

Business Undergraduates Learning Online: A One Semester Snapshot

**Krassie Petrova and Rowena Sinclair
Auckland University of Technology, New Zealand**

ABSTRACT

Online learning was first introduced into an undergraduate business programme in 1999 starting with just one single course. Currently online learning is used across the whole programme either to enhance classroom teaching or to reduce class contact time. In the second half of 2004, a broad review of online learning within the programme was undertaken, with the purpose to enhance understanding about online learning and provide recommendations about further development and improvement. The study presented here was carried under the umbrella of the review and was aimed at identifying key characteristics of student perceptions about the two online models implemented, and the actual usage patterns of the online learning platform. It provided information about student perceptions of online learning and a picture of the online platform usage.

Keywords: *online learning, e-learning, flexible delivery, New Zealand, business education, student perceptions, online usage*

INTRODUCTION

Online learning can be defined as an implementation of e-Learning using Web-based technologies (Petrova 2001). E-Learning on the other side is often used as a comprehensive term to identify the use of a variant of information and communicating technologies to enhance and support learning, sometimes blending their use (OECD 2005 p.11). Today online learning and e-learning have become an accepted educational paradigm across universities worldwide (Ling et. al. 2001, ANTA 2002, Lee & Nguyen 2005, OECD 2005).

Students have been identified and recognised as stakeholders in the development and implementation of online learning. Studies in the area of change processes related to the introduction of new educational technologies have found that students might be resisting change. Organizational formats developed to accommodate the new educational paradigm need to be managed carefully in order to avoid early disillusionment and the subsequent failure of students to realise the full education potential of online and e-learning (Hunt, Thomas, & Eagle 2002, McPherson 2002, Zentel, Bett, Meister, Rinn & Wedekind 2003).

Student participation in online learning and student perceptions in particular have been the emphasis of a significant research effort – see for example Swan 1995, Phillimore 2002, Lizzio, Wilson and Simons 2002, Lind and Soams 2003, Sahay 2004, Selim 2005, Wells, Fieger and de Lange, 2005. Other studies have highlighted usage patterns in terms of time, place and functional components (McKnight & Demers 2002, Burr & Spennemann 2004, Parry 2004). It is beyond the scope of this article to provide a comprehensive summary and comparison of the relevant literature. However the results of the reviewed research studies point out that in order to improve the scholarship of teaching online, it is necessary to study student perceptions and obtain timely feedback on what students value in 'online', and corroborating data on 'what' they use online, and 'where' and 'when'. Students' perceptions can provide valuable input to the continuing

processes of curriculum development and management (McKnight & Demers 2002, Burr & Spennemann 2004).

The study presented here attempts to provide a one semester snapshot picture composed of student perceptions about online courses in business programme, and to supplement the picture with data about online platform usage.

The article is organised as follows: the next section provides background information about the structure and online content of the programme used in the study and explains its motivation. The main objective is stated in the section following which also describes the study design. The next two sections describe the data collection methods implemented and present the findings. These are followed by a summary and a brief conclusion, highlighting priority areas for future work. Some specific terms used are explained at the end of the article.

BACKGROUND

The Bachelor of Business programme (BBus) at the New Zealand University used in this study is a three year undergraduate programme with eleven separate majors and is offered by the Faculty of Business. It aims to develop graduates capable of working in electronic contexts in business and in the wider community. The BBus is committed to student centred learning. Students are involved in learning and assessment activities which prepare them for their future roles in industry and the wider community. The significant growth experienced over the last five years, both in terms of increasing student numbers and in adding majors, has also led to a change of the student profile. Students are transferring to the BBus through multiple entry points. Characterised by their ethnic diversity, some students have experienced different learning cultures and speak English as an alternative language. Many fulltime students work long hours.

Online Learning Models

Online learning was first introduced into the BBus in 1999 in a single course. Since that time, there has been considerable expansion. Currently online learning is used within the programme to:

- Enhance the three hours per week classroom teaching (“enhanced mode”), and
- Provide flexible offerings by way of reduced class contact for some courses i.e. one class hour replaced by an hour equivalent online activity (“flexible mode”).

The Faculty of Business was one of the early adopters of online learning within the university, and initially built its own proprietary online learning platform (Parry 2004). However, since then online learning has become more widespread across the university and its importance is recognised within the university at a strategic level with regard to providing a learning environment that promotes student success.

A variety of curriculum and staff development strategies have been implemented, including grants. In early 2005 a full-time Flexible Learning Advisor was appointed to the Faculty of Business, who was charged with the task of supporting future online learning development. Following a number of pilot activities, a new university-wide online learning platform was introduced in early 2004 (AUTonline, based on BlackBoard®). A university wide infrastructure with regards to online learning emerged.

Motivation

In their article on the use of information technology to enhance education in business schools, Leidner and Jarvenpaa (1995) pointed out that there was a need to better understand the role of students in learning models involving information technology, and suggested that students would be 'likely to resist the new learning models' (Leidner & Jarvenpaa 1995 p. 287). Lizzio, Wilson and Simons (2002) found that student perceptions of the teaching and learning environment and the assessment practice contribute to the development of deep approaches to studying. More specifically they established that positive perceptions of the environment directly influence both measured academic outcomes e.g. academic achievement and also qualitative learning outcomes e.g. workplace related skills.

Therefore, it was considered important to investigate students as stakeholders in the online teaching and learning process. An opportunity to design and conduct a study was provided in the second half of 2004, when a broad review of online learning within the BBus programme was undertaken. The purpose of the review was to enhance understanding about online learning and provide recommendations about further development and improvement.

The review included: two groups of stakeholders (students and lecturers), the two online delivery modes (enhanced and flexible), and the online course sites (Figure 1). Lecturers were seen as participants in online learning both as course developers and as course implementers while students interact with the online learning platform in the context of the online course and delivery model.

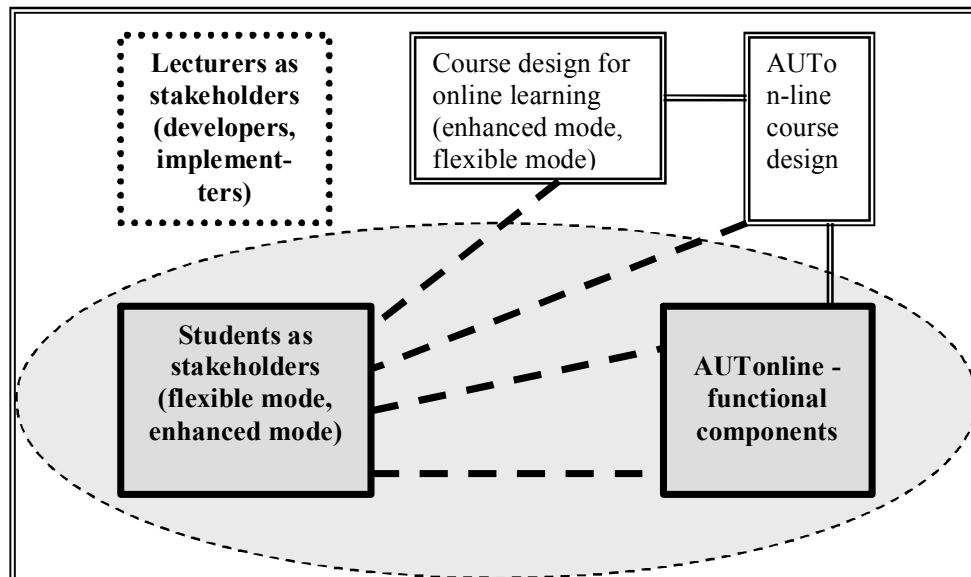


Figure 1: The general online learning framework.

The shaded part of the framework in Figure 1 shows the scope of the study reported here. The work was motivated primarily by the need to understand how the quality of student learning and

the student learning experiences could be improved, whilst working within the environmental and academic constraints.

An additional motivation was to investigate further the usage pattern of the online platform in terms of time. A better understanding of student behaviour online in terms of time might help develop better course designs (for example, better timing of important announcements). Furthermore, research in the area of information technology supported learning has identified “time flexibility” as an important advantage (Petrova 2001). Parry’s (2004) work presents some interesting examples of time and place patterns of online use for BBus staff and students but the results reported in the Parry’s study did not allow the drawing of significant conclusions.

STUDY OBJECTIVE AND DESIGN

The main objective of the study follows on from the need to better understand student behaviour and perceptions in relation to the online teaching and learning process. It can be broadly formulated as follows:

“To identify patterns of student online usage and to understand the key characteristics of student perceptions as active participants in online learning”.

It was assumed that student perceptions about online learning would be influenced by the type of online learning models i.e. flexible and enhanced, by the course design as implemented in AUTonline, and by the use of the specific functional components of the online platform (Figure 1). To address the study objective and based on prior work (Gerbic 2002, Capner 2004, Petrova 2002, and Sinclair 2003), two specific research questions were formulated:

1. What are the trends and patterns of the general use of the online platform including:
 - time dimensions,
 - functional components usage.
2. What are the trends and patterns of student perceptions and perspectives of online learning (enhanced and flexible) including:
 - satisfaction with online learning,
 - perceived value of online learning.

DATA COLLECTION

The following approaches towards data collection were adopted.

To investigate Question 1, the in-built AUTonline statistics unit was used to collate data about the use of AUTonline functional components (including time of access). At the time the system was capable of producing summary reports for more than one month; hence statistical data was gathered separately for three one-month periods, covering effectively the whole semester. Some of the more common AUTonline components used in the reports on usage are explained below:

- Course Content Area - uploading and storing course material such as notes, MS Microsoft Power Point presentations.
- Course Announcements – posting an announcement to the whole class by the lecturer, permanent or temporary.

- Course Discussion Board - a number of discussion forums and separate threads can be maintained.
- Group Area – a group space fully enabled with its own forum and email facility, for group project work.
- Communications Area – includes email, discussion board, group area and other collaboration facilities.

To investigate Question 2, data was collected through the use of two anonymous questionnaires – one for each of the two online learning models. These were designed to differentiate flexible from enhanced mode but at the same time to allow for a comparison between the modes. Each questionnaire included a section about the perceived usage of AUTOnline components as well.

The BBus comprises courses at three academic levels, level 5, level 6, and level 7, equivalent to first, second and third year of undergraduate studies. The first year is a foundation course (First Year Integrated Programme – FYIP). All BBus students are required to undertake a core Cooperative Education course (a full semester course, equivalent to four single courses), and to complete a core Ethics course as well as a core capstone Business Development Project course (BBus, 2005).

In their second and third year students specialize in one or two professional majors, each comprising a set of “level 6” Professional Studies courses and a set of “level 7” Professional Studies courses. All students included in the study were studying courses at levels 6 and/or 7 i.e. the subjects of the survey were either second or third year undergraduates. All questionnaires were distributed at the end of Semester 2 2004, after students had had significant experience with online learning.

FINDINGS

Meeting the research questions would provide a one semester “snapshot” of BBus online learning, and a background for further development and improvement. Although the scope of this study was limited to courses offered in online enhanced and flexible modes, and distance education courses were not included, some information was gathered across the programme as a whole for comparison purposes (see for example, Tables 1 and 2). This section describes the structure of the programme under investigation and reports on the findings related to the two research questions formulated in the previous section.

Online Learning Spread

Data from AUTonline collected from August to October, 2004 indicating the type and number of courses taught in flexible and in enhanced mode in Semester Two 2004 are summarized in Table 1. It was found that:

- All core courses in BBus include elements of online learning within their course and this could comprise up to 58% of the course of study of an individual student.
- The BBus comprises a total of 83 courses and online learning in some form was offered in 54 courses during the semester i.e. in 65% of all BBus courses.
- Flexible mode courses are available in five BBus majors with a concentration in the management major.
- Online learning was used in enhanced mode in all majors, in at least one course, with a range from one to five courses across the different majors.

- No courses were offered during the study time in an off campus mode, although two courses are under development for that mode.

Table 1: *Courses taught in flexible and enhanced mode in Semester Two 2004*

Courses	Flexible	Enhanced	Total
Core Courses (Co-op, FYIP, BDP and Ethics)	1	6	7
Professional Studies - Level 6	6	18	24
Professional Studies - Level 7	6	17	23
Total	13	41	54

Course enrolment numbers were used as a guideline as to how many students access online learning (Table 2). It was found that:

- 84% of course enrolments are in courses which include online learning (flexible mode, enhanced mode).
- 64% of course enrolments are in courses which use online learning in enhanced mode.
- 20% of course enrolments are in courses in flexible mode.

Table 2: *Number of student enrolled in BBus courses in Semester Two 2004*

Enrolment	Flexible	Enhanced	Total
Core Courses – FYIP		1337	1337
Core Courses – Ethics	285	-	285
Core Courses - BDP	234	-	234
Core Courses - Co-operative Education	-	220	220
Professional Studies - Level 6	331	492	823
Professional Studies - Level 7	210	1224	1434
Total	1060	3273	4333

Time Dimensions

AUTonline statistical data from the Professional Studies courses, throughout the period of August-October 2004, indicates that students were using the online platform as shown in Figures 2 and 3.

In enhanced mode (Figures 2a and 2b), 60% of all online activity took place between 10 am - 5 pm. There was little variation across the semester, or by course level. The first three days of the week were characterised by the heaviest usage levels - almost four times than that of weekend use.

In flexible mode (Figures 3a and 3b), the most common hours of use were between 10am-6pm, regardless of the level studied. Similar to the use of AUTonline by students enrolled in enhanced mode courses, days in the early to mid week appeared to be most commonly used by 'flexible' students. However the use over the weekends was higher compared to the 'enhanced' courses – which was to be expected given that one advantage of a flexible mode is to extend time flexibility for study.

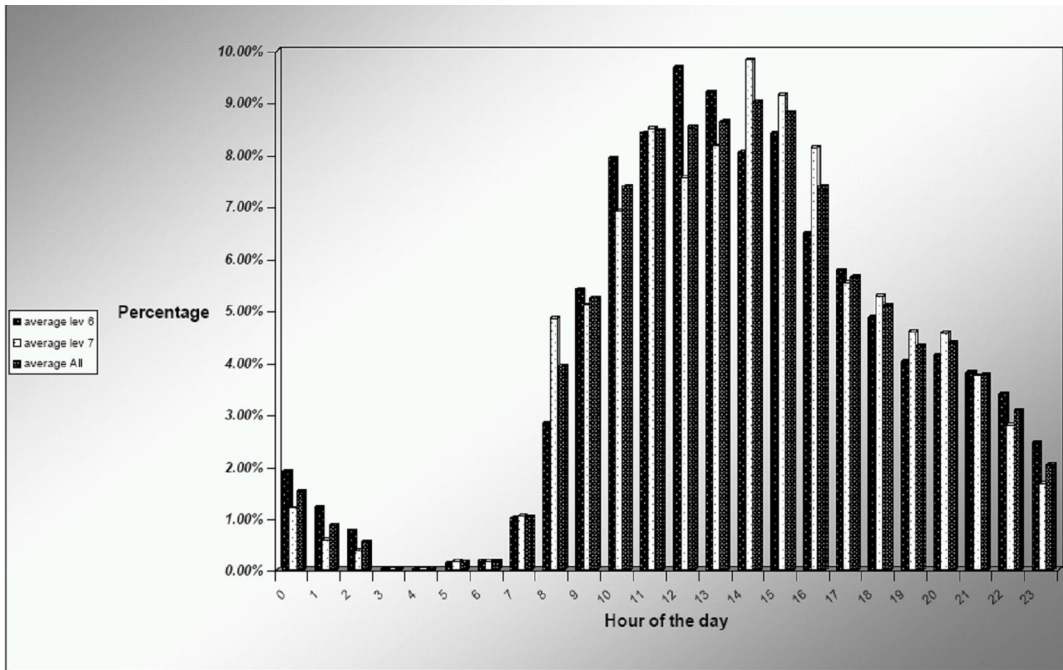


Figure 2a: Enhanced mode online usage (hourly)

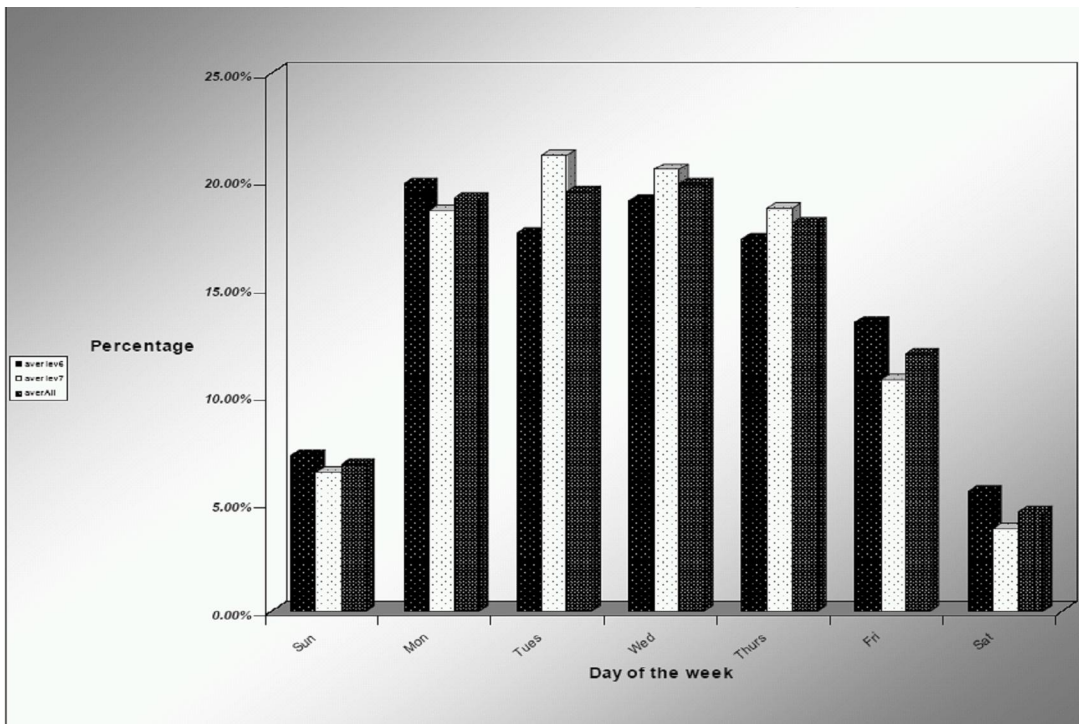


Figure 2b: Enhanced mode online usage (daily)

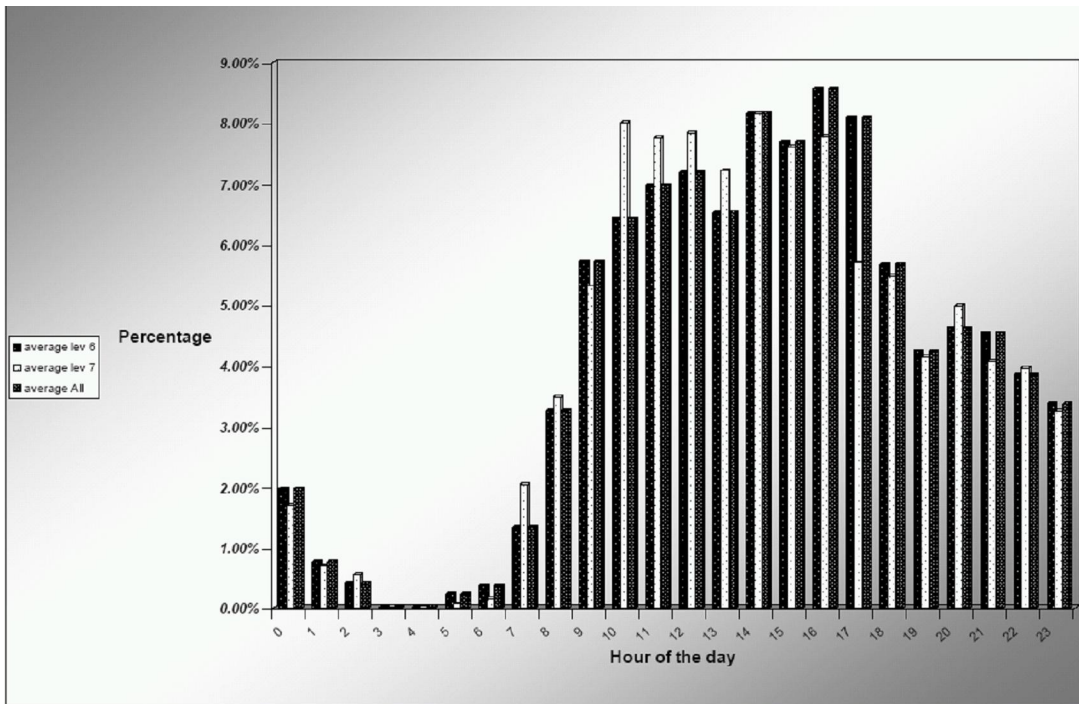


Figure 3a: Flexible mode online usage (hourly)

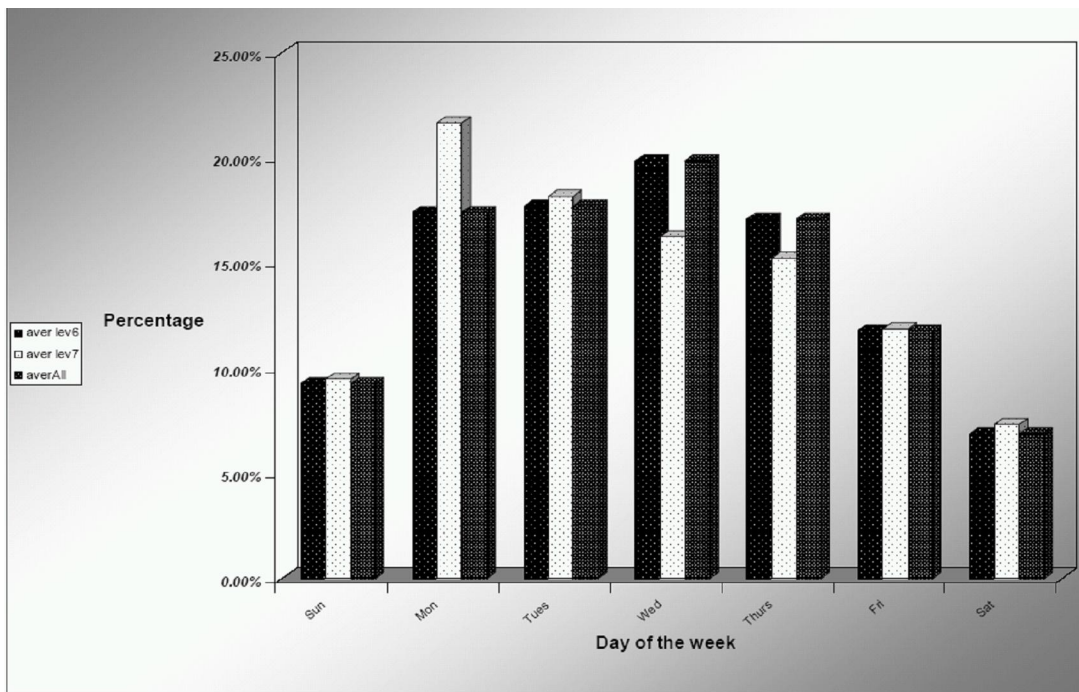


Figure 3b: Flexible mode online usage (daily)

Online Components Usage

AUTonline statistical data for the period of August-October 2004 indicates that students were using the functions of the online platform as shown in Figures 4 and 5.

In enhanced mode (Figure 4), the Content Area was the most commonly used feature of AUTonline overall, one third of the usage is associated with this component. Almost 20% of usage is of Announcements and the Discussion Board; however usage varies according to the level of the course. There was a range of 7% variation in the use of the Discussion Board, with level 6 courses using this component considerably more than level 7 courses (23.24% versus 16.10%).

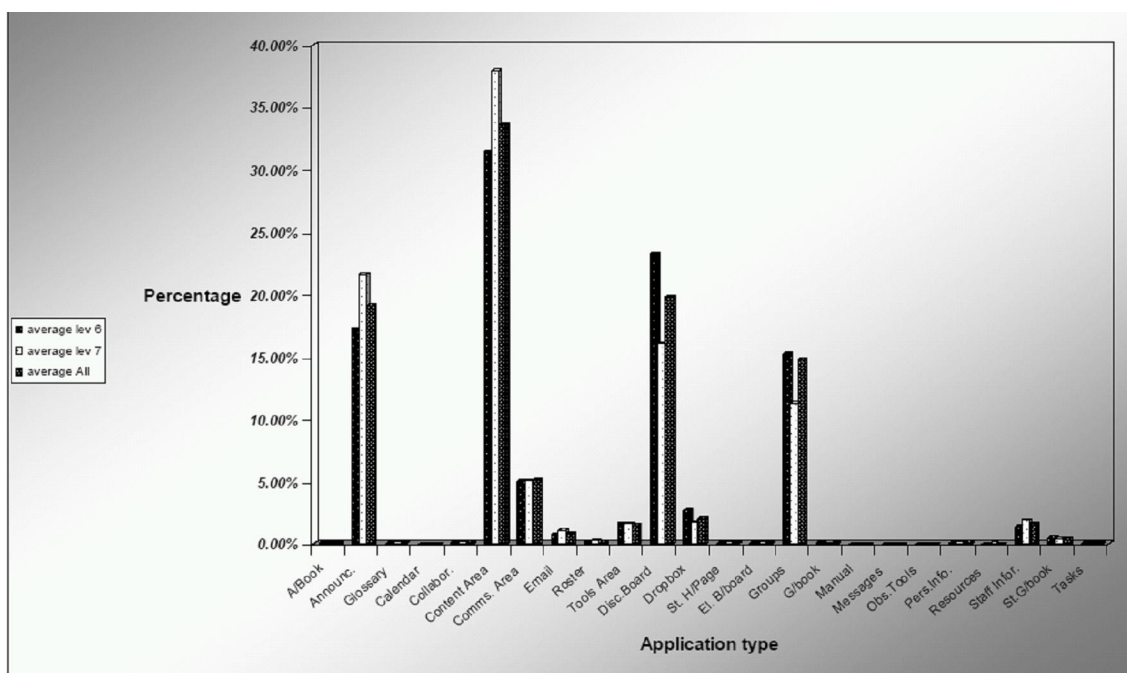


Figure 4: Enhanced mode - online platform components usage

In flexible mode (Figure 5), The Group Area was the most commonly used component of AUTonline (36.20%). This reflects the wide use of collaborative learning in flexible courses. This was followed by the Discussion Board (22.30%) and the Content Area (18.49%). There was a significant variation in the use of these components depending on the level of course. Students studying at level 7 flexible mode had a much higher usage of the Discussion Board (45.78% vs. 22.30%) compared to level 6 courses. At level 6, the Group Area had a higher proportion of use (36.20% vs. 21.19%).

Furthermore, there was a time variation in the use of the Group Area by students at level 6. A growing increase of use from 29.83% in August, to 34.54% in September and 44.22% in October was observed. The use of the Discussion Board mirrors this variation in a contrasting manner, with a decrease in usage from 33.25% to 17.79% in September and 15.86% in October.

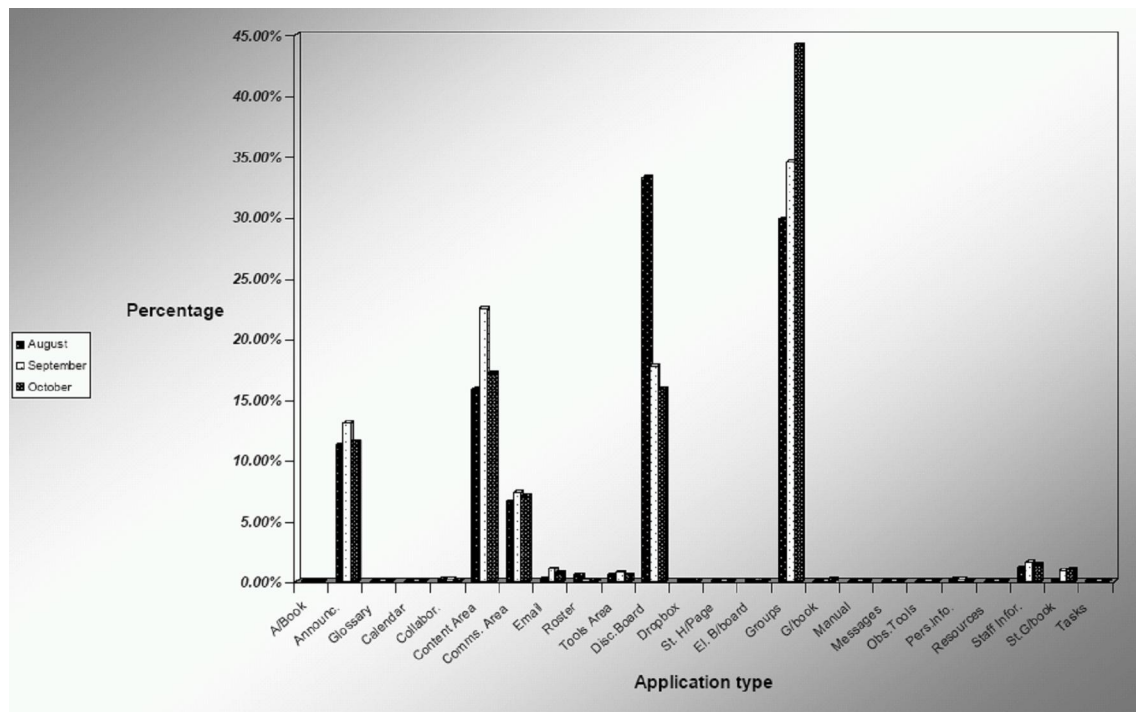


Figure 5: Flexible mode - online platform components usage

Students Perceptions

Data were collected through anonymous questionnaires. The questions addressed the review objectives (student satisfaction with online learning, the value of online learning for students, the role of the online experience in student's learning). Information was gathered from six courses offered in flexible mode and seven courses offered in enhanced mode. All courses were part of Professional Studies and were characterized by a substantial use of AUTonline. The responses to the questionnaires were summarised separately for courses in enhanced mode and for courses in flexible mode.

In enhanced mode, responses were received from 197 students, representing 71% of the students enrolled in enhanced mode courses. 84% of the responding students regarded themselves as full time students.

The responses (Table 3) indicate that 75% of students agreed they would choose another course in enhanced mode and 72% of the students agreed or strongly agreed that their experiences had been positive. The majority of the students agreed or strongly agreed that the enhanced mode met their expectations, and that it supported assessment (66%) and communication (72%). In other words, most students perceived the course as valuable and were satisfied with the enhanced mode of teaching and learning in terms of support for their work.

A total of 75% of students agreed or strongly agreed on the benefits of the online platform for notices, deadline notifications, changes and announcements. The majority of students agreed or strongly agreed on the benefits of the online platform for content storage (83%) and additional

materials (74%). The figures show that students value highly these online tools for organising course content.

A total of 58% of students would recommend this course in enhanced mode to another student, and 50% of the students agreed or strongly agreed that they preferred to take a course which uses AUTonline “a lot” while 19% disagreed. The figures show that more than about half of the students perceive the ‘enhanced’ course that they had undertaken in a positive way.

Table 3: Enhanced mode – students’ responses

Number of papers = 7							
Number of students enrolled 276							
Number of students responding 197 (71%)							
	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
		1	2	3	4	5	
1	The online mode of this paper met my expectations	1(1%)	15(8%)	44(23%)	106(55%)	22(11%)	4(2%)
2	Assessment tasks were well supported by AUTonline.	1(1%)	20(10%)	43(22%)	92(47%)	37(19%)	4(2%)
3	AUTonline supported communication between lecturers and students well.	0(0%)	18(9%)	46(24%)	83(44%)	41(22%)	2(1%)
4	AUTonline helped me to keep up-to-date with changes, deadlines & notices	3(2%)	8(4%)	34(18%)	99(52%)	44(23%)	3(2%)
5	AUTonline provided adequate storage for course materials.	0(0%)	7(3%)	22(11%)	93(48%)	68(35%)	2(1%)
6	AUTonline provided adequate additional course materials.	0(0%)	13(7%)	35(18%)	92(48%)	50(26%)	2(1%)
7	So far my experiences with this paper have been positive.	2(1%)	11(6%)	32(17%)	91(48%)	52(28%)	1(0.5%)
8	I prefer to take a paper which uses AUTonline a lot	13(7%)	23(12%)	55(29%)	49(26%)	45(24%)	2(1%)
		Yes/No	Y	N	n/a		
9	Would you choose another paper with an enhanced online option?	Yes/No	144(75%)	44(23%)	3(2%)		
10	Would you recommend this paper to another person based on its 'enhanced online' mode of delivery?	Yes/No	110(58%)	76(40%)	4(2%)		
11	Are you a full time student?	Yes/No	161(84%)	31(16%)			
			Yes	No	N/A		
12	I used the following features of AUT online for this paper:						
0.1	Announcements	Yes/No/NA	152(80%)	21(11%)	16(8%)		
0.2	Content area	Yes/No/NA	139(73%)	37(19%)	15(8%)		
0.3	Discussion board	Yes/No/NA	111(58%)	66(35%)	13(7%)		
0.4	Communication area e.g. chat	Yes/No/NA	65(35%)	92(49%)	30(16%)		
0.5	Roster	Yes/No/NA	30(16%)	115(61%)	43(23%)		
0.6	Group area	Yes/No/NA	87(46%)	75(40%)	26(14%)		
0.7	Other - specify: repository for documentation, course material, ISQL oracle UNIX handout resources, related info, digital drop box, course material	Yes/No/NA	32(24%)	22(17%)	77(59%)		

In flexible mode (Table 4), responses were received from 294 students, representing 65% of the students enrolled in flexible mode courses. For 43% of the responding students, this was their first course in flexible mode. 85% of the responding students regarded themselves as full time students.

Table 4: Flexible mode – students’ responses

Number of Papers = 6							
Number of students enrolled =458							
Number of students responding = 294 (65%)							
	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	N/A
		1	2	3	4	5	
2	The flexible mode of this paper met my expectations.	9(3%)	21(7%)	69(23%)	163(54%)	23(8%)	2(1%)
3	Assessment tasks were well supported by AUTonline.	19(6%)	19(6%)	49(16%)	171(57%)	40(13%)	2(1%)
4	AUTonline supported communication between lecturers and students well.	7(2%)	19(7%)	53(18%)	139(48%)	64(22%)	6(2%)
5	AUTonline helped me to keep up-to-date with changes, deadlines & notices	3(1%)	12(4%)	33(11%)	159(55%)	77(27%)	4(1%)
6	AUTonline provided adequate storage for course materials.	4(1%)	5(2%)	50(17%)	141(49%)	82(28%)	6(2%)
7	AUTonline provided adequate additional course materials.	5(2%)	23(8%)	50(17%)	141(49%)	60(21%)	9(3%)
8	My experiences with this paper have been positive so far.	6(2%)	20(7%)	54(19%)	161(56%)	45(16%)	2(1%)
9	I would prefer to take papers in this mode (cf. 3 hour class mode)	18(6%)	35(13%)	77(28%)	93(33%)	52(19%)	12(4%)
10	I had a choice between AUTonline and 3 hour face-to-face classes.	0(0%)	44(16%)	201(72%)	33(12%)	0(0%)	0(0%)
		Yes/No/NA	Y	N	N/A		
11	Was the choice of online time flexible enough for you?	Yes/No/NA	232(81%)	49(17%)	7(2%)		
12	Were the constraints of the weekly tasks compatible with your style of learning?	Yes/No/NA	197(68%)	83(29%)	8(3%)		
13	Would you choose another paper with a flexible option?	Yes/No/NA	211(73%)	68(24%)	93(3%)		
14	Would you recommend this paper to another person based on its 'flexible mode of delivery'?	Yes/No/NA	189(66%)	92(32%)	7(2%)		
15	Is this your first paper in flexible mode (hours class time, 1 hour online)?	Yes/No/NA	125(43%)	161(56%)	20(1%)		
16	Are you a full time student?	Yes/No/NA	246(85%)	38(13%)	4(1%)		
17	Did you experience problems with meeting weekly deadlines? If yes, please pick from the list below:	Yes/No/NA	89(30%)	110(38%)	94(32%)		
0.1	Computer access - explain: more comp. labs.	Yes/No/NA	39(13%)	164(56%)	90(31%)		
0.2	Internet access - explain:	Yes/No/NA	44(15%)	163(56%)	86(29%)		
0.3	Study related work	Yes/No/NA	72(25%)	146(50%)	75(26%)		
0.4	Work commitments	Yes/No/NA	83(28%)	135(46%)	75(26%)		
0.5	Family commitments	Yes/No/NA	47(16%)	161(55%)	85(29%)		
0.6	Other - specify: Sport commitments	Yes/No/NA	22(8%)	120(41%)	151(52%)		
18	I used the following features of AUTonline for this paper:						
0.1	Announcements	Yes/No/NA	243(83%)	26(9%)	24(8%)		
0.2	Content area	Yes/No/NA	212(72%)	51(17%)	30(10%)		
0.3	Discussion Board	Yes/No/NA	264(90%)	22(8%)	7(2%)		
0.4	Communication Area e.g. chat	Yes/No/NA	135(46%)	117(39%)	41(14%)		
0.5	Roster	Yes/No/NA	14(5%)	86(29%)	193(66%)		
0.6	Group area	Yes/No/NA	250(85%)	32(11%)	11(4%)		
0.7	Other - please specify:	Yes/No/NA	40(14%)	37(13%)	216(74%)		

The tables indicate that 62% of students agreed or strongly agreed that the flexible mode met their expectations and 73% of students would choose another course with a flexible option. The majority of students agreed or strongly agreed that the platform supported assessment (70%) and communication (70%). In other words, a significant percentage of the students perceived the course they had undertaken as valuable and were very satisfied with the flexible mode of teaching and learning in terms of support for their work.

A total of 82% of students agreed or strongly agreed on the benefits of the platform for notices, changes and deadlines. The majority of students agreed or strongly agreed on the benefits of the platform for content storage (77%) and additional materials (70%). The figures show that students value highly these online tools for organising course content.

A total of 52% of the students agreed or strongly agreed that they preferred this mode to 3 hours of face-to-face classes while 19% of students disagreed or strongly disagreed with this statement. 66% of students would recommend the course in flexible mode to another student. The figures show that more than half of the students perceive the 'flexible' course that they had undertaken in a positive way.

The table in the Appendix provides a comparative summary of the responses to each question for the two groups (flexible and enhanced modes). The following are some specific findings relating to these responses.

It needs to be noted that the positive responses to questions relating to the AUTonline functional usage, in particular 'keeping up to date' and 'assessing course material' was backed up by relatively high usage rates in the Announcement and Content Area components of AUTonline for both enhanced and flexible mode courses. In other words, the online platform is recognised by students as having an important role as course content organiser and a communication channel between them and the lecturer.

The pattern of responses for questions relating to experiences in the enhanced mode shows that although students were generally positive about taking further enhanced courses themselves, they were less inclined to recommend enhanced courses to others. This suggests some uncertainty on the part of students as to the benefits of AUTonline in enhanced mode. This pattern was not replicated for flexible mode courses. In other words there are no strong grounds to believe that students clearly see online learning as more beneficial to students compared to face-to-face learning.

Enhanced mode may appear to show a broader level of satisfaction at level 7 than at level 6, but this is heavily biased by the small sample at level 7 with one of the two courses showing a very strong positive response. This is likely to be confounded with topic, course structure, and lecturer at least. In other words there are reasons to believe that third year student might be better prepared to take advantage of the benefits offered by online learning in some subject areas.

SUMMARY

As shown previously, every student enrolled in the BBus will have some experience of online learning because of the adoption of online learning by the core courses within the programme. Depending on students' course of study, this could amount to 58% of the overall points needed to complete the BBus). At its greatest impact, this would include two courses in flexible mode and five courses in enhanced mode. Beyond the core courses, a student's experience would depend on which major(s) the student is enrolled in.

The study proposed to investigate two research questions: (1) What are the trends and patterns of the general use of the online platform? and (2) What are the trends and patterns of student perceptions and perspectives of online learning (enhanced and flexible modes)?

Research Question One

It was found that students are taking advantage of increased time (and place) flexibility in both modes. Most of the use is during the early/mid part of the week, although weekend use is a little higher in flexible mode. However, most students still prefer to login between 10am - 5/6pm. Similar results were reported by Burr and Spennemann (2004) and earlier by McKnight and Demers (2002).

It was found that the most extensive use of online learning is for enhancement of face-to-face classes, with 40 out of the 83 courses (48%) using online learning in that way. The flexible mode is less prevalent. Two of the compulsory courses were offered in this mode and the remaining eleven courses were in five majors, with a concentration in one of them (management).

Use of the Online Platform in Enhanced Mode.

Similarly to the results reported in Phillimore (2002), in the enhanced mode the Content Area component was used most especially for retrieving MS PowerPoint slides, followed by Announcements and Discussion Board. There was less emphasis on the use of the online environment to develop student capabilities.

This is probably a fairly typical pattern for many universities, where existing courses are enhanced with online learning (Lee & Nguyen 2005). There are several possible reasons for this. It may indicate that the enhanced mode is being used to support face-to-face classes, which are more interactive and capability focused. It may also reflect the absence of interaction or student centered approaches in the course. It may also be indicative of an early stage of development as teachers familiarize themselves with the environment and start to understand what it might offer for learning. There is probably a time and workload issue as well because any online activity must be fitted into the existing course structure and this implies either replacement (for the teacher) or additional work (for the teacher and for the students).

Use of the Online Platform in Flexible Mode.

In the flexible mode, there was a much greater use of online learning for communicative activities, i.e. group work and online discussions. While the platform was used to put a wide variety of content online, none of the teachers mentioned MS PowerPoint slides! A much wider range of capabilities were being addressed and there was much more emphasis on using the online platform for this purpose.

Here, it would appear that lecturers have used the flexible mode in a different fashion compared with the enhanced mode. This may be because this mode required significant curriculum appraisal and thinking in order to ensure student development, as opposed to the enhanced mode which appears to be more of an "add on" or support mechanism. What is noticeable is that students are more active in flexible mode; this may be because flexible mode represents a "transfer" of class activity due to the reduced time in class. It may also be that teachers who engage in flexible mode have different ideas about teaching and learning (Selim, 2005).

Research Question Two

With regard to the trends and patterns of student perceptions and perspectives of online learning (enhanced and flexible modes) it was established that there was a reasonably high level of

satisfaction from students enrolled in courses using both enhanced and flexible modes, with over 70% of students rating their experience as positive and being prepared to do a course in that mode again. There is a slightly higher level of satisfaction in flexible mode with the ways in which online learning related to various aspects of the course, e.g. assessment, communications and notices.

However, students' overall expectations from the course they had taken are not being met to the same extent, and it is notable that there is a big difference in the number of students that would take a course again in the same mode and recommend the course in the mode to a friend. A possible explanation to this might be found in the fact that the study did not take into consideration the subject complexity of their course neither factors related to the individual characteristics of other stakeholders – such as lecturers and peers. All these might have contributed to the final answer to the question.

In both modes students appear to be fairly evenly split in their preferences for face-to-face and online learning. There could be many reasons for this. Students may not understand the role of the medium in an on campus university and will still be adapting to the greater demands of independent and student centred learning and time management (Hunt, Thomas, & Eagle 2002). Lecturers may also be uncertain of the role of online learning in their courses and the ways in which it might be used to benefit learning in tandem with face-to-face classes.

CONCLUDING REMARKS

The findings reported here confirm to a large degree the macro-conclusions of a recently published report (Marshall 2005) which analyses the institutional capability to develop and implement e-learning in a way that meets the needs of students and staff in a sustainable fashion. However the study is limited to investigating the student perspective only. Another limitation of the approach is it's programme orientation and the subsequent lack of specific data related to individual course design and subject specifics. Subject related surveys of student perceptions would complement a programme level investigation and might provide corroborating evidence: for example the results reported here are similar to the findings in (Wells, Fieger & de Lange 2005) about the key perception predictors, which include the use of Announcements and the Content Area of the online learning platform

Despite these limitations, the findings contributed to a better understanding of the role played by online learning in student learning experiences, allowed the identification of priority development areas, and provided a starting point for further discussion. As students are recognized as major stakeholders in the development of online learning, future work needs to focus on increasing their understanding of the role of online learning. Priority areas include:

- Implementing online learning to develop the specific skills and capabilities expected from a business graduate.
- Providing more flexibility within the course design to enable further student centered learning.
- Continuing to develop online learning as a complement to face-to-face classroom learning.

At an implementation level, promoting online learning through the enhanced mode first might help achieve the goals above. This would encourage the development of student capabilities and active learning.

The Marshall report (2005) found that the university performed well and had a strong focus on teaching and learning and development co-ordination. The report suggested that more needed to be done in the area of evaluation of online learning - a task partially fulfilled by this study. However feedback about student perceptions of online learning needs to be gathered on a

regular basis, to provide the information necessary to work successfully in the priority areas outlined (McPherson 2002, Zentel et al. 2003, Sahay 2004, Lindh & Soames 2004). A suitable vehicle for this is the existing course evaluation process, which might be extended to include questions specifically targeting online learning (enhanced mode, flexible modes), including parts of the framework used in Marshall and Mitchell (2002, 2004).

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DEFINITIONS OF THE KEY TERMS USED IN THE REPORT

AUTonline: The online platform used in at the university. It is based on Blackboard® and is linked to the student enrolment system. AUTonline provides controlled access on and off campus, 24/7.

BBus: Bachelor of Business – a three year undergraduate degree offered by the university's Faculty of Business.

Core Courses: These are the compulsory courses in the BBus. Include Ethics (15 points), Business development project (15 points), Cooperative Education (60 Points), and FYIP (First year Integrates Programme) – four double (30 point) point courses.

Course: An examined unit of study (in other programmes, known as "class", "module", "paper"). A single course is worth 15 points. A full time student typically takes four single courses in one semester'.

Enhanced Mode: Online learning is used as an additional teaching and learning strategy, with no change to the existing face-to-face class structure i.e. three hours of class contact per week.

Flexible Mode: Online learning is a more significant part of the course and there is reduced face-to-face contact i.e. two hours of face-to-face activity and more intensive online activities which replace a one hour class.

Level 6, level 7: The Bachelor pf Business programme comprises a mix of courses at three academic levels (5,5 and 7) - roughly equivalent to studies in Year 1, Year 2 and Year 3 of the degree.

Major: In the Bachelor of Business programme students typically complete the requirements for at least on major specialization ("major"). A major contributes 90 points out of the 360 points required to complete the degree itself.

Distance (Off Campus) Mode: There are no or few face-to-face classes and online learning is the dominant teaching and learning mode.

Online Learning: The use of the online platform (AUTonline) within a course as a teaching and learning strategy.

Professional Studies: These comprise non-core professional courses, associated with each BBus major.

Semester: The academic year in New Zealand universities starts in Semester 1 during late February or early March each year, Semester 2 starts in July of the same year and Summer Semester starts in early December.

APPENDIX

A Comparative Summary of Student Responses

Questions	Enhanced Mode	Flexible Mode
1) The flexible mode of this course met my expectations.	The majority of all replies agree with this comment but a significant number are undecided/indifferent.	The majority of all replies agree with this comment.
2) Assessment tasks were well supported by AUTonline.	The majority of the replies agree but the pattern is less strong with a wider spread of responses. ~10% disagree.	Somewhat more positive than enhanced mode but again a more spread pattern.
3) AUTonline supported communication between lecturers and students well.	The pattern is very variable here from 45% to 100% agreement	Somewhat more positive than enhanced mode but again a more spread pattern.
4) AUTonline helped me to keep up-to-date with changes, deadlines and notices.	Between 47% and 100% agree with this statement. (The 47% is a single course outlier). Most students agree.	Most students (60% to 80%) agree here with no outliers.
5) AUTonline provided adequate storage for course materials.	There is majority agreement across all courses. Most are positive.	There is majority agreement across all course responses. Most are positive.
6) AUTonline provided adequate additional course materials	There is majority agreement across all courses but a significant number are undecided/indifferent.	There is majority agreement across all course responses.
7) My experiences with this course have been positive so far.	70% or more agreement across all courses. Replies are generally favourable.	60% or more agreement across all courses. Replies are generally favourable.
8) I would prefer to take courses in this mode (<i>cf.</i> 3 hour class mode).	The views here are very wide with ~30% in the "neutral zone". Despite the positive responses above, students do not seem to regard enhanced mode as a "selling" point.	The response here is more positive than the enhanced mode courses, with fewer neutral replies.
9) I had a choice between AUT online and 3 hour fact-to-face classes.	Question not asked for enhanced mode.	Responses range from 0 to 47%. The choice options don't always line up with timetable realities.

Questions	Enhanced Mode	Flexible Mode
10) Would you choose another course with a flexible/enhanced option?	Responses are between 60% to 90% positive.	Responses are between 60% to 90% positive.
11) Would you recommend this course to another person based on its 'flexible mode of delivery'?	More variable responses here, from 13% to 70%. Students seem less willing to recommend enhanced mode to others than their own enthusiasm would suggest.	A wide range of response here from 44% to 80% positive with no discernable pattern. Again students seem less willing to recommend flexible mode to others than their own enthusiasm would suggest.
12) Is this your first course in flexible mode (2 hours class time, 1 hour online)?	Not asked for enhanced mode.	Varies from 36% to 64%
13) Are you a full time student?	~85% overall.	~85% overall.

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