THE REALITY GAP

How to bridge the gap between students' expectations and lecturers' information technology delivery skills.

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ABSTRACT:

Courses offered on the Web, multimedia presentations, listservers - these are some of the opportunities that are being offered in education throughout the world. Students in the Department of Accountancy Law and Finance at UNITEC were asked what they expect from information technology to enhance the way that their courses are being delivered. Lecturers were invited to describe what teaching tools they are currently using and what they plan to use in the near future. It was expected that students’ expectations would be greater than what is currently being provided. The aim of this research was to discover if a gap exists and if so, to make some recommendations as to how the gap could be narrowed.

INTRODUCTION:

The issues investigated arose from a focus group that was conducted in the second semester of 1997 as part of a research project in the Department of Accountancy, Law and Finance at UNITEC. Although not a direct question, a number of students in this focus group complained of UNITEC lecturers using too much “talk and chalk”. It was felt that this issue needed further investigation.

METHODOLOGY:

The chosen method of investigation was to invite students and lecturers to attend a series of focus groups. This method was chosen because there was a need to elicit
some in-depth information. It was hoped that group members would influence each other by responding to ideas and comments in the discussion.

**Student Focus Group**

Participants in the Focus Group:

Each focus group consisted of up to nine participants, as a focus group must be small enough for everyone to have an opportunity to share insights and yet large enough to provide diversity of perceptions. When a group exceeds a dozen participants there is a tendency for the group to fragment (Krueger, 1994). All participants were second semester students with some experience of attending a number of different lectures/courses.

There were four focus groups each with comparable participants to detect trends and patterns across groups. The structure of the groups was drawn from a survey conducted in the Department of Accountancy Law and Finance at UNITEC in semester two of 1997. This survey indicated that 36% of students were aged between 20 and 30 years of age, and a further 39% were aged over 30 years of age. Over 50% of the students surveyed did not have English as a first language.

Group 1 - Under 20-30 year age group who have English as their first language

Group 2 - Under 20-30 year age group who do not have English as their first language

Group 3 - Over 30 year age group from any language background

Group 4 – Mixture of the above three groups.

The participants were invited to a lunchtime session (approx 45 min).

The distribution of male /female participants was approximately equal.
Key Research Questions

1. What technology are you aware of that UNITEC has provided for lecturers in the Department of Accountancy Law and Finance to use in their classes?

2. To what extent does the average lecturer in the Department of Accountancy Law and Finance make use of the technology available to deliver their course?

3. Describe the technological communication tools you would expect UNITEC to provide in the ideal situation.

4. Do you think it would make a significant difference to your learning style and assessment results if lecturers were to use these tools?

5. What are the barriers that you perceive that lecturers in the Department of Accountancy, Law and Finance have to overcome to make better use of technological communication tools?

Staff Focus Group

Participants in the Focus Group:

A focus group of twenty four full time lecturers was held at an Accountancy Law and Finance staff meeting.

Key Research Questions:

1. What methods of delivery are you currently using?

2. Do you think you would/could use anything else?

3. What resources do you think UNITEC should provide to assist you in the acquisition of skills and equipment?
RESULTS:

Student Focus Groups

Responses

1. What technology are you aware of that UNITEC has provided for lecturers in the Department of Accountancy Law and Finance to use in their classes?

   Lecturers are using OHP, Videos, DataShows using Power Point, Television, E-mail, CD-Rom

2. To what extent does the average lecturer in the Department of Accountancy Law and Finance make use of the technology available to deliver their course?

   Approximately 70% of lecturers are using OHP occasionally. Students felt that approximately 30% of lecturers used a variety of methods. Lecturers who used more than an OHP style of presentation generally made use of a large number of different forms of teaching. Although there was some disagreement among students, they mostly felt that a high proportion of lecturers made very little effort to incorporate technology into their teaching.

   Apart from OHP presentations the most commonly used technology is videos Students reported that, on average, they saw one video per semester. All students felt that there was too much talk and board work which bored them and students often reported that they liked a video because it broke the boredom of the lecturer speaking and writing on the board.

3. Describe the technological communication tools you would expect UNITEC to provide in the ideal situation.

   More videos – but the videos must be up-to-date and displayed on large screens so that everyone can see them. Students also requested that videos be available for loan in the library so that they could be reviewed after the lecture.

   E-mail to contact lecturers and for students from overseas to communicate with family and friends.
Audio-tapes of the lecture, case studies and any course related readings should be available from the library.

CD-Roms.

Datashows using PowerPoint

All course material including course notes, previous exams with model solutions and worked examples of exercises should be available on the UNITEC network, or on the Web and in the library to use for revision purposes.

Internet resources should be available to all students with pointers to relevant sites for research topics.

A PC permanently loaded into each desk in lecture rooms for students to take notes and view Power-point presentations would be useful.

A printer attached to the whiteboard to print out notes for students would mean that students wouldn’t have to take notes from the whiteboard while trying to listen to the lecturer.

More use of site visits and guest lecturers with videos recorded and available for reviewing later would make classes more interesting.

More scanners could be made available for students to use.

4. Do you think it would make a significant difference to your learning style and assessment results if lecturers were to use these tools?

Unanimous Yes

Reasons: Variety keeps your attention longer.

When material is presented in different ways students might understand the subject better.

Videos stick in the mind better.

It is easier to remember visual presentations.

Students can reinforce their in class learning by being able to go over the work after the class.

5. What are the barriers that you perceive that lecturers in the Department of Accountancy, Law and Finance have to overcome to make better use of technological communication tools?
Age – older lecturers seems to use talk and chalk, perhaps lecturers are unfamiliar with technology

Lecturers don’t have the time to research good, relevant, up-to-date videos, appropriate Web sites etc.

Up-to-date equipment and resources are expensive – would fees go up?

The size and shape of some rooms makes it hard to see visuals.

Web-based resources must be focussed, otherwise it is too easy to be distracted.

There is already too much content in courses. There may not be time to add in extras.

Analysis of student focus groups

The researchers were satisfied that the responses received from the student focus groups were representative of the student body in the Department of Accountancy Law and Finance at UNITEC. Students do like, and expect, variety in the way that courses are delivered and feel that their learning could be enhanced by methods other than “chalk and talk”.

One weakness of this study was that the focus group moderators were lecturers. Students were asked to criticize (although not personalize) lecturers use of technology skills in delivering their curricula, to another lecturer. This can be seen as threatening, consequently the moderators did not know if they collected as much in depth information as possible. An independent moderator may have been preferable.

A second area of weakness was the focus group of overseas students. These students were all of various Asian ethnicities and there was difficulty encouraging these students to take part in a discussion. The various cultural groups represented may have felt hesitant about criticizing or giving opinions about lecturers who they see as being people in positions of authority.

A third area that could have been improved on was timing. By the time the researchers were prepared to run the focus groups, students were enmeshed in mid term exams and most students had assignments to be completed. Consequently it was difficult to get enough students to participate. The aim was for seven to nine participants however, five to six were averaged for each group.
**Lecturer Focus Groups**

Responses

1. What methods of delivery are you currently using?

   This question looked at all the delivery methods that are currently being used by lecturers rather than just the use of technological tools. This was deliberately done as the results of the student focus groups indicated that what students were looking for was variety in teaching styles and methods.

   *Twenty different delivery methods were identified with, as expected, overheads, handouts and videos being the most common methods.*

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<thead>
<tr>
<th>Deliver methods currently used</th>
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<tbody>
<tr>
<td>Overheads</td>
<td>100%</td>
</tr>
<tr>
<td>Hand outs</td>
<td>100%</td>
</tr>
<tr>
<td>Videos</td>
<td>90%</td>
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<tr>
<td>Group discussions</td>
<td>90%</td>
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<tr>
<td>Internet/e-mail</td>
<td>90%</td>
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<tr>
<td>Case Studies</td>
<td>70%</td>
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<tr>
<td>Work sheets</td>
<td>50%</td>
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<tr>
<td>Quizzes</td>
<td>30%</td>
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<tr>
<td>Computer software</td>
<td>30%</td>
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<tr>
<td>Power point</td>
<td>15%</td>
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2. Do you think you would/could use anything else?

   *Lecturers would like to be able to offer more and varied delivery methods.*

   *The alternate methods suggested were:*

   - Video conferencing with guest speakers
   - Internet access for all courses
   - Virtual reality for demonstrations
   - Self directed, computer-based learning
   - Simulation experiences
   - Television
   - CD Rom
   - Radio
3. What resources do you think UNITEC should provide to assist you in the acquisition of skills and equipment?

*Common concerns were:*

*Insufficient video players available*

*Very few students currently have Internet access and there is insufficient free time available in the computer labs to schedule Internet based classes for all subjects.*

*There should be a policy on the payment of guest lecturers.*

*Greater technical support and training should be made available.*

**Analysis of lecturer focus group**

The decision to speak with lecturers at a staff meeting was justified by being able to gain information from the majority of the teaching staff in the department. The informal, brainstorming method of data collection allowed all staff to contribute. A recommendation was made at the meeting that follow up sessions be held to allow staff to share “best practice” teaching methods with other staff.

**Conclusion:**

The main outcome of these focus groups was that the results confirm the concerns raised by UNITEC students in an earlier focus group that lecturers use too much ‘talk and chalk’. Students have suggested that lecturers need to become more aware of technological tools and be allowed the time to investigate current videos and Internet resources. Students feel that their learning would be enhanced by the use of a variety of teaching methods. Lecturers described an extensive number of teaching methods currently being used but this does not appear to generally correlate with information supplied by students. There is a wealth of experience and expertise within the department that needs to be shared amongst all teaching staff.

**Recommendations for further study**

It is recommended that further research be conducted to determine how often, when and where within the Accountancy Law and Finance programmes different delivery
methods are used as although lecturers are using a variety of methods students still perceive that the primary methods are white board and video.
A further recommendation is that a study be done of the quantifiable difference in examination results when different delivery methods are used.

**ANCIENT CHINESE PROVERB**

*I hear and I forget
*I see and I remember
*I do and I understand*