of the study which was to:

1. Assess the effectiveness of the present usage of eLearning tools.
2. Consider the use of further tools and activities to enhance and facilitate the student learning experience.
3. Identify if the blended learning format would improve the delivery of the course to the students.

The information found corroborate some of the ideas around about the blended learning format, but more importantly has identified some points which needs to be carefully considered if a decision is to be made to move the course s in that direction.

Due to the low number of respondents, the questionnaire will need to be submitted to more students during the second semester of 2009 to verify the validity of the information collected.

¹ http://www.manukau.ac.nz/departments/ed_development/elearning/elearning.asp

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INTRODUCTION AND BACKGROUND

This report describes the evaluation of the running of the Cisco certified Network Associate Exploration courses in view of their potential future implementation in a blended format at Manukau Institute of Technology. This study will analyse some aspects of the project, and has been conducted by Hervé Carpentier.

The CCNA course is part of the [Cisco Networking Academy Program](#)² and it has been preparing students for the [Cisco Certified Network Associate certification](#)³ examination worldwide for more than ten years. The present implementation of the course at MIT is face to face, with all course materials accessible through a web browser from anywhere with an internet connection. Currently, the four parts of this course are delivered over two semesters. The practical work involved in the course is supporting the theory and vice versa.

The four part of this course are:

1. Networking Basics
2. Routers and Routing Basics
3. Switching Basics and Intermediate Routing
4. WAN Technologies.

The courses are level 5 and 6 courses.

The amount of material included in the course has increased greatly in recent years, and it has been decided at national level between several tertiary institutions to deliver the CCNA course over four semesters within the Metro Bachelor of Engineering Technology program. The students can access the laboratories to complete the practical work at any time, 7 days per week.

The students are able to access and complete the formative assessments (End of Chapter Tests) 24*7; they get immediate feedback on their mistakes. To encourage them to complete the ECTs, which count towards 10% of the final results. There are also some simulator (Packet Tracer) activities available to help students to assess their practical skills at the end of most chapters.

The assessment structure includes a combination of on-line tests, a practical test and a paper examination.

PURPOSES, AND AUDIENCES

The purposes of this evaluation were to:

1. Assess the effectiveness of the present usage of eLearning tools.
2. Consider the use of further tools and activities to enhance and facilitate the student learning experience

² <http://cisco.netacad.net/>

³ http://www.cisco.com/web/learning/le3/le2/le0/le9/learning_certification_type_home.html

3. Identify if the blended learning format would improve the delivery of the course to the students

The two following guidelines taken from [e-Learning Guidelines for New Zealand](#)⁴ have been considered (Milne & Dimock, 2008) :

*a. TT6 Are online activities available that will enable students to assess their learning*⁵?

There are already several assessment tools used for the present format of the course⁶. The study was considering if further tools could be developed to enhance student learning. The redevelopment of the course means that the opportunity to introduce more online activities will be available.

*b. The second guideline was inspired from TD1 "[Is the use of e-learning appropriate to the intended learning outcomes?](#)"*⁷

Is the use of blended learning more appropriate to achieve the intended learning outcomes?

The author was interested in finding out if using a blended learning format would improve the achievements of the students on this specific course.

The primary and secondary audiences of this evaluation were staff and students involved in the course.

A third audience was the staff and students of the Evaluation of eLearning for Best Practice course, who have followed the development of the evaluation project.

DECISIONS AND QUESTIONS

The findings of this study will be used to influence the decision on how to run the CCNA course from the first semester of 2010, and to decide which set of eLearning tools will be used to deliver it.

METHODS / INSTRUMENTATION

This study is a combination of two types of evaluation as described by Reeves and Hedberg (Reeves & Hedberg, 2003). It can be described as a summative effectiveness evaluation of existing delivery methods with a view to redeveloping the course in a blended delivery format.

The paradigm used is the Eclectic-Mixed Methods-Pragmatic Paradigm (Hegarty, 2003), (Phillips et al., 2000).

The evaluation model implemented was the multiple type evaluation models.

An anonymous questionnaire was completed by the students. Staff provided the study with an expert perspective.

It was originally intended to have discussions through focus groups to further develop some of the ideas/information gathered via the questionnaires (Kitzinger, 1995), but the tight deadlines did not allow this to take place.

⁴ <http://elg.massey.ac.nz>

⁵ <http://elg.massey.ac.nz/index.php?title=TT6>

⁶ Appendix A

⁷ <http://elg.massey.ac.nz/index.php?title=TD1>

The questionnaire was delivered to the students through [Survey Monkey](#)⁸. The interface to create a questionnaire is more user friendly on Survey Monkey than it is on Blackboard. An even number Liker scale has been used as much as possible to avoid neutral "comfortable" option for the user to answer (Garland, 1991).

A conversation using [Skype](#)⁹ took place with a former colleague experienced in the teaching of Cisco Networking Academy Courses using the blended delivery format.

A conversation and discussion took place with a colleague teaching the CCNA course at MIT.

SAMPLE

The evening class students enrolled on "Network Principles 1" and "Data Communication 1" covering CCNA1 and 2 were asked to complete the survey. This is a group of 18 students, and the class is a mix of full time and part time students.

The experts involved were Mark Schatzdorfer from [Manukau Institute of Technology](#)¹⁰ and D.M., from [Birmingham City University](#)¹¹.

LIMITATIONS

This study only looked at the specific implementation of the CCNA course as taught at MIT.

The sample size of students was small, as only 12 students have answered the questionnaire.

Most of the group was composed of part time students who are older than traditional full time students, which might influence their attitude to on-line learning.

RESULTS AND DISCUSSION

OVERVIEW OF THE MAIN FINDINGS

Findings reported in this section were obtained from an online questionnaire, a summary of an interview with a colleague experienced in the Blended Learning format and an overview of the opinion of a colleague teaching the same course face to face.

The questionnaire provided some very interesting results which indicate that the students are ready for the blended learning challenge.

The two experts consulted for this study agree in saying that it is important to keep the option of the in-person class to suit the requirements of the students.

⁸ <http://www.surveymonkey.com/>

⁹ <http://www.skype.com>

¹⁰ <http://manukau.ac.nz>

¹¹ <http://www.bcu.ac.uk/>

ON-LINE QUESTIONNAIRE:

The survey was organized in four topics.

1. The learning environment
2. The preferred mode of communication with the lecturer
3. Assessments
4. Future developments

The questionnaire frequently refers to Packet Tracer. This is simulation software is made available for free to the students and instructors of the Cisco Networking Academy Program.

1. THE LEARNING ENVIRONMENT:

The first two questions are linked and therefore analysed together.

The students were asked which part of the learning environment they were using, and why and why not they are not using the resources mentioned.

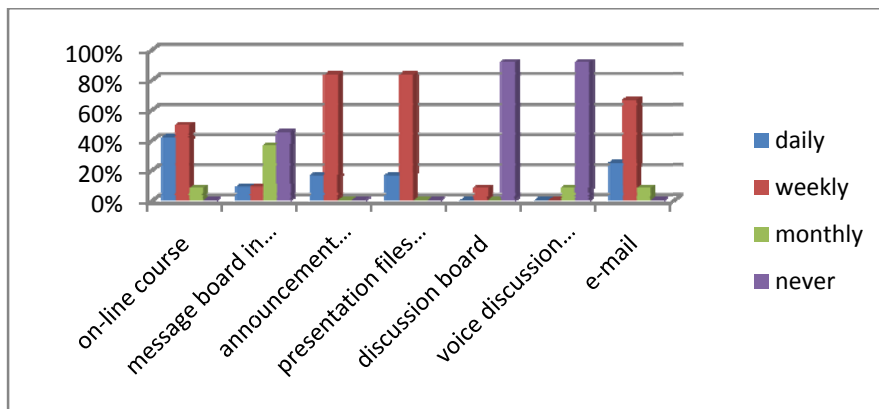


FIGURE 1 - PART OF THE LEARNING ENVIRONMENT IN USE (N=12).

According to the results in figure 1, the on-line course is used mainly weekly (50%) and sometimes daily. Out of 7 comments about the online course, only one was negative. The message board on the Networking academy site is quite inefficient to pass a message to the students. The announcement system on Blackboard seems to be a much more efficient way of communicating with them. 83% of the students are checking the presentation file weekly which seems to indicate that they find it useful for their learning. The discussion boards are almost never used, which confirm the author's observations. The comments mention that they are "useless", "not required", "too many clicks away", "asks the lecturer for help personally".

From the comments about the email, it looks like it is necessary to give the students more training about MIT email system. The part-time students do seem to be involved or participating in the induction week.

The third question asked their preference between the online course and the book (figure 3). The curriculum exists in the two formats, with the added advantage for the on-line curriculum to be updated regularly.

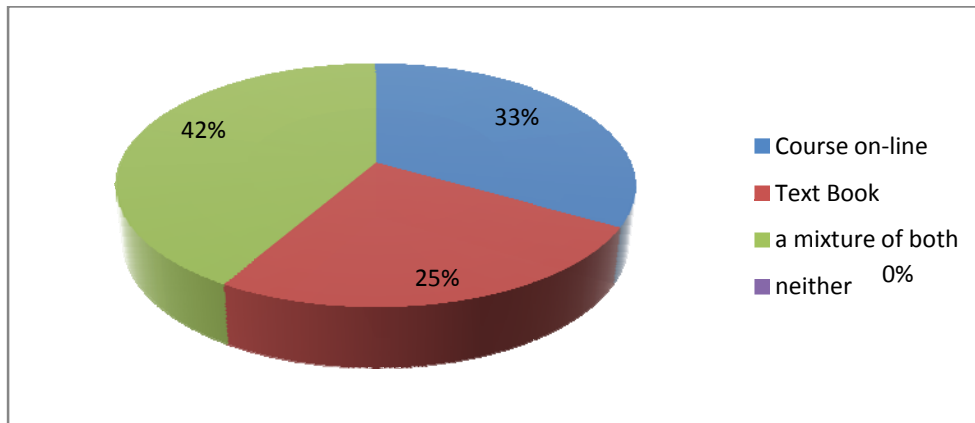


FIGURE 2- PREFERENCE TO ACCESS THE COURSE MATERIAL (N=12)

5 students added comments to their answer amongst which there were 4 different issues:

- The time it takes to access the online material
- The potential distractions of using a PC
- Eye health concerns of using a computer all the time
- One student prefers the content of a book for quick reference. This is probably linked to the first comment

It is interesting to see that although the students are in majority older, learning from a screen does not seem to be too much of an issue, as it used to be ten years ago when the Cisco Networking Academy Program started. According to information gathered with the main database, the average age of the students in that group is over 34.

2. PREFERRED MODE OF COMMUNICATION WITH THE LECTURER:

In that section, the first question was to find what the preferred modes of communication about the running of the course are. The findings are indicated in table 1

Although the author of the survey has tried to use an even Likert scale for most questions, he has chosen to use a scale ranging from one to five in an attempt to classify the method in order of preference. There is in that situation no neutral point.

TABLE 5- ANNOUNCEMENTS ABOUT THE RUNNING OF THE COURSE.

<i>Number 1 represents the most preferred method and number 5 the least preferred method.</i>	1	2	3	4	5	Response Count
RSS (on-line feed -This automatically send news items in a reader)	18.2%	18.2%	9.1%	27.3%	27.3%	11
E-mail	75%	16.7%	8.3%	%	0%	12
Message board on the Networking Academy site	10%	0 %	20%	10%	60%	10
Announcement system on Blackboard	27.3%	27.3%	18.2%	9.1%	18.2%	11
Text Messaging	20%	20%	30%	10%	20%	10
Other (please specify)						0

As can be seen in table 5, the most preferred method of receiving announcement of the running of the course is by a wide margin E-mail, followed in order by

- the announcement system on Blackboard
- Text messaging
- RSS

The least preferred method is the message board on the networking academy site.

At the present time, text messaging is not used. It might be worth investigating the feasibility and cost of using this technique.

Cisco has recently made available the RSS technology for the message board on the networking academy site. It might be worth experimenting to see if the preference of students evolves if a combination of these two methods is used.

The author believes from experience that a combination of email and announcement system on Blackboard as used presently might still be very efficient to contact the student.

The purpose of the second question was to ascertain if the students were satisfied with the present accessibility to the lecturer. This question was asked as this specific group of students has access to their lecturer via instant messaging. The findings are indicated in table 2

TABLE 6- SATISFACTION WITH THE ACCESS TO THE LECTURER

	Response Percent	Response Count
Yes	100%	12
No	0%	0
	Please comment	3

The means of access to the lecturer available seem to be sufficient with all students indicating they were satisfied with the access to the lecturer (Table 2). The methods used at the present time are email and instant messaging. For this last method, the lecturer has created work accounts on Gmail, AIM, yahoo and MSN. These accounts are accessed automatically via Meebo.com when his computer is started. The 3 comments mention appreciating the speed of response as well as the availability of the lecturer out of hours.

The third question identified the preferred modes of access to their lecturer and findings are shown in Table 3, where number 1 represents the most preferred method and number 5 the least preferred method.

TABLE 7- PREFERRED MODE OF ACCESS TO THE LECTURER

	1	2	3	4	5	Response Count
In person	83.30%	8.30%	8.30%	0.00%	0.00%	12
Via email	33.30%	50.00%	8.30%	0.00%	8.30%	12
Via instant messaging (on-line)	18.20%	18.20%	36.40%	18.20%	9.10%	11
Via the telephone	10.00%	20.00%	10.00%	40.00%	20.00%	10
Via text messaging (SMS-Cell phone)	9.10%	0.00%	18.20%	27.30%	45.50%	11

According to table 3, most students selected "In person" as the most preferred method.

The second most preferred method is email then instant messaging and the telephone. The students appear **unsure** about instant messaging. This **confirms** that the group seems to be split in two about that method of communication with some students using this method most of the time and the rest of the group never. Since this is an efficient method of getting in touch there is probably a case for demonstrating IM to the students as part of the first class of the semester.

The least preferred method is text messaging.

3. ASSESSMENTS:

The purpose of the first question is to find the opinion of the students about the number of formative assessment opportunities. The findings are indicated figure 3.

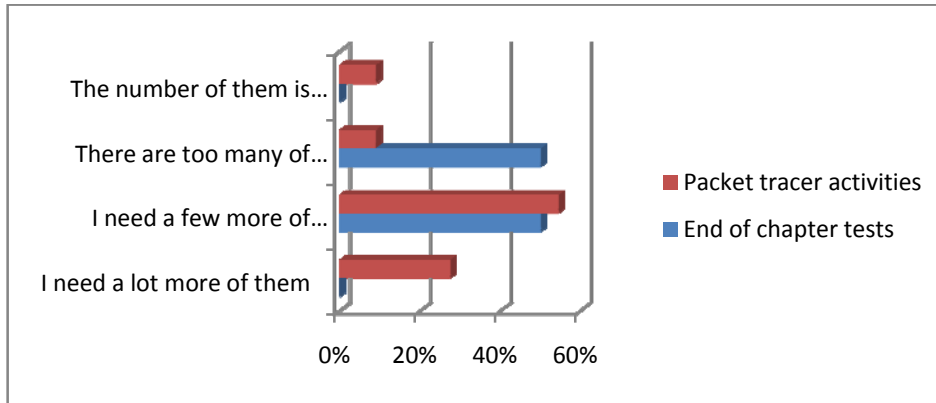


FIGURE 3- OPINION ABOUT THE NUMBER OF END OF CHAPTER TESTS AND PACKET TRACER ACTIVITIES (ECTS- N=12, PTA N=11).

For the end of chapter test, the opinion is split evenly between "I need a few more of them" and "there are too many of them already".

To assess their practical skills, the students are requesting more Packet Tracer activities (81.80%). Further work is needed in this area.

The second question in that section was asking the students their opinion about the content of the end of chapter tests.

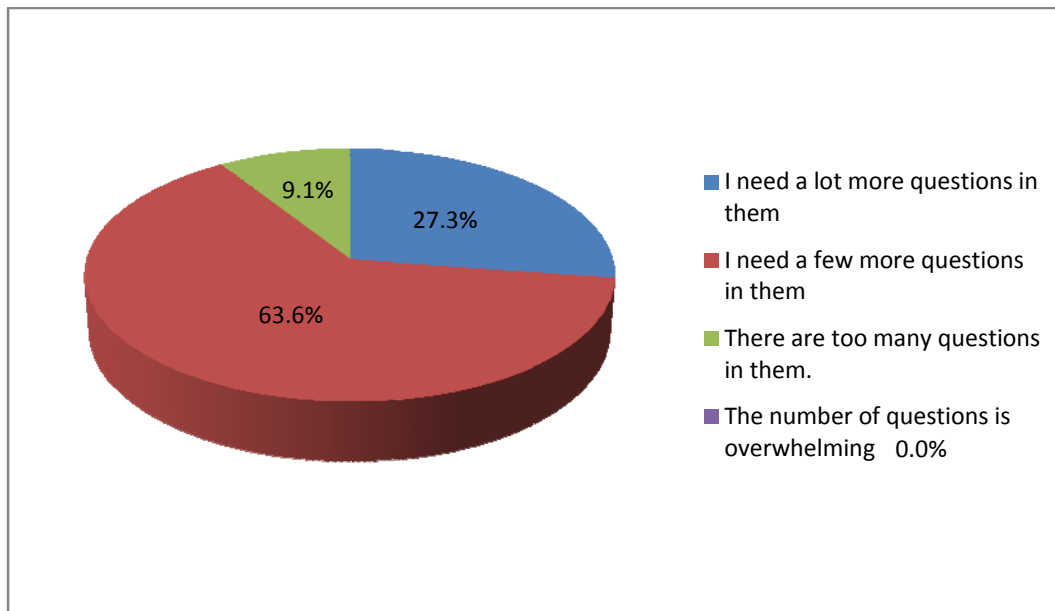


FIGURE 4 - OPINION ABOUT THE CONTENT OF THE END OF CHAPTER TESTS (N=12)

According to figure 4, the students would like more questions in their end of chapter tests. These seem to be more used as learning tools as suspected.

Combined with the result of the previous questions, there is a case to create more online tests containing more questions than the fifteen to twenty available at the present time.

Cisco Academy instructors are not able to modify the questions available through the Cisco Networking Academy Program. However, they can use different environment, such as Blackboard to create supplementary material.

The third question was to find out if the students would complete the end of chapter test if they were not counting towards their final mark.

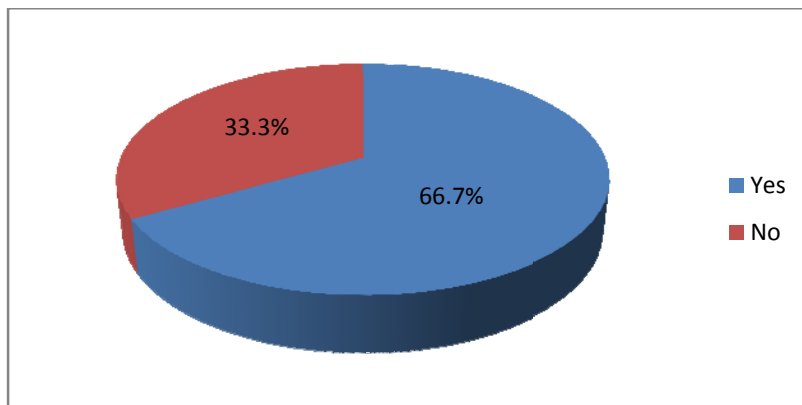


FIGURE 5- WOULD THE STUDENTS COMPLETE THE END OF CHAPTER TEST IF THEY WERE NOT COUNTING TOWARDS THEIR FINAL MARK? (N=12).

According to figure 5, the majority of the students say that they would still complete the ECT if they were not counting towards the final grade of their course. At the moment for the students enrolled in the two first courses, the total of all the tests counts towards 10% of the final mark. However when looking at the gradebook of classes where the ECT is not compulsory, there is a big difference in the number of tests taken. The trend seems as well to be for these students to complete the assessment nearer the date of the final exam, as mentioned in one of the comments. This leads to cramming and short term retention, affecting their performance on the subsequent courses.

From experience, the author of this survey recognises that making the ECTs compulsory forces the students to read the on-line course regularly, which in turn boosts their performance in the associated practical exercises. Currently, the speed at which they are completing the practical exercises is an issue due to the amount of material to cover during the course.

The subsequent question was asking the students about the difficulty of the skills integration challenges (Packet Tracer activities), and the answers are represented in figure 6.

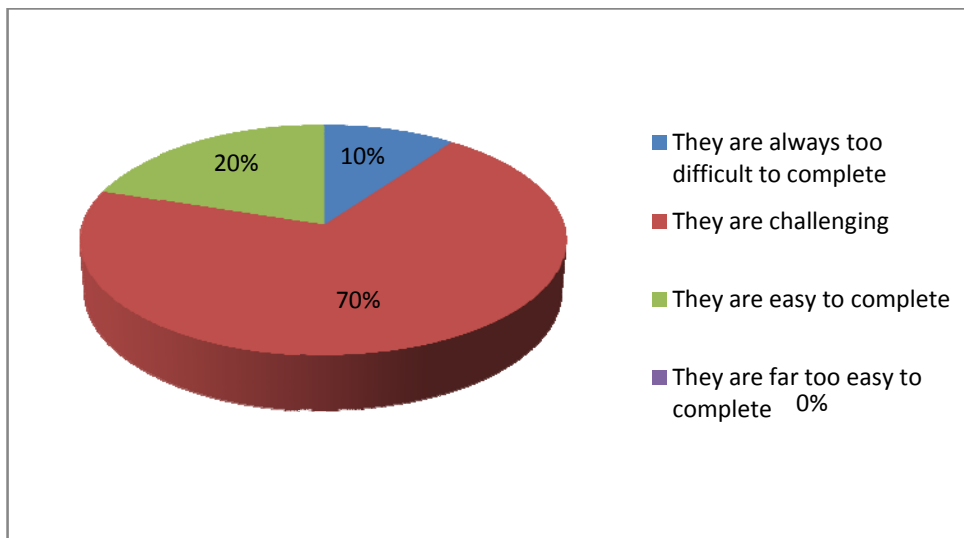


FIGURE 6- THE DIFFICULTY OF THE SKILLS INTEGRATION CHALLENGES (N=12)

The two collected comments mentioned that the level is correct and that they take a long time to complete.

These activities are formative assessments designed to test the student to the limit of their understanding. The result for this question is therefore good news as the challenge labs seems to have been pitched at the right level.

The last two questions in that section was asking the students if they thought that they were enough formative assessments on the courses, and their suggestions to improve this point. The answers are represented in figure 7

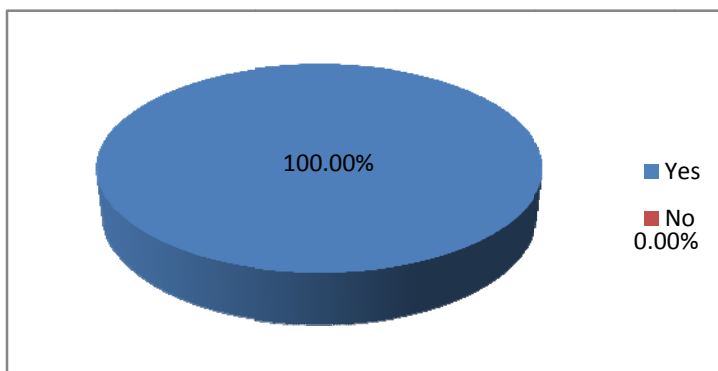


FIGURE 7-DO YOU THINK THAT THERE ARE ENOUGH WAYS FOR YOU TO CHECK ON YOUR PROGRESS ON THE COURSE? (N=12)

Three students out of the 12 who completed the survey suggested further ideas to help them to self assess their progress. Their answers were

- A revision guide for each chapter
- videos with step by step illustrations for cross ref for times when one attempts at sleeping time and you cannot contact the lecturer

- Being able to see the answers to the tests immediately after completion instead of later, as this would help understanding of what has gone wrong. “At the moment, by the time you get back to the answers, you have lost the thread.”

Some short videos have been created this year, and some of them have been inserted within PowerPoint presentations. It will take a while to build an extensive library.

It is difficult to agree with the third respondent. The Cisco Academy Instructors at MIT are trying to encourage the students to complete formative assessment by taking the mark into consideration as a small part of the final mark for the course. If they make the answers to a test available straight away, the students that have not completed it could gather the correct answers from students who have completed it when requested. Although the questions to the exam are not available straight away, the Cisco LMS compile a list of links towards the online course. These indicate the area he or she has to review. Ideally, the author’s opinion is that the formative assessment should only be attempted when the students are ready. It is probable that some students are using the on-line assessment as a learning tool.

4. FUTURE DEVELOPMENTS:

At the beginning of the session when the students were asked to complete the questionnaire, they were given a definition of blended learning, with a description of the tools that might be used for that type of delivery.

In that section, the first question asked the student if they were considering blended learning to be a progress. According to the answers represented in figure 8, they are very positive about it.

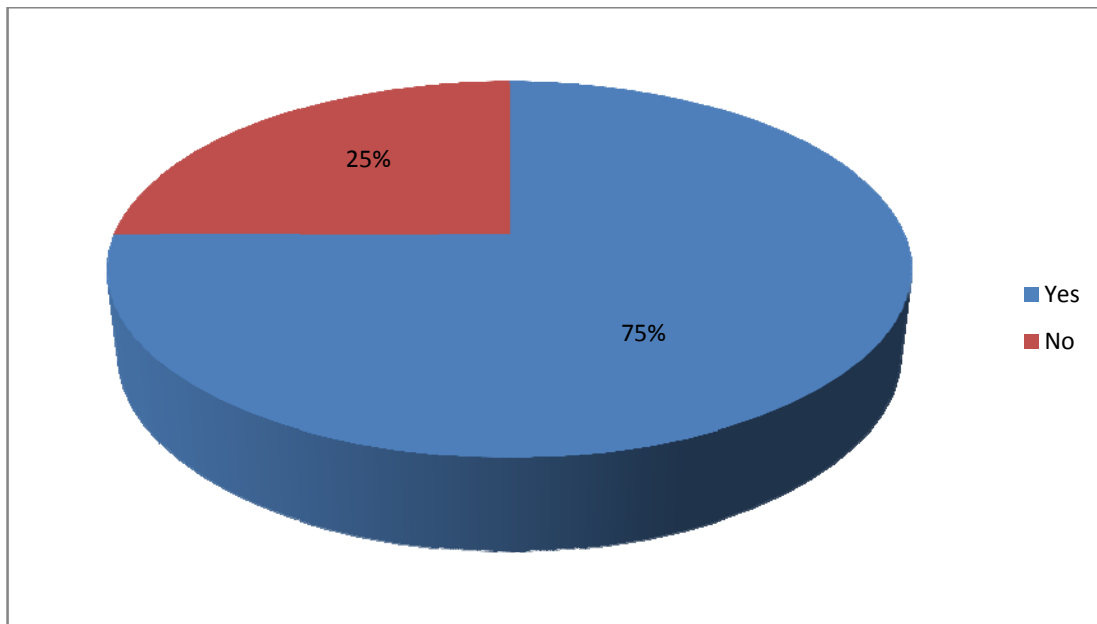


FIGURE 8-1. DO YOU CONSIDER THE BLENDED LEARNING TO BE A PROGRESS? (N=12)

The students were given the option to add a comment. Amongst the three comments we had:

- Blended learning should not be treated as cost saving
- A very enthusiastic response
- A student who sees Blended learning as a way of avoiding timetable clashes

The second question was asking the students how to access the lectures. They were given three choices and an opportunity to add a comment.

The findings are indicated in table 4

TABLE 8- ACCESS TO THE LECTURES

	Response %	Response Count
Accessing a video of the presentation from the internet	41.7%	5
Having a live online presentation weekly at a predetermined day and time (web conference). You could access it from a computer at home or from MIT.	41.7%	5
I prefer a traditional lecture	50%	6
	Comments	3

50% of the respondents prefer a traditional lecture. Amongst the other 50% of the students, the opinions were evenly split between a synchronous and asynchronous sessions.

The only useful of the three comments left was suggesting a podcast. It might be worth investigating this.

The third question in that section was asking the students the importance they attach to a weekly live question and answer session. The students were given the opportunity to add a comment.

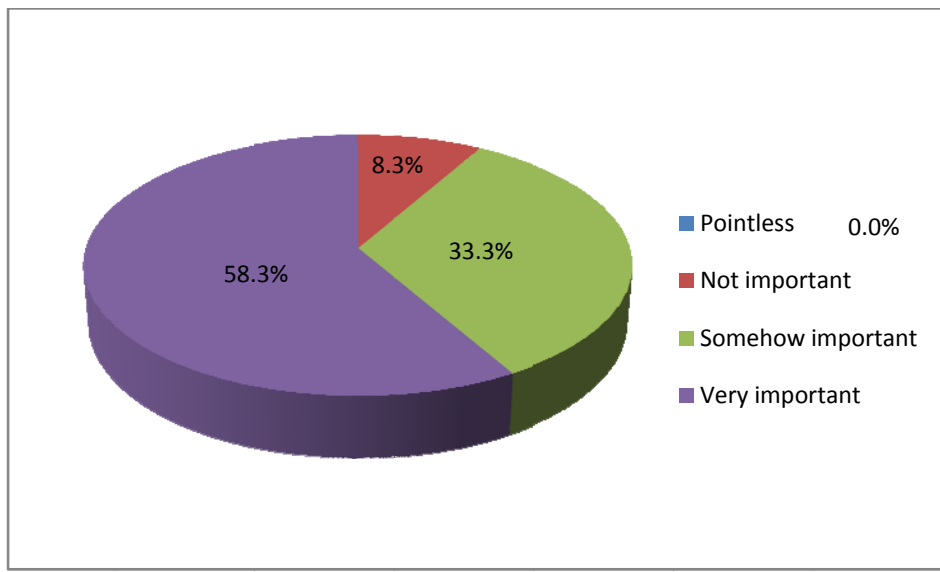


FIGURE 9- THE IMPORTANCE OF A WEEKLY LIVE Q/A SESSION (N=12)

As indicated by figure 9, most student (58.3 %) find a weekly live questions and answers session very important.

Five students left a comment. The only useful comment was that these sessions could be useful, but that he or she could ask questions via email anyway.

The last question of the survey was asking if the students thought that Blended Learning would improve their learning. The students were asked to supply further information.

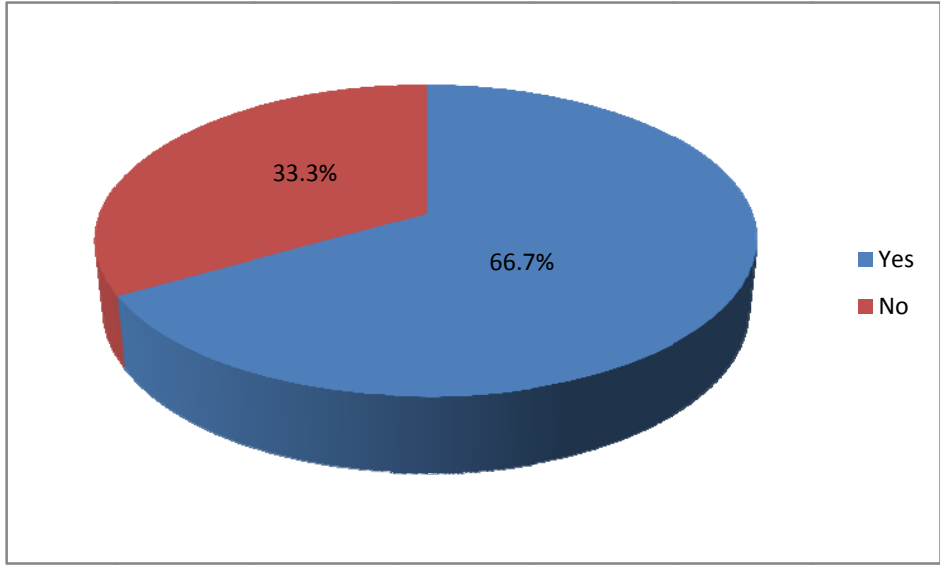


FIGURE 10- WOULD A BLENDED LEARNING FORMAT IMPROVE YOUR LEARNING? (N=12)

A clear majority thinks that Blending Learning would improve their progress (figure 10).

The positive respondents were asked what they think was necessary to implement the blended format successfully. Five students replied out of the eight in that situation. Two students mentioned that support needs to be available and the other replies included:

- The need to provision for different user internet speed
- The importance of the mixture of work to complete at home and at the tech.
- The availability of Text books, online on-demand video of lecturers and Q&A sessions, as well as ongoing availability of lecturer for Q&A.

The negative respondents were asked why they were thinking that the blended learning format would not improve their learning. Three out of the four students in that situation answered, and their explanations included:

- The need to have fixed time to study for motivation.
- The potential for distraction by using a computer.
- The present format works fine

The second reply comes from the student who mentioned the issue in a previous question.

SUMMARY OF INTERVIEW WITH A COLLEAGUE EXPERIENCED IN THE BLENDED LEARNING FORMAT

D.M. is the lead instructor trainer for Cisco Certified Network Professional course at a Cisco Academy Training Centre. He has been in that role for 6 years and has piloted the blended learning delivery 4 years ago.

In the in-person format, the trainee instructors were attending in person for 10 days, completing the labs on the equipment available at the CATC.

The CCNP course the next level up to the CCNA course concerned by this study

There are at the present time no simulators available for the CCNP course.

The format used for the instructor training was as followed:

- One presentation per day completed via Webex followed by a question and answer session daily for about two weeks.
- These sessions were recorded and accessible for the participants at any time.
- The students were completing the labs in their workplace.
- The students were required to attend for the last 3 days in person, when a few revision labs were set up on the real equipment. The trainees are requested to take the on-line theory tool on day 2 and the practical exam on day 3.

The online tools used for the blended delivery are:

- the online curriculum

- the live Webex¹² sessions
- the recorded Webex sessions
- The online end of chapter tests, with answers available immediately after the test is finished.
- Instant messaging availability via AIM.

He mentioned that the results and pass rate obtained using Blended Learning is similar to the in-person delivery.

Some students prefer coming in person for the 10 day course, so the 2 formats are concurrently running together.

It seems that the preference is not due to the format, but to the fact that the trainees are away from the normal work location, which enabled them to solely focus on their course without outside interference or distraction.

The format of recorded session associated with a Q/A session has been tried, but was not as successful in term of attendance as the live delivery then Q/A. The later method was also recording the session to make it available asynchronously.

From the trainer point of view, the advantage of using the blended delivery format was not to be tied up in the lab for the 10 days that the in person delivery requires.

OPINION OF A COLLEAGUE TEACHING THE SAME COURSE FACE TO FACE.

Mark Schatzdorfer is an experienced Cisco academy instructor teaching the CCNA and CCNP course at MIT.

His opinion about the use of the blended delivery format for the CCNA course is as follow:

- 1) He considers that the online activities are a good basis for students to assess how well they are doing in the course at the time. He mentioned that there is a variety of tests that cover both theoretical and practical knowledge and so he thinks at the moment they are sufficient. However, he considers that a distinction should be made between online activities that provide feedback to a student, and using online activities as the only way to assess a student.
- 2) Mark does not think that there are any other tools necessary to help the students at this point in time, as there are enough assessments available for students to judge their progress. More assessment would become overbearing.
- 3) He thinks the move to even more online learning is not so suitable for younger/full time students. It is mainly beneficial for part-time, mature or presently-employed students.

Mark's point 1 indicates that he thinks that it is important for the students to complete the practical work on the real equipment as well as on the simulator.

It is interesting to note that the two expert agree that there is a case to keep the option of the in-person class opened, even if it is for different reasons.

¹² Webex is an online conference system similar to Elluminate. More information is available on www.webex.com.

CONCLUSIONS AND RECOMMENDATIONS

The two guidelines considered were:

-TT6 Are online activities available that will enable students to assess their learning?

-Is the use of blended learning more appropriate to achieve the intended learning outcomes?

The answer to the first question is positive. The answer to the second question is also positive, providing that the appropriate learning environment is put into place.

The eLearning tools used at the present time are effective in supporting students learning.

A combination of email and the announcement systems as used now through the Blackboard interface is efficient in communicating with the students. It might be worth investigating in the cost effectiveness of the use of text messaging to contact students.

The opinion are still shared as to the preference between the use of the online course and the use of printed material, and here is some evidence that the two support are used by a lot of the students.

The students appreciate the availability of the lecturer.

There is a case to spend more time training students or to make sure that the students get more information on how to use the learning environment.

It would be beneficial to create more on-line formative assessments. In the case of MIT, this could take the format of online questionnaires created on Blackboard.

The Packet Tracer activities (skills integration challenges) seems to be pitched at the right level and are a good formative assessment tool for the students to use.

The students seem to be ready in their majority to take the challenge of blended learning, and they consider weekly questions and answers session as very important. The lecturer needs to be available between these, either electronically or in person, and resources need to be accessible remotely.

The opinion of the expert in this study indicate that the two formats (blended and in person delivery) need to be running concurrently to suit the student needs. The best method to deliver the lectures seems to be the synchronous delivery, with the recording of the sessions being available on demand. It is important to insist that the practical work is completed on the real equipment as well as on the simulator. It would probably necessary to keep a close eye on the less mature students who might not be as suitable or ready for the blended learning format.

Due to the low number of respondents to the survey, it is recommended that it is repeated to a greater number of students in the second semester of 2009 to confirm or inform the present results.

If the results are confirmed, the CCNA course in the blended learning format can be progressively at MIT, providing that:

- There is a choice of format for the students,
- There is more training for the students about the learning environment.

- A close tab is kept on the less mature students to check that they are coping with the format.
- The teaching staff is trained towards the further use of eLearning tools.

In the mean time, it would be worth preparing towards this format, and experimenting with techniques not used to date on that case such as podcasting and the use of text messaging if it is deemed to be cost effective.

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APPENDICES

APPENDIX A: ELEARNING TOOLS AVAILABLE ON THE COURSE

The learning tools used at the present time are:

The Cisco LMS:

- On-line curriculum (present and past courses)
Packet Tracer 5.1 simulator
- Announcement system on Cisco LMS
- Online grade book
- A message board
- List of historical classes
- Access to previous on-line class
- Access to new version of the on-line course for previous classes
- Professional development area
- Communities and chat area
- Alumni connection
- Careers opportunities

The Blackboard environment:

- Announcement system on Cisco LMS
- Hosting of the course documents
 - Copy of the weekly Power point presentation
 - Further study material
 - Discussion Board
 - External links

APPENDIX B: QUESTIONNAIRE USED

A. THE LEARNING ENVIRONMENT

1. Which parts of on-line learning environment are you using at the present time?

i. On-line course

1 daily 2 weekly 3 monthly 4 never

ii. Message board in the Networking Academy site

1 daily 2 weekly 3 monthly 4 never

iii. Announcement system on eMIT

1 daily 2 weekly 3 monthly 4 never

iv. Presentation files uploaded by the lecturer

1 daily 2 weekly 3 monthly 4 never

v. discussion board

1 daily 2 weekly 3 monthly 4 never

vi. Voice discussion board

1 daily 2 weekly 3 monthly 4 never

vii. E-mail

1 daily 2 weekly 3 monthly 4 never

2. Could you explain the reason why you are using or not using the resources mentioned above in the text box

i. On-line course

ii. Message board in the Networking academy site

iii. Announcement system on eMIT

iv. Presentation files uploaded by the lecturer

v. Discussion board

vi. Voice discussion board

vii. E-mail

3. Do you prefer learning from the course on-line or from a book?

1 Course on-line

2 Text Book

3. A mixture of both

4. Neither

(Tick box option)

You can enter comments about your answer in the following text box:

B. PREFERRED MODE OF COMMUNICATION WITH THE LECTURER

1. How do you prefer to receive announcements about the running of the course from your lecturer? Please number each of the following options 1 to 6, with 1 being the favourite option and 6 the least favourite option

- i. RSS (on-line feed -This automatically send news items in a reader).
- ii. E-mail
- iii. Message board on the Networking Academy site
- iv. Announcement system on eMIT
- v. Text messaging
- vi. Other

2. Are you satisfied with the present accessibility to your lecturer?

- i. Yes
- ii. No

Explain why or why not in the following text box

3. Your preferred mode of access to the lecturer. Please number these options in order of preference, with 1 being the preferred option, and 5 the least preferred option.

- i. In person
- ii. Via email
- iii. Via instant messaging (on-line)

- iv. Via the telephone
- v. Via text messaging (SMS- Cell phone)
- vi. Other

C. ASSESSMENTS

At the moment, we have at the end of each chapter an on-line test and a "skills integration challenge" (packet tracer activity)

1. What is your opinion about the content of the end of chapter tests?
 1. I need a lot more questions in them
 2. I need a few more questions in them
 3. There are too many questions in them.
 4. The number of questions is overwhelming
2. What is your opinion about the number of end of chapter tests?
 1. I need a lot more of them
 2. I need a few more of them
 3. There are too many of them already
 4. The number of them is overwhelming
3. Would you complete the end of chapter tests if they did not count towards your final grade?
 1. None of them
 2. A few of them
 3. Most of them
 4. All of them
4. We will now consider the number of Packet Tracer activities.
 1. I need a lot more of them

2. I need a few more
3. There are too many of them already
4. The number of them is overwhelming

5. What is your opinion about the difficulty of the "skills integration challenge" (packet tracer activity) at the end of each chapter?

1. They are always too difficult to complete
2. They are challenging
3. They are easy to complete
4. They are far too easy to complete

6 Do you think there enough ways for you to check on your own progress on the course?

- Yes
No

7. Indicate in the box any other activity you think would help you to self assess your progress

D. FUTURE DEVELOPMENTS

We are considering running this course as a blended delivery course, with access to online learning so you do not have to attend every face-to-face session at MIT. You could still access the lab whenever it is not in use, 7 days per week.

1. Do you consider this as a progress?

- Yes
No

2. How would you like to access the Lectures?

- i. Accessing a video of the presentation from the internet
- ii. Having a live online presentation weekly at a predetermined day and time (web conference). You could access it from a computer at home or from MIT
- iii. I prefer a traditional lecture
- iv. Other methods?

3. How important would it be for you to have a weekly live Questions and Answers session?

1. Pointless 2. Not important 3. Somehow important 4. Very important

4. Could you explain your answer in the following text box?

5. Do you think that a Blended Learning format would improve your learning?

- i. Yes 2. No

6. If you answered yes, what do you think is necessary to successfully implement this format?

7. If you have answered no why do you think this is the case?