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# What Value has Design in Computer-Based Learning (CBL)?: An Analysis from the Student Perspective 

## Appendices



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## Appendix 1: Screenshots of CBL Material

## A1.1: MENTOR Screenshot Showing Glossary and History



The Glossary may be accessed using the button bar on the screen and this offers the learner the option of clarifying the meanings of the terms used in the material.

## A1.2: MENTOR Screenshot Showing The Main Map Screen



The main map may be accessed from the button bar, or from the introductory screen as shown. This offers a diagrammatic overview of the material concerned and enables the user to navigate directly to the start point of any of the units within the module.

## A1.3: MENTOR Screenshot Showing Structure Map



The structure map may be accessed using the button at the bottom of the active window currently on screen. This offers a more detailed overview of the material within the module and may be expanded to reveal contents to the level of specific windows within specific units of the module. This map allows the user to navigate directly to individual windows within the material. When the button for this map is clicked the map opens to show the currently active window highlighted within the map, thereby offering the user an indication of their current location within the material.

## A1.4 MENTOR Screenshot Showing Simple Exercise



The exercises vary in their complexity, with some exercises requiring only recall of material covered previously, to the level where learners are required to discriminate the material from distractor material shown and to respond by making a decision.

## A1.5: MENTOR Screenshot Showing More Complex Exercise



The more complex exercises required an understanding of material covered previously and the capability to utilise that understanding in order to make context specific decisions.

## A1.6: MENTOR Screenshot Showing Feedback Offered in Exercise



The exercises also varied in the level of on-screen feedback offered. While the simpler exercises merely indicated whether responses were appropriate, the more complex exercises offered some level of explanation regarding the appropriate responses within the specific context.

## A1.7: MENTOR Screenshot Showing PSE Assessed Exercise



The assessed exercise required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a wider context. The background material was presented to learners within the MENTOR software, including a fictional business plan. The learners accessed the problem scenario as shown above and their assignment was submitted as a print out for grading.

## A1.8: SHS Mediabase Screenshot Showing Menus and Layers



The Mediabase includes a wide range of related material, navigation of which is provided in the form of menus and sub-menus.

## A1.9: SHS Mediabase Screenshot Showing Typical Food \& Beverage Screen



The Mediabase includes video clips of production methods and still images of completed dishes and servings.

## A1.10: SHS Mediabase Screenshot Showing Range of Modalities Used



The Mediabase contains a wide range of material which it presents as interactive screens including navigable maps, VR scenes, and exercises.

## A1.11: SHS Mediabase Screenshot Showing Role Playing Scenarios



The Mediabase includes a range of role play scenarios in the form of videos of good and bad practice in the restaurant.

A1.12: SHS Mediabase Screenshot Showing Video Screen of Wine Background


## A1.13: SHS Mediabase Screenshot Showing Role Playing Exercise



A1.14: SHS Mediabase Screenshot Showing Table Setting Exercise


## A1.15: DMLE Screenshot Showing Mondo Exercise Feedback



The Mondo Exercise offers some level of explanation regarding the appropriate responses within the specific context.

## A1.16: DMLE Screenshot Showing Prototype Scenario Setting



The prototyping simulation begins by setting the task and highlighting some of the important variables to be considered. The material is presented in the form of text, graphics, animation and video.

## A1.17: DMLE Screenshot Showing Technical Advisors / Experts



Expert advice may be accessed using the on-screen buttons. The advice is offered using a range of text, graphics, animations and videos, including some drag and drop style simulation elements which learners may manipulate to observe effects.

A1.18: DMLE Screenshot Showing Showing Manufacturing and Video


Overviews are offered from the perspectives involved in the design, manufacturing and marketing of the Slideman project. The material makes use of text, graphics, sound and video material.

## A1.19: DMLE Screenshot Showing Design Variables



The design options are presented and learners are required to choose a design specification. This requires understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.20: DMLE Screenshot Showing Design Critique / Feedback



The design specification exercise offered some level of explanation regarding the appropriate responses within the specific context.

## A1.21: DMLE Screenshot Showing Manufacturing Variables



The manufacturing options are presented and learners are required to choose a design specification. This requires understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.22: DMLE Screenshot Showing Manufacturing Issues



The manufacturing options are presented and important issues are highlighted. This required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.23: DMLE Screenshot Showing Marketing Options



Learners are required to choose a marketing approach. This required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.24: DMLE Screenshot Showing Simulation Based on Decisions Made



Having taken decisions based on their understanding of the material covered, learners may then run the simulation to discover how their business fares. The feedback is provided using a dynamic graph which shows results of trading over time, given the decisions made by the learner. This reveals the level of profit achieved and reflects the design, manufacturing, and marketing decisions made by the learners.

A1.25: HBS Screenshot Showing Intro Panel


The topics covered may be accessed using the on-screen buttons.

## A1.26: HBS Screenshot Showing Feedback Loop \& Advice Video



Feedback is provided following the simulation with video material offering some expert advice.

A1.27: HBS Screenshot Showing Finance Panel


Learners are required to choose an approach to financing their business. This required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context. The material is presented using text, graphics and animation.

## A1.28: HBS Screenshot Showing Guides



The business issues are presented and important issues are highlighted by the "guides". The material is presented using sound and video.

## A1.29: HBS Screenshot Showing HRM Panel



Learners are required to make decisions based on their understanding of HRM issues in their business. This required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.30: HBS Screenshot Showing Company



Learners are required to make decisions at the outset based on their understanding of their business. This required understanding of the material previously covered and the capability to utilise that understanding in order to make decisions within a specific but complex and ill defined context.

## A1.31: HBS Screenshot Showing Intro Buttons



The topics covered may be accessed using the on-screen buttons.

## A1.32: HBS Screenshot Showing Presidents Dashboard



Learners may observe the impact of their decisions using the "President's Dashboard". This required understanding of the material previously covered and the capability to utilise that understanding in order to appreciate the issues unfolding and take further decisions to address such.

## A1.33: HBS Screenshot Showing Feedback Loop



Learners may review their approach and re-run the simulation.

A1.34: HBS Screenshot Showing Initial Decisions


Learners are required to make decisions at the outset, based on their understanding of business at that point. This required use of prior learning, understanding of material previously covered, and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.35: HBS Screenshot Showing Option to View or Seize



Learners may review the business opportunity outlined in the scenario, or move to seize the opportunity presented when they are ready, using the on-screen buttons.

## A1.36: HBS Screenshot Showing Opportunity



Learners may view a range of material relating to the business opportunity outlined in the scenario, using the on-screen buttons.

## A1.37: HBS Screenshot Showing Voicemail



Learners may listen to a voicemail message relating to the business opportunity outlined in the scenario, using the on screen hotspot within the phone image.

## A1.38: HBS Screenshot Showing R\&D Panel



Learners are required to make decisions relating to research and development, based on their understanding of their business. This required, understanding of material previously covered, and the capability to utilise that understanding in order to make decisions within a specific context.

## A1.39: MNE Screenshot Showing Demo Screen



Learners may view material relating to the topics addressed by choosing the appropriate "Demo". The demo material provides a range of text, graphics, animations and video clips to show the material and processes addressed.

## A1.39: MNE Screenshot Showing Demo Screen



Learners may view material relating to the topics addressed by choosing the appropriate "Demo". The demo material provides a range of text, graphics, animations and video clips to show the material and processes addressed.

## A1.40: MNE Screenshot Showing Demo Screen with Video Clip



Learners may view material relating to the topics addressed by choosing the appropriate "Demo". The demo material provides a range of text, graphics, animations and video clips to show the material and processes addressed.

A1.41: MNE Screenshot Showing Demo Screen with Video Clip


Learners may view material relating to the topics addressed by choosing the appropriate "Demo". The demo material provides a range of text, graphics, animations and video clips to show the material and processes addressed.

## A1.42: MNE Screenshot Showing Demo Screen



Learners may view material relating to the topics addressed by choosing the appropriate "Demo". The demo material provides a range of text, graphics, animations and video clips to show the material and processes addressed.

## A1.43: MNE Screenshot Showing Lab Screen Feedback



Learners may undertake the task addressed by choosing the appropriate "Lab". The lab provides a range of text, graphics, animations and video clips to simulate the environment in which network engineers would be expected to operate.

## A1.44: MNE Screenshot Showing Lab Screen



Learners may undertake the task addressed by choosing the appropriate "Lab". The lab provides a range of text, graphics, animations and video clips to simulate the environment in which network engineers would be expected to operate.

## A1.45: MNE Screenshot Showing Help Screen



Learners may access "Help" within the "Lab". The help function provides a range of topic specific content using a text based format.

## Appendix 2.1: Results

### 2.1.1: SEI Pilot Response Frequency Tables by Topic Investigated

Table 2.1.1: SEI Pilot Study Learning Elements Responses Obtained at Scale Points 4 to 5

| Effectiveness (1 not effectıve, 5 very effective) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Induction Sessions |  |  |  |  |  |  |
| Session 1 | Effectiveness | 1 | 2 | 3 | 4 | 5 |
| Session 2 | Effectiveness | 1 | 2 | 3 | 4 | 5 |


| SEI Pilot Phase Teaching / Learning Elements | Total \% Responses <br> (at points 4 to5) <br> Using N of Item Questionnaires |
| :--- | :--- |
| Total N of Item Response Opportunities = 25 |  |
| Induction Session 1 | $\mathbf{6 4 \%}$ |
| Study Session Ratings | $60 \%$ |
| Induction Session 2 | $44 \%$ |
| Personal Notes Ratings | $44 \%$ |
| Speaking to Friends | $\mathbf{3 6 \%}$ |
| Reference Book Ratings | $\mathbf{3 2 \%}$ |
| Additional Reference Ratings | $\mathbf{1 2 \%}$ |
| Tutorial Support | $4 \%$ |

## Appendix 2.2: SHS Pilot Response Frequency Tables by Topic Investigated

Table 2.2.1 SHS Pilot Study Expressed Preferences for Computer-based Environment Types

| Please rate each of the following computer based learning environments: <br> (1: not motivating to 5 highly motivating) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Electronic Book (text shown on screen) | 1 | 2 | 3 | 4 | 5 |
| Game approach (where points are scored for correct answers) | 1 | 2 | 3 | 4 | 5 |
| Simulated Environment ( g O Office Scene with sources of information and Tasks to be undertaken ) | 1 | 2 | 3 | 4 | 5 |
| Combination of Electronic Book, Computer Game and Simulated Environment | 1 | 2 | 3 | 4 | 5 |


| SHS Pilot Study: Expressed Preferences <br> for Computer-based Environment Types (N= 26) | Number at <br> Level 4 to 5 | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| Electronic book environment | 4 | $15 \%$ |
| Game environment | 10 | $38 \%$ |
| Simulated environment | 12 | $46 \%$ |
| Combination environment | 17 | $65 \%$ |

Table 2.2.2 SHS Pilot Study Effectiveness of Defined Sections Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| VR Scene of Restaurant \& Bar | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Effectiveness Rating of Defined Sections (N= 26) | Number at <br> Level 4 to 5 | $\%$ |
| :--- | :--- | :--- |
| Directory of Tea, Coffee \& Light Beverages | 18 | $69 \%$ |
| Wine List | 18 | $69 \%$ |
| VR Scene of Restaurant / Bar | 11 | $42 \%$ |
| Stated Objectives | 9 | $35 \%$ |
| Stated Purpose | 9 | $35 \%$ |
| Restaurant Seating Plan | 7 | $27 \%$ |
| Getting Started Section | 6 | $23 \%$ |
| Introduction Section | 5 | $19 \%$ |

Table 2.2.3 SHS Pilot Study Approach Taken by Learners
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Approach Taken by Learners: Rating (N= 26) | Number at <br> Level 4 to 5 | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| I revisited material when I found other things related to it | 9 | $35 \%$ |
| I skimmed the material, rather than look at it all, in order to save time | 7 | $27 \%$ |
| The interactive table setting exercise was not essential so I focused on other material | 3 | $12 \%$ |

Table 2.2.4 SHS Pilot Study Human / Tutor Contact Issues
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Human/Tutor Contact Issues (N= 26) | Number at <br> Level 4 to 5 | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| I would find more tutor input helpful | 10 | $\mathbf{3 8 \%}$ |
| I would prefer to have more face to face contact with the class tutor | 9 | $35 \%$ |
| I find email communication useful for maintaining contact with the class tutor | 9 | $35 \%$ |
| I feel quite isolated when working on this computer based material | $\mathbf{4}$ | $\mathbf{1 5 \%}$ |

Table 2.2.5 SHS Pilot Study Perceived Impact on Learning Experience
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Perceived Impact on Learning Experience (N= 26) | Number at <br> Level 4 to 5 | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| The interactive table setting exercise helped me to learn the setting layout | 5 | $19 \%$ |
| The interactive table setting exercise gave enough feedback | 1 | $4 \%$ |
| The on screen feedback for the interactive exercise helped me check my learning | 5 | $19 \%$ |
| I'm not sure whether I'm learning what I should from this computer based material | 5 | $19 \%$ |
| The video clips of Cailein Gillespie increased my depth of thought | 9 | $35 \%$ |
| The video clips of Mathew Algie increased my depth of thought | 2 | $8 \%$ |
| The interactive maps increased my depth of thought | 3 | $12 \%$ |
| I would find multiple choice tests helpful to check my learning | 19 | $73 \%$ |

Table 2.2.6 SHS Pilot Study Perceived Impact of Presentation
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:


| SHS Pilot Study: Perceived Impact of Presentation (N= 26) | Number <br> $\mathbf{( 4 ~ t o ~ 5 ) ~}$ | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| I found the Visual Elements (look) of the windows motivating | 9 | $35 \%$ |
| The presentation of this multi-media material is as good as others I've experienced | 11 | $42 \%$ |
| The presentation of this multi-media material is better than others I've experienced | 5 | $19 \%$ |
| The presentation of this multi-media material is not as good as others I've experienced | 2 | $8 \%$ |
| Time flexibility is more important to me than quality of presentation | 7 | $27 \%$ |
| My view of this material has been influenced by other multi-media I've used | 6 | $23 \%$ |

Table 2.2.7 SHS Pilot Study Perceived Effectiveness of Navigation Elements
The material makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) -5 (highly effective) and offer a comment of explanation.

| Element |  |  |  |  |  | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pull Down Menus | 1 | 2 | 3 | 4 | 5 |  |


| SHS Pilot Study: Perceived Effectiveness of Navigation Elements (Pilot N= 26) | Number <br> $(4$ to 5) | \% |
| :--- | :--- | :--- |
| Pull Down Menus | 21 | $81 \%$ |
| Clickable Screen Areas | 21 | $81 \%$ |
| Click to View Settings of Dishes | 22 | $85 \%$ |
| Click to View Settings of Wines / Beverages | 20 | $77 \%$ |
| Hand Tool in Navigable Map | 7 | $27 \%$ |
| Arrow Pointer in VR Restaurant / Bar | 3 | $12 \%$ |

Table 2.2.8 SHS Pilot Study Text Related Responses
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Text Related Responses (N= 26) | Number <br> $\mathbf{( 4 ~ t o ~ 5 ) ~}$ | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| This material contained too little text | 4 | $15 \%$ |
| This material contained too much text | 1 | $4 \%$ |
| I find myself wanting to read from the Metablock rather than on screen | 7 | $27 \%$ |

Table 2.2.9 SHS Pilot Study Perceived Effectiveness of Metablock Materials
The material makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) $\mathbf{- 5}$ (highly effective) and offer a comment of explanation.

| Element |  |  |  |  |  | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Metablock Materials | 1 | 2 | 3 | 4 | 5 |  |


| SHS Pilot Study: Perceived Effectiveness of Metablock Materials: (N= 26) | Number <br> (4 to 5) | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| Metablock Materials | 18 | $69 \%$ |

Table 2.2.10 SHS Pilot Study "Usability" Related Responses
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I was uncertain what to do with the interactive maps | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: "Usability" Related Responses (N= 26) | Number <br> (4 to 5) | $\%$ <br> I was uncertain what to do with the interactive maps |
| :--- | :--- | :--- |

Table 2.2.11 SHS Pilot Study Comparison with Other Modes
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Pilot Study: Comparison With Other Modes (N= 26) | Number <br> $(4$ to 5) | $\%$ |
| :--- | :--- | :--- |
| This material is more motivating than some lectures I've experienced | 16 | $62 \%$ |
| This material is more motivating than most lectures I've experienced | 3 | $12 \%$ |
| I would have been better reading a book | 1 | $4 \%$ |

Table 2.2.12 SHS Pilot Study Perceived Effectiveness of Graphics / Multimedia Elements
The material makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element |  |  |  |  |  | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Introduction Section Voice Over | 1 | 2 | 3 | 4 | 5 |  |


| SHS Pilot Study: Perceived Effectiveness of Graphics / Multimedia Elements (N=26) | Number <br> $\mathbf{4}$ to 5) | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| Screen Text / Voice Over of Pronunciation | 21 | $81 \%$ |
| Expert Video (Cailein Gillespie) | 15 | $58 \%$ |
| Screen Display of Serving Setting: Red Wine | 10 | $38 \%$ |
| Screen Display of Serving Setting: White Wine | 10 | $38 \%$ |
| Screen Display of Navigable Map: Red Wine | 9 | $35 \%$ |
| Screen Display of Navigable Map: White Wine | 8 | $31 \%$ |
| Production Video (Red Wine) | 8 | $31 \%$ |
| Screen Display of Serving Setting: Tea | 5 | $19 \%$ |
| Production Video (White Wine) | 6 | $23 \%$ |
| Screen Display of Serving Setting: Coffee | 5 | $19 \%$ |
| Introduction Section: Voice Over | 3 | $12 \%$ |
| Restaurant Table Layout | 5 | $19 \%$ |
| Production Video (Mathew Algie) | 6 | $23 \%$ |
| Restaurant Table Plan | 3 | $12 \%$ |
| Function Space Management System | 2 | $8 \%$ |
| Interactive Table Setting Exercise | 1 | $4 \%$ |

## Appendix 2.3: Response Frequency Tables by Topic Investigated

### 2.3.1 Computer Literacy

Table 2.3.1: SEI "Computer Literacy" of Learners Open Responses Obtained in Questionnaires at Exit Points Semester 21996 to Semester 22000

| SEI "Computer Literacy" of <br> Learners Open Responses <br> Obtained in Questionnaires at <br> Exit Points Semester 2 1996 to <br> Semester 2 2000 | Entrance <br> Total | Entrance <br> Total \% | Midpoint <br> Total | Midpoint <br> Total \% | Exit <br> Total | Exit <br> Total <br> $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Experienced Using Computer | 330 | $71 \%$ | 129 | $68 \%$ | 108 | $65 \%$ |
| Experienced Using Email | 282 | $60 \%$ | 117 | $61 \%$ | 107 | $64 \%$ |
| Experienced Using Internet | 277 | $59 \%$ | 106 | $55 \%$ | 89 | $54 \%$ |
| Use Office Type Software | 98 | $21 \%$ | 18 | $9 \%$ | 30 | $18 \%$ |
| Use Specialised/Specific Software | 29 | $6 \%$ | 5 | $3 \%$ | 7 | $4 \%$ |

Table 2.3.2: SHS "Computer Literacy" of Learners Open Responses Obtained in Questionnaires

| SHS "Computer Literacy" of Learners Open Responses Obtained in Questionnaires 1999/2000 | Overall Total by Item Entrance ( $\mathrm{N}=81$ ) | Entrance <br> \% | Total by Item Midpoint $(N=51)$ | Midpoint \% | $\begin{aligned} & \text { Total by } \\ & \text { Item } \\ & \text { Exit } \\ & \mathbf{N}=\mathbf{3 4}) \end{aligned}$ | Exit \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| experienced with net | 56 | 69\% |  |  |  |  |
| comfortable with computers | 54 | 67\% |  |  |  |  |
| experienced with email | 54 | 67\% |  |  |  |  |
| Social communication via email | 42 | 52\% |  |  |  |  |
| experienced using computers | 14 | 17\% |  |  |  |  |
| simple language helps | 6 | 7\% | 2 | 4\% |  |  |
| electronic commerce / business | 3 | 4\% |  |  |  |  |
| access to home computer | I | 1\% |  |  |  |  |
| Internet | 1 | 1\% |  |  |  |  |

(Note The element of computer literacy was not specifically probed beyond the entrance questionnarres.)

### 2.3.2 Content Appropriateness SEI Responses Obtained to 3 Point Scale Questions, by Questionnaire Batch

Questionnaire Item:
How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |

Table 2.3.3: SEI Content Appropriateness Too Basic

| Sem 2 97 to 98 - Sem 2 99 to 00 <br> Responses to 3 Point Item on Content | Midpoint <br> N=143 | Midpoint | Exit <br> N=177 | Exit |
| :--- | :--- | :--- | :--- | :--- |
| Content Levels | Total N <br> Too Basic | Total \% <br> Too Basic | Total N <br> Too Basic | Total \% <br> Too Basic |
| Skills \& Entrepreneurial Characteristics | 8 | $6 \%$ | 13 | $7 \%$ |
| Opportunity v Idea in Business | 7 | $5 \%$ | 16 | $9 \%$ |
| Team Building in Business | 7 | $5 \%$ | 30 | $17 \%$ |
| Market Research \& Sources | 12 | $8 \%$ | 16 | $9 \%$ |
| Getting Into Business | 10 | $7 \%$ | 24 | $14 \%$ |
| The Business Plan | 7 | $5 \%$ | 17 | $10 \%$ |
| Finance Issues | 18 | $13 \%$ | 32 | $18 \%$ |
| Patents, Licences \& Legal Issues | 13 | $9 \%$ | 28 | $16 \%$ |
| Strategic Marketing | 10 | $7 \%$ | 12 | $7 \%$ |
| Funding | 12 | $8 \%$ | 24 | $14 \%$ |
| The Investor's Viewpoint | 12 | $8 \%$ | 10 | $6 \%$ |
| Survival Strategies | 6 | $4 \%$ | 34 | $19 \%$ |

Table 2.3.4: SEI Content Appropriateness: Too Detailed

| Sem 297 to 98 - Sem 299 to 00 <br> Responses to 3 Point Item on Content | Midpoint <br> N=143 | Midpoint | Exit <br> N=177 | Exit |
| :--- | :--- | :--- | :--- | :--- |
| Content Levels | Total N <br> Too Detailed | Total \% <br> Too Detailed | Total N <br> Too Detailed | Total \% <br> Too Detailed |
| Skills \& Entrepreneurial Characteristics | 12 | $8 \%$ | 15 | $8 \%$ |
| Opportunity v Idea in Business | 7 | $5 \%$ | 13 | $7 \%$ |
| Team Building in Business | 7 | $5 \%$ | 17 | $10 \%$ |
| Market Research \& Sources | 10 | $7 \%$ | 17 | $10 \%$ |
| Getting Into Business | 17 | $12 \%$ | 9 | $5 \%$ |
| The Business Plan | 6 | $4 \%$ | 14 | $8 \%$ |
| Finance Issues | 4 | $3 \%$ | 23 | $13 \%$ |
| Patents, Licences \& Legal Issues | 7 | $5 \%$ | 33 | $19 \%$ |
| Strategic Marketing | 5 | $3 \%$ | 21 | $12 \%$ |
| Funding | 0 | $0 \%$ | 7 | $4 \%$ |
| The Investor's Viewpoint | 1 | $1 \%$ | 10 | $6 \%$ |
| Survival Strategies | 1 | $1 \%$ | 4 | $2 \%$ |

Table 2.3.5: SEI Content Appropriateness: Appropriate

| Sem 297 to 98 - Sem 2 99 to 00 <br> Responses to 3 Point Item on Content | Midpoint <br> $\mathbf{N = 1 4 3}$ | Midpoint | Exit <br> $\mathbf{N = 1 7 7}$ | Exit |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Content Levels | Total N <br> Appropriate | Total \% <br> Appropriate | Total N <br> Appropriate | Total \% <br> Appropriate | Change <br> from <br> Midpoint to <br> Exit |
| Skills \& Entrepreneurial Characteristics | 121 | $85 \%$ | 142 | $80 \%$ | $-5 \%$ |
| Opportunity v Idea in Business | 124 | $87 \%$ | 141 | $80 \%$ | $-7 \%$ |
| Team Building in Business | 118 | $83 \%$ | 122 | $69 \%$ | $-14 \%$ |
| Market Research \& Sources | 77 | $54 \%$ | 136 | $77 \%$ | $23 \%$ |
| Getting Into Business | 109 | $76 \%$ | 134 | $76 \%$ | $0 \%$ |
| The Business Plan | 71 | $50 \%$ | 137 | $77 \%$ | $27 \%$ |
| Finance Issues | 37 | $26 \%$ | 115 | $65 \%$ | $39 \%$ |
| Patents, Licences \& Legal Issues | 36 | $25 \%$ | 110 | $62 \%$ | $37 \%$ |
| Strategic Marketing | 39 | $27 \%$ | 135 | $76 \%$ | $49 \%$ |
| Funding | 33 | $23 \%$ | 137 | $77 \%$ | $54 \%$ |
| The Investor's Viewpoint | 31 | $22 \%$ | 147 | $83 \%$ | $61 \%$ |
| Survival Strategies | 34 | $24 \%$ | 130 | $73 \%$ | $49 \%$ |

(Note. Nil responses were included in the calculations of the percentages as there was opportunity for the learners concerned to
explore the units in any order therefore they could have responded to the items concerned. The total N was taken as the number of returned questionnaires for the purposes of calculating percentages of responses.)

### 2.3.3 Confidence Levels SEI Responses Obtained to 5 Point Scale Questions

Questionnaire Item:Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table 2.3.6: SEI Levels of Confidence Responses at Scale Points 4 to 5
(by Rank Order of \% at Entrance Point)

| SEI Levels of Confidence Responses at Scale Points 4 to 5 | $\begin{aligned} & \hline \text { Entrance } \\ & \mathrm{N}=513 \\ & \hline \end{aligned}$ | Entrance | $\begin{aligned} & \text { Midpoint } \\ & \mathbf{N}=191 \end{aligned}$ | Midpoint | $\begin{aligned} & \hline \text { Exit } \\ & \mathrm{N}=202 \\ & \hline \end{aligned}$ | Exit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total N by Question Items | Total \% N by Question Item | Total N by Question Items | Total \% N by Question Item | Total N by Question Items | Total \% N by Question Item |
| Team Building in Business | 145 | 28\% | 91 | 48\% | 142 | 70\% |
| Market Research \& Sources | 133 | 26\% | 51 | 27\% | 130 | 64\% |
| Skills \& Entrepreneurial Characteristics | 92 | 18\% | 86 | 45\% | 157 | 78\% |
| Finance Issues | 90 | 18\% | 23 | 12\% | 107 | 53\% |
| Getting Into Business | 88 | 17\% | 65 | 34\% | 132 | 65\% |
| Strategic Marketing | 85 | 17\% | 60 | 31\% | 110 | 54\% |
| Opportunity v Idea in Business | 74 | 14\% | 86 | 45\% | 130 | 64\% |
| The Investor's Viewpoint | 69 | 13\% | 14 | 7\% | 146 | 72\% |
| Funding | 61 | 12\% | 23 | 12\% | 144 | 71\% |
| The Business Plan | 60 | 12\% | 40 | 21\% | 150 | 74\% |
| Survival Strategies | 49 | 10\% | 10 | 5\% | 124 | 61\% |
| Patents, Licences \& Legal Issues | 42 | 8\% | 18 | 9\% | 92 | 46\% |

Table 2.3.7: SEI Change in Levels of Confidence Responses Over Time

| SEI Change in Levels of Confidence <br> Responses Over Time | Change from <br> \% Entrance to \% <br> Midpoint | Change from <br> \% Midpoint to <br> \% Exit | Change from <br> \% Entrance to <br> \% Exit |
| :--- | :--- | :--- | :--- |
| Team Building in Business | $20 \%$ | $22 \%$ | $42 \%$ |
| Market Research \& Sources | $1 \%$ | $37 \%$ | $38 \%$ |
| Skills \& Entrepreneurial Characteristics | $27 \%$ | $33 \%$ | $60 \%$ |
| Finance Issues | $-6 \%$ | $41 \%$ | $35 \%$ |
| Getting Into Business | $17 \%$ | $31 \%$ | $48 \%$ |
| Strategic Marketing | $14 \%$ | $23 \%$ | $37 \%$ |
| Opportunity v Idea in Business | $31 \%$ | $19 \%$ | $50 \%$ |
| The Investor's Viewpoint | $-6 \%$ | $65 \%$ | $59 \%$ |
| Funding | $0 \%$ | $59 \%$ | $59 \%$ |
| The Business Plan | $\mathbf{9 \%}$ | $53 \%$ | $62 \%$ |
| Survival Strategies | $-5 \%$ | $56 \%$ | $51 \%$ |
| Patents, Licences \& Legal Issues | $\mathbf{1 \%}$ | $37 \%$ | $38 \%$ |

Table 2.3.8: SEI Learner Confidence Open Responses Obtained in Questionnaires

| SEI Learner Confidence: Open Responses Obtained in Questionnaires $(1997-2000)$ | Entrance <br> Total <br> Responses $(\mathrm{N}=468)$ | Entrance <br> Total \% <br> Responses $(N=468)$ | Midpoint <br> Total <br> Responses $(\mathrm{N}=191)$ | Midpoint <br> Total \% <br> Responses $(\mathrm{N}=191)$ | Exit <br> Total <br> Responses $(N=166)$ | Exit <br> Total \% <br> Responses $(N=166)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Improvement in Confidence Level | 260 | 56\% | 126 | 66\% | 91 | 55\% |
| Confirmation of Initially Confident Confidence Level | 133 | 28\% | 53 | 28\% | 49 | 30\% |
| Confirmation of Initially High Confidence Level | 31 | 7\% | 15 | 8\% | 27 | 16\% |

(Note. Questions were developed over the time of the study, therefore varied in phrasing and focus over time The open responses
were categorised in terms of the comments made by respondents and the results are shown in the table below The actual questions
posed are listed in the appendices for the questionnarres used.)

### 2.3.4 Approaches to Learning and Learning Styles

Table 2.3.9: SEI Approaches to Learning Responses to 5 Point Scale Statements at Level 4 to 5

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I worked through all elements of the material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SEI Responses to 5 Point Scale Statements at Level 4 to 5 (1999 <br> to 2000) | Midpoint <br> Total N by <br> Question |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Approaches to Learning | Midpoint <br> Total \% N <br> Items <br> n <br> Question <br> Item | Exit Total <br> N by <br> Question <br> Items <br> $\mathbf{N}=\mathbf{4 6}$ | Exit Total <br> \% N by <br> Question <br> Item |  |
| I worked through all elements of the material | 26 | $65 \%$ | 34 | $74 \%$ |
| I revisited the material when I found other things related to it | 17 | $43 \%$ | 26 | $57 \%$ |
| I skimmed the material, rather than read it all, in order to save time | 8 | $20 \%$ | $\mathbf{4}$ | $\mathbf{9 \%}$ |

Table 2.3.10: SHS Exit Responses to 5 Point Scale Statements: Approach Taken by Learners
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS 5 Point Statement Results: Approach Taken by Learners <br> (Exit May 00 N = 34) | Total <br> Agree <br> (4 to 5) | Total \% <br> Agree <br> (4 to 5) |
| :--- | :--- | :--- |
| I revisited material when I found other things related to it | 20 | $59 \%$ |
| I skimmed the material, rather than look at it all, in order to save time | 20 | $59 \%$ |
| I skimmed the non-central material, rather than look at it all, in order to save <br> time | 21 | $62 \%$ |
| I worked through all elements of the material | 9 | $26 \%$ |

## DMLE Responses to 5 Point Scale Statements: Approach Taken by Learners

## Questionnaire Item:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I worked through all elements of the material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table 2.3.11: DMLE 5 Point Scale Responses Semester 11998 to 1999 (N=7)

| DMLE Sem 11998 to 1999 Totals at Scale Points 4 to 5 (N=7) | Total | Total \% |
| :--- | :--- | :--- |
| I worked through all elements of the material | 4 | $57 \%$ |
| I skimmed the material, rather than cover it all, in order to save time | 3 | $43 \%$ |
| I revisited the material when I found other things related to it | 3 | $43 \%$ |
| The video clips were not essential so I focused on other material | 1 | $14 \%$ |

Table 2.3.12: DMLE 5 Point Scale Responses Semester 11999 to 2000 (N=7)

## Questionnaire Item:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I worked through all elements of the material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Sem 11999 to 2000 Totals at Scale Points 4 to 5 (N=7) | Total | \% |
| :--- | :--- | :--- |
| I worked through all elements of the material | 7 | $100 \%$ |
| I skimmed the material, rather than cover it all, in order to save time | 1 | $14 \%$ |
| I revisited the material when I found other things related to it | 2 | $29 \%$ |
| The simulations were not essential so I focused on other material | 1 | $14 \%$ |
| The video clips were not essential so I focused on other material | 3 | $43 \%$ |

(Note. due to an error in the questionnaire some items appeared twice The first items were used in the discussion, on the basis that these were less likely to have been influenced by earlier responses and that all respondents would have been equally exposed to the items at the time of their first responses.)

Table 2.3.13: SEI Summary of ASSIST Results Midpoint Semester 1 \& 21999 to 2000

| SEI <br> ASSIST | Deep <br> Approach <br> Total N <br> By Approach | Strategic <br> Approach <br> Adjusted <br> Total N <br> By Approach | Surface <br> Apathetic <br> Approach <br> Total N <br> By Approach | Supporting <br> Understanding <br> (related to deep <br> approach) <br> Total N <br> By Course / <br> Teaching <br> Preference | Transmitting <br> Information <br> (related to <br> surface <br> approach) <br> Total N <br> By Course / <br> Teaching <br> Preference |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Midpoint <br> Sem1 99 to 00 | $\mathbf{1 ( 3 \% )}$ | $1(3 \%)$ | $38(95 \%)$ | $8(20 \%)$ | $34(85 \%)$ |
| Midpoint <br> Sem2 99 to 00 | $\mathbf{1 ( 2 \% )}$ | $5(10 \%)$ | $42(88 \%)$ | $11(23 \%)$ | $40(83 \%)$ |

(Note where totals were identical in two categories a score was entered in each category therefore total dıffers from 100\%)

Table 2.3.14: SEI Learning Style Inventory Responses Semester 11999 to 2000 (N = 85)

| SEI Entrance Q14Sem1 <br> 99 to 00 | Visual <br> vps1 | Auditory <br> aps1 | Tactile <br> tps |
| :--- | :--- | :--- | :--- |
| Total | 61 | 4 | 11 |
| Total \% | $72 \%$ | $5 \%$ | $13 \%$ |

(Note: where totals were identical in two, or more, categories no category was assigned, therefore total differs from 100\%)
Table 2.3.15: SEI Entrance Learning Style Inventory Responses Semester 21999 / 2000 ( $\mathrm{N}=65$ )

| SEI EntranceQ Sem2 99 <br> to 00 | Visual <br> vps1 | Auditory <br> aps1 | Tactile <br> tps |
| :--- | :--- | :--- | :--- |
| Total | 46 | 9 | 1 |
| Total \% | $71 \%$ | $14 \%$ | $2 \%$ |

(Note. where totals were identical in two, or more, categories no category was assigned, therefore total differs from $100 \%$ ) Note
Subject 27 included in calculation of $\%$ - as this is the approach taken throughout with returned questıonnaıres which have nonresponse items)

Table 2.3.16: SHS Summary of ASSIST Results Midpoint Semester 299 to 00 Approach to Learning

| SHS <br> ASSIST | Semester 2 | 1999 to 2000 |  |
| :--- | :--- | :--- | :--- |
| Midpoint <br> Sem1 99 to 00 | Deep Approach | Strategic Approach Adjusted | Surface Apathetic <br> Approach |
| Total N <br> By Approach | $28(55 \%)$ | $\mathbf{2 0}$ (39\%) | $\mathbf{4 ( 8 \% )}$ |

(Note. where totals were identical in two categories a score was entered in each category therefore total differs from $100 \%$ )

Table 2.3.17: SHS Midpoint Semester 299 to 00 Preferences for different types of course and teaching

| SHS Mid Sem2 99 to 00 | Supporting Understanding <br> (related to deep approach) | Transmitting Information <br> (related to surface approach) |
| :--- | :--- | :--- |
| Total N <br> By Course / Teaching Preference | $14(27 \%)$ | $40(78 \%)$ |

(Note: where totals were identical in two categories a score was entered in each category therefore total differs from $100 \%$ )

Table 2.3.18: SHS Entrance Learning Style Inventory Results Sem 199 to 00

| SHS Sem 199 to 00 | (Visual) <br> VPS 1 | (Auditory) <br> APS 1 | (Tactile) <br> TPS 1 |
| :--- | :--- | :--- | :--- |
| Total | 37 | 12 | 7 |
| Total \% | $57 \%$ | $18 \%$ | $11 \%$ |

(Note: where scores were equal in two or more categories no category was assigned)

Table 2.3.19: Learning Style Inventory Results DMLE Semester 11999 to 2000 ( $\mathrm{N}=7$ )

| DMLE Learning Styles <br> Sem 199 to 00 | (visual) | (auditory) | (tactile) |
| :--- | :--- | :--- | :--- |
| Subject | VPS 1 | APS 1 | TPS 1 |
| Total | 5 | 1 |  |
| Total \% | $71 \%$ | $14 \%$ |  |

(Note: where scores were equal in two or more categones no category was assigned results shown for subject 3)
Table 2.3.20: Woolwich MNE ASSIST Approach to Learning Results Semester 1 1999 / 2000 ( $\mathrm{N}=5$ )

| Woolwich <br> MNE <br> ASSIST | Deep Approach | Strategic <br> Approach <br> Adjusted | Surface <br> Apathetic <br> Approach | Supporting <br> Understanding <br> (related to deep <br> approach) | Transmitting <br> Information <br> (related to <br> surface <br> approach) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total N | 3 | 1 | 1 | 1 |  |
| Total \% | $60 \%$ | $20 \%$ | $20 \%$ | 2 | 1 |

(Note. The numbers in the Woolwich MNE case are too small to draw firm conclusions from the ASSIST results. They have been included here simply to offer some level of comparison with the SEI and SHS Cases.)

Table 2.3.21: Woolwich MNE Learning Style Inventory Results Semester 11999 / 2000 ( $\mathrm{N}=5$ )

| Woolwich MNE Learning <br> Styles Sem 199 to 00 | Visual <br> VPS 1 | Aural <br> APS 1 | Tactile <br> TPS 1 |
| :--- | :--- | :--- | :--- |
| Total | 3 |  |  |
| Total \% | $60 \%$ |  |  |

(Note: where scores were equal in two or more categories no category was assigned: results shown for subjects 1 and 3)

### 2.3.5 Human Contact Issues

Table 2.3.22: SEI Human Contact: Response Obtained to 5 Point Scale Statements
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I feel quite isolated when working with this computer based material |  |  |  |  |  |


| SEI Human Contact: Response Obtained to 5 Point <br> Scale Statements at Scale Points 4 to 5 | Midpoint <br> Total N <br> Actual <br> by Question <br> Items <br> $\mathbf{N}=40$ | Midpoint <br> Total \% N <br> Actual <br> by Question <br> Items | Exit <br> Total N <br> Actual <br> by Question <br> Items <br> $\mathbf{N}=46$ | Exit <br> Total \% N <br> Actual <br> by Question <br> Items |
| :--- | :--- | :--- | :--- | :--- |
| I feel quite isolated when working with this computer <br> based material | 6 | $15 \%$ | 15 | $33 \%$ |

Table 2.3.23: SEI Human Contact: Open Responses Obtained in Questionnaires

| SEI Human Contact: Open <br> Responses Obtained in <br> Questionnaires 1997 to 2000 | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> $(\mathbf{N}=166)$ | Exit <br> Total \% <br> Responses <br> $(\mathbf{N}=166)$ <br> Human Contact Important |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 84 | $\mathbf{1 8 \%}$ | 45 | $24 \%$ | 28 | $17 \%$ |  |

Table 2.3.24: SEI Human Contact: Responses Obtained in Interviews

| SEI Human Contact: Responses <br> Obtained in Interviews <br> $\mathbf{1 9 9 7}$ to 2000 | Total Number of Interviewees Indicating <br> Issue Relevant (N=61) | \% of Interviewees Indicating <br> Issue Relevant (N=61) |
| :--- | :--- | :--- |
| Human Contact Important | 31 | $51 \%$ |

Table 2.3.25: SHS Human Contact: Open Responses Obtained in Questionnaires

| SHS Human Contact: Open <br> Responses Obtained in <br> Questionnaires <br> 1999 to 2000 | Entrance <br> Total <br> $(\mathbf{N}=81)$ | Entrance <br> Total \% <br> $(\mathbf{N}=81)$ | Midpoint <br> Total <br> $(N=51)$ | Midpoint <br> Total \% <br> $(N=51)$ | Exit <br> Total <br> $(N=34)$ | Exit <br> Total \% <br> $(\mathbf{N}=34)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| human contact important | 11 | $14 \%$ | 9 | $18 \%$ | 26 | $76 \%$ |
| would not want all classes / <br> material on computer | 8 | $10 \%$ | 19 | $37 \%$ | 6 | $18 \%$ |
| prefer tutorial <br> face to face |  |  | 13 | $25 \%$ | 26 | $76 \%$ |
| prefer q\&a <br> face to face |  |  | 5 | $10 \%$ | 26 | $76 \%$ |
| prefer academic learning <br> face to face |  |  | 3 | $10 \%$ |  |  |
| prefer guest speakers <br> face to face |  |  | $6 \%$ |  |  |  |

## Table 2.3.26: SHS Human Contact: Exit Responses to 5 Point Scale Statements at 4 to 5 Level

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I felt quite isolated when working on this computer based material |  |  |  |  |  |


| SHS Human Contact Exit Responses to 5 Point Scale Statements at 4 to 5 <br> Level (1999 to 2000) | Agree + <br> (4 to 5) <br> $(\mathbf{N}=\mathbf{3 4})$ | (N = 34) |
| :--- | :--- | :--- |
|  | Number | $\%$ |
| I felt quite isolated when working on this computer based material | 9 | $26 \%$ |

Table 2.3.27: DMLE Human Contact: 5 Point Scale Responses at Scale Points 4 to 5 Semester 11998 to 1999 (N=7)

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| I would prefer working alone with this computer based material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Human Contact: 5 Point Scale Responses at Scale Points 4 to 5 Semester 11998 to <br> 1999 ( $\mathbf{N}=7$ ) | Total | Total \% |
| :--- | :--- | :--- |
| I would prefer working alone with this computer based material | 3 | $43 \%$ |
| I prefer team working with this computer based material | 3 | $43 \%$ |

Table 2.3.28: DMLE Human Contact: 5 Point Scale Responses at Scale Points 4 to 5 Semester 11999 to $2000(N=7)$

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| I prefer team working with this computer based material |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Human Contact: 5 Point Scale Responses at Scale Points 4 to 5 <br> Semester 11999 to 2000 (N=7) | Total | $\%$ |
| :--- | :--- | :--- |
| I prefer team working with this computer based material | 7 | $100 \%$ |
| I learned more by working in a team with this material | 6 | $86 \%$ |

(Note: due to an error in the questionnaire an item was entered twice. The first response was used in calculations)

Table 2.3.29: DMLE Human Contact: Open Responses Obtained in Questionnaires

| DMLE Human Contact: Open Responses Obtained in Questionnaires | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \text { Total } \\ & (N=7) \end{aligned}$ | $\begin{aligned} & \text { Semester } \\ & 11998 \text { to } \\ & 1999 \\ & \text { Total \% } \\ & (\mathrm{N}=7) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & (N=7) \end{aligned}$ | Semester <br> 11999 to <br> 2000 <br> Total \% $(N=7)$ | Semester 1 2000 to 2001 Total $(\mathrm{N}=32)$ | Semester <br> 12000 to <br> 2001 <br> Total \% $(\mathbf{N}=\mathbf{3 2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| human contact important | 1 | 14\% | 1 | 14\% | 3 | 9\% |

Table 2.3.30: Woolwich MNE Group Human Contact: Open Responses Obtained in Questionnaires

| Woolwich MNE <br> Group Human <br> Contact: Open <br> Responses <br> Obtained in <br> Questionnaires <br> (1999 to 2000) | First <br> Questionnaire <br> Total by <br> Category <br> N (Poss) $=5$ | First <br> Questionnaire Total \% | Second <br> Questionnaire <br> Total by <br> Category <br> N (Poss) $=5$ | Second Questionnaire Total \% | Third Questionnaire Total by Category N (Poss) $=5$ | Third Questionnaire Total \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| human contact important | 1 | 20\% |  |  |  |  |

## Table 2.3.31: SEI Tutor Related Issues: Response Obtained to 5 Point Scale Statements at 4 to 5 Level

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would find more tutor input helpful |  |  |  |  |  |


| SEI Tutor Related Issues: Response Obtained to 5 Point Scale Statements at 4 to 5 Level $1999 \text { to } 2000$ | Midpoint <br> Total N <br> Actual <br> by <br> Question <br> Items <br> $\mathrm{N}=40$ | Midpoint Total \% N Actual by Question Item | Exit Total <br> N <br> Actual <br> by <br> Question <br> Items <br> $\mathrm{N}=46$ | Exit Total \% N <br> Actual by Question Item |
| :---: | :---: | :---: | :---: | :---: |
| I would find more tutor input helpful | 8 | 20\% | 18 | 39\% |
| I would prefer to have more face to face contact with the class tutor | 8 | 20\% | 15 | 33\% |
| I find email communication useful for maintaining contact with the class tutor | 8 | 20\% | 25 | 54\% |

Table 2.3.32: SHS Tutor Related Issues: Exit Responses to 5 Point Scale Statements at 4 to 5 Level

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| SHS Tutor Related Issues: Exit Responses to 5 Point Scale Statements at 4 to 5 <br> Level <br> 1999 to $2000(\mathrm{~N}=34)$ | Total <br> Agree | Total \% <br> Agree <br> $(4$ to 5) |
| :--- | :--- | :--- |
| I would have preferred to have more face to face contact with the class tutor | 16 | $47 \%$ |

Table 2.3.33: DMLE Tutor Related Issues: 5 Point Scale Responses at 4 to 5 Level Semester 11998 to 1999

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| I would find more tutor input helpful | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DMLE Tutor Related Issues: 5 Point Scale Responses at 4 to 5 Level <br> Semester 1 1998 to 1999 (N=7) | (4 to 5) <br> Number | (4 to 5) <br> $\%$ |  |  |  |
| I would find more tutor input helpful | 5 | $71 \%$ |  |  |  |
| I would prefer to have more tutor input | 4 | $57 \%$ |  |  |  |

Table 2.3.34: DMLE Tutor Related Issues: 5 Point Scale Responses at 4 to 5 Level Semester 11999 to 2000

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:


| DMLE Tutor Related Issues: 5 Point Scale Responses at 4 to 5 Level Semester 1 1999 to 2000 (N=7) | Total | $\%$ |
| :--- | :--- | :--- |
| I would find more tutor input helpful | 1 | $14 \%$ |
| I would prefer to have more tutor input | 2 | $29 \%$ |

(Note: due to an error in the questionnaire some items were entered twice, only the first response was used for calculations)

Table 2.3.35: DMLE Tutor Related Issues: Open Responses Obtained in Questionnaires

| DMLE Tutor Related Issues: Open Responses Obtained in Questionnaires 1998 to 2001 | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \text { Total } \\ & (N=7) \end{aligned}$ | $\begin{aligned} & \text { Semester } \\ & 11998 \text { to } \\ & 1999 \\ & \text { Total \% } \\ & (\mathrm{N}=7) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & (N=7) \end{aligned}$ | Semester <br> 11999 to <br> 2000 <br> Total \% $(N=7)$ | Semester 1 2000 to <br> 2001 <br> Total $(N=32)$ | Semester 12000 to 2001 <br> Total \% $(\mathbf{N}=32)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| prefer tutorial face to face |  |  | 3 | 43\% |  |  |
| prefer academic learning face to face |  |  | 2 | 29\% |  |  |

### 2.3.6 Learner Management Issues

Table 2.3.36: SEI Learner Management Issues Open Responses Obtained in Questionnaires

| SEI Learner Management <br> Issues: Open Responses <br> Obtained in <br> Questionnaires | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit Less <br> S2 00 <br> Total <br> Responses <br> $(\mathbf{N}=\mathbf{1 6 6 )}$ | Exit Less <br> S2 00 <br> Total \% <br> Responses <br> $(\mathbf{N}=\mathbf{1 6 6})$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Self Management Important | 53 | $11 \%$ | 71 | $37 \%$ | 45 | $27 \%$ |
| Pace Flexibility | 59 | $13 \%$ | 49 | $26 \%$ | 26 | $16 \%$ |
| Lack of Location Flexibility <br> (access issues) | 53 | $11 \%$ | 33 | $17 \%$ | 37 | $22 \%$ |


| SEI Learner <br> Management Issues: <br> Open Responses <br> Obtained in <br> Questionnaires <br> 1999 to 2000 <br> (continued) | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $\mathbf{( N = 1 9 1 )}$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit Less <br> S2 00 <br> Total <br> Responses <br> $(\mathbf{N}=166)$ | Exit Less <br> S2 00 <br> Total \% <br> Responses <br> $(\mathbf{N}=166)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Time Flexibility <br> Positive Comment | 21 | $4 \%$ | 35 | $18 \%$ | 28 | $17 \%$ |
| Time Flexibility <br> Negative Comment |  |  | 1 | $1 \%$ |  |  |
| Personal Control <br> Important | 21 | $4 \%$ | 12 | $6 \%$ | 15 | $9 \%$ |
| Route <br> Flexibility | 6 | $1 \%$ | 13 | $7 \%$ | 9 | $5 \%$ |

(Note: Questions were developed over the time of the study, therefore varied in phrasing and focus over tume. The open responses were categorised in terms of the comments made by respondents and the results are shown in the table above The actual questions
posed are listed in the appendices for the questionnaires used )

Table 2.3.37: SEI Learner Management Issues: Responses Obtained in Interviews

| SEI Learner Management Issues: Responses Obtained in Interviews (N=61) <br> 1997 to 2000 | Total <br> Responses | \% Responses |
| :--- | :--- | :--- |
| Self Management Important | 53 | $87 \%$ |
| Time Flexibility Positive Comment | 41 | $67 \%$ |
| Route Flexibility | 40 | $66 \%$ |
| Pace Flexibility | 31 | $51 \%$ |
| Lack of Location Flexibility (access issues) | 28 | $46 \%$ |
| Personal Control Important | 9 | $15 \%$ |
| Time Flexibility Negative Comment | 2 | $3 \%$ |

(Note Interview questions were developed in relation to the comments made by interviewees, therefore varied in phrasing and focus The responses were categorised in terms of the comments made by respondents and the results are shown in the table above. The opening questions posed are listed in the appendices for the interviews conducted )

Table 2.3.38: DMLE / HBS Learner Management Issues Open Responses Obtained in Questionnaires Semester 1 1998/99 Semester 12000 / 01

| DMLE / HBS <br> Open Responses Obtained in Questionnaires | DMLE <br> Semester <br> 11998 to 1999 <br> Total by Category ( $\mathrm{N}=7$ ) | DMLE Semester 1 1998 to 1999 Total \% | DMLE <br> Semester <br> 11999 to <br> 2000 <br> Total by <br> Category <br> ( $\mathrm{N}=7$ ) | DMLE <br> Semester <br> 11999 to 2000 <br> Total \% | DMLE <br> Semester <br> 12000 to <br> 2001 $\text { ( } \mathrm{N}=32 \text { ) }$ | DMLE <br> Semester <br> 12000 to 2001 <br> Total \% | HBS <br> Semester <br> 11999 to <br> 2000 <br> Total by <br> Category $(N=17)$ | HBS Semester 11999 to 2000 Total \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| self management important | 1 | 14\% | 2 | 29\% |  |  |  |  |
| pace flexibility | 1 | 14\% | 1 | 14\% |  |  |  |  |
| lack of location flexibility |  |  |  |  | 6 | 19\% |  |  |
| time flexibility important |  |  |  |  | 4 | 13\% | 1 | 6\% |
| self management important |  |  |  |  | 2 | 6\% |  |  |
| pace flexibility |  |  |  |  | 1 | 3\% |  |  |

Table 2.3.39: Woolwich MNE Group Learner Management Issues Open Responses Obtained in Questionnaires Semester 11999 / 00 to 2000 / 01

| Woolwich MNE Group <br> Learner Management Issues Open Responses Obtained in Questionnaires Semester 1999/00 to 2000/01 | Woolwich MNE Q1 $(\mathrm{N}=5)$ <br> Number | Woolwich MNE Q1 \% | Woolwich MNE Q2 $(\mathbf{N}=\mathbf{2})$ <br> Number | Woolwich MNE Q2 \% | Woolwich MNE Q3 $(N=5)$ <br> Number | Woolwich MNE Q3 \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pace <br> flexibility | 2 | 40\% | 1 | 50\% | 3 | 60\% |
| personal control important |  |  | 1 | 50\% | 4 | 80\% |
| lack of location flexibility |  |  |  |  | 1 | 20\% |

### 2.3.7 Learner Perceptions of CBL Material

### 2.3.7.1 Perceived Impact on Learning / Understanding (Cognitive)

Table 2.3.40: SEI Perceived Impact on Learning / Understanding (Cognitive): Responses to 5 Point Scale Statements at 4 to 5 Level

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would find multiple choice tests helpful to check my learning |  |  |  |  |  |


| SEI Perceived Impact on Learning / Understanding <br> (Cognitive): Responses to 5 Point Scale Statements at 4 <br> to 5 Level <br> 1999 to 2000 | Midpoint <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathbf{N}=\mathbf{4 0}$ | Midpoint <br> Total \% N <br> Actual by <br> Question <br> Item | Exit Total <br> N Actual <br> by <br> Question <br> Items <br> $\mathbf{N = 4 6}$ | Exit Total <br> \% N <br> Actual by <br> Question <br> Item |
| :--- | :--- | :--- | :--- | :--- |
| I would find multiple choice tests helpful to check my <br> learning | 25 | $63 \%$ | 31 | $\mathbf{6 7 \%}$ |
| The learning summaries increased my depth of thought | 21 | $53 \%$ | 24 | $52 \%$ |
| The notepad exercises/summaries increased my depth of <br> thought | 9 | $23 \%$ | 9 | $20 \%$ |
| I'm not sure whether I'm learning what I should be from this <br> computer based material | 11 | $28 \%$ | 13 | $\mathbf{2 8 \%}$ |

Table 2.3.41: SEI Perceived Impact on Learning / Understanding (Cognitive) of Exercise Elements: Responses Obtained To Open Responses Obtained in Questionnaires

| SEI Perceived Impact on <br> Learning / Understanding <br> (Cognitive) of Exercise <br> Elements: Open Responses <br> Obtained in Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> $(\mathbf{N}=166)$ | Exit <br> Total \% <br> Responses <br> $(\mathbf{N}=166)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Exercises Material Aided <br> Learning / Understanding | 5 | $1 \%$ | 68 | $36 \%$ | 24 | $14 \%$ |

(Note Questions were developed over the time of the study, therefore varied in phrasing and focus over time The responses were categorised in terms of the comments made by respondents and the results are shown in the table above. The actual questions posed are listed in the appendices for the questionnares used )

Table 2.3.42: SEI Perceived Impact on Learning / Understanding (Cognitive) of Exercise Elements: Responses Obtained in Interviews

| SEI Perceived Impact on Learning / Understanding (Cognitive) of <br> Exercise Elements: Responses Obtained in Interviews (N=61) <br> $\mathbf{1 9 9 7}$ to $\mathbf{2 0 0 0}$ | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Exercises Material Aided Learning / Understanding | 36 | $59 \%$ |
| (Note Interview questions were developed in relation to the comments made by interviewees, therefore varied in phrasing and focus |  |  |
| The responses were categorised in terms of the comments made by respondents and the results are shown in the table below The |  |  |
| opening questions posed are listed in the appendices for the interviews conducted.) |  |  |

Table 2.3.43: SEI Computer's Perceived Impact on Learning / Understanding (Cognitive) Open Responses Obtained in Questionnaires

| SEI Computer's Perceived Impact on Learning / Understanding (Cognitive) Open Responses Obtained in Questionnaires 1997 to 2000 | Entrance <br> Total <br> Responses $(\mathrm{N}=468)$ | Entrance <br> Total \% <br> Responses $(\mathrm{N}=468)$ | Midpoint Total Responses ( $\mathrm{N}=191$ ) | Midpoint <br> Total \% <br> Responses $(N=191)$ | Exit <br> Total <br> Responses $(N=166)$ | Exit <br> Total \% <br> Responses $(N=166)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Computer Material Aided Learning / Understanding | 70 | 15\% | 42 | 22\% | 39 | 23\% |
| Computer Aids Information Retrieval | 184 | 39\% | 38 | 20\% | 21 | 13\% |
| Hyperlinks Material Aided Learning / Understanding | 3 | 1\% | 10 | 5\% | 5 | 3\% |

(Note Open response items were developed over the time of the study, therefore varied in phrasing and focus over time The
responses were categorised in terms of the comments made by respondents and the results are shown in the table below. The actual questions posed are listed in the appendices for the questionnaires used.)

Table 2.3.44: SEI Computer's Perceived Impact on Learning / Understanding (Cognitive): Responses Obtained To Interview Questions

| SEI Computer's Perceived Impact on Learning / Understanding <br> (Cognitive): Responses Obtained To Interview Questions <br> (N=61) <br> $\mathbf{1 9 9 7}$ to 2000 | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Computer Aids Information Retrieval | 32 | $52 \%$ |
| Computer Material Aided Learning / Understanding | 24 | $39 \%$ |
| Hyperlinks Material Aided Learning /Understanding | 12 | $20 \%$ |

Table 2.3.45: SHS Perceived Impact on Learning / Understanding (Cognitive) Exit Responses to 5 Point Scale Statements at 4 to 5 Level
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:

| I found the multiple choice tests helpful to check my learning | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Perceived Impact on Learning / Understanding (Cognitive) Exit Responses to <br> $\mathbf{5}$ Point Scale Statements at 4 to 5 Level (N = 34) <br> 1999 to 2000 | Agree / + <br> (4 to 5) <br> Number | Agree /+ <br> (4 to 5) <br> $\%$ |
| :--- | :--- | :--- |
| I found the multiple choice tests helpful to check my learning | 12 | $35 \%$ |
| I was not sure whether I'm learning what I should from this computer based material | 13 | $38 \%$ |

Table 2.3.46: DMLE Perceived Impact on Learning / Understanding (Cognitive): 5 Point Scale Responses at 4 to 5 Level Semester 11998 to 1999

Questionnaire Item:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements: | The text helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

| DMLE Perceived Impact on Learning / Understanding (Cognitive): 5 Point Scale <br> Responses at 4 to 5 Level Semester 1 1998 to 1999 ( $\mathbf{N}=7$ ) | Total | Total \% |
| :--- | :--- | :--- |
| The text helped me to understand the material | 6 | $86 \%$ |
| The simulations helped me to understand the material | 5 | $71 \%$ |
| The video clips helped me to understand the material | 4 | $57 \%$ |
| The sound element helped me to understand the material | 2 | $29 \%$ |
| The learning summaries increased my depth of thought | 4 | $57 \%$ |
| The notepad exercises increased my depth of thought | 2 | $29 \%$ |
| I'm not sure whether I'm learning what I should be from this computer based material | 2 | $29 \%$ |
| The on-screen feedback helps me check I'm learning | 4 | $57 \%$ |
| I would find multiple choice tests helpful to check my learning | 5 | $71 \%$ |

(Note: due to an error in the questionnarres some items were incorrectly entered. These were disregarded in the results)

Table 2.3.47: DMLE Perceived Impact on Learning / Understanding (Cognitive): 5 Point Scale Responses at 4 to 5 Level Semester 11999 to 2000
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| I'm not sure whether I'm learning what I should from this computer based material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Perceived Impact on Learning / Understanding (Cognitive): 5 Point <br> Scale Responses at 4 to 5 Level Semester 1 1999 to 2000 (N=7) | Total | $\%$ |
| :--- | :--- | :--- |
| I'm not sure whether I'm learning what I should be from this computer based <br> material | 1 | $14 \%$ |
| The text helped me to understand the material | 7 | $100 \%$ |
| The simulations helped me to understand the material | 7 | $100 \%$ |
| The video clips helped me to understand the material | 3 | $43 \%$ |
| The sound element helped me to understand the material | 2 | $29 \%$ |
| The on-screen feedback helps me check I'm learning | 5 | $71 \%$ |
| I would find multiple choice tests helpful to check my learning | 3 | $43 \%$ |
| The interactive exercises helped me to understand the material | 6 | $86 \%$ |
| The Slideman exercise increased my depth of thought | 4 | $57 \%$ |
| The Mondo exercise increased my depth of thought | 5 | $71 \%$ |

[^0]Table 2.3.48: Woolwich MNE Group: Perceived Impact on Learning / Understanding (Cognitive) Open Responses Obtained in Questionnaires

| Woolwich MNE Group: Perceived Impact on Learning / Understanding (Cognitive) Open Responses Obtained in Questionnaires 1999 to 2000 | First <br> Quest're <br> Total by <br> Category $N=5$ | First Quest're Total \% | Second Quest're Total by Category $\mathbf{N}=2$ | Second Quest're Total \% | Third <br> Quest're <br> Total by <br> Category $N=5$ | Third Quest're Total \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| feedback explanation important | 5 | 100\% | 2 | 100\% | 4 | 80\% |
| problem solving provoked thought | 4 | 80\% | 2 | 100\% | 2 | 40\% |
| exercises aided learning | 3 | 60\% | 1 | 50\% | 4 | 80\% |
| graphics aided learning | 2 | 40\% | 2 | 100\% | 4 | 80\% |
| simulations aided learning | 2 | 40\% | 2 | 100\% | 4 | 80\% |
| visual display aided learning | 2 | 40\% | 1 | 50\% |  |  |
| demonstrations valuable | 1 | 20\% | 1 | 50\% | 2 | 40\% |
| simple language helps |  |  | 1 | 50\% |  |  |
| text valuable |  |  |  |  | 4 | 80\% |
| computer aids info retrieval |  |  |  |  | 4 | 80\% |

### 2.3.7.2 Perceived Impact on Learning / Understanding (Affective)

Table 2.3.49: SEI Perceived Impact on Learning / Motivation (Affective): Open Responses Obtained in Questionnaires

| SEI Perceived Impact on <br> Learning / Motivation <br> (Affective): Open Responses <br> Obtained in Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses <br> (N=468) | Entrance <br> Total \% <br> Responses <br> (N=468) | Midpoint <br> Total <br> Responses <br> (N=191) | Midpoint <br> Total \% <br> Responses <br> (N=191) | Exit <br> Total <br> Responses <br> (N=166) | Exit <br> Total \% <br> Responses <br> (N=166) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Relevance Important | 252 | $54 \%$ | 96 | $50 \%$ | 78 | $47 \%$ |
| Interactivitylmportant | 117 | $25 \%$ | 54 | $28 \%$ | 30 | $18 \%$ |
| Assessment Motivates | 51 | $11 \%$ | 13 | $7 \%$ | 33 | $20 \%$ |
| Feedback On Demand Important | 52 | $11 \%$ | 17 | $9 \%$ | 20 | $12 \%$ |
| Novelty Value Added Interest | 46 | $10 \%$ | 21 | $11 \%$ | 16 | $10 \%$ |
| Feedback Explanation Important | 18 | $4 \%$ | 23 | $12 \%$ | 26 | $16 \%$ |
| Variety In Link / Unit Contents <br> Important | 12 | $3 \%$ | 28 | $15 \%$ | 21 | $13 \%$ |
| Examples Important (Real Life) | 15 | $3 \%$ | 20 | $10 \%$ | 17 | $10 \%$ |
| Fun, Humour Positive Comment | 15 | $3 \%$ | 6 | $3 \%$ | 5 | $3 \%$ |
| Workload Too Heavy For This <br> Class |  |  | 7 | $4 \%$ | 11 | $7 \%$ |
| Internet of Interest | 13 | $3 \%$ |  |  |  |  |
| Technical Elements <br> Do Not Interest (Programming etc) | 5 | $1 \%$ |  |  |  |  |
| Word Processing of Interest | 3 | $1 \%$ |  |  |  |  |
| Design Software of Interest | 3 | $1 \%$ |  |  |  |  |
| Give Exemplars |  |  | 1 | $1 \%$ | 2 | $1 \%$ |
| Interest Engaged |  |  | 1 | $1 \%$ |  |  |
| Fun, Humour Negative Comment |  |  |  | $1 \%$ |  | $1 \%$ |
| Expectations Were Not Met |  |  |  | 1 |  |  |

(Note Questions were developed over the time of the study, therefore varied in phrasing and focus over time The open responses
were categorised in terms of the comments made by respondents and the results are shown in the table above. The actual questions
posed are listed in the appendices for the questionnaires used.)

Table 2.3.50: SEI Perceived Impact on Learning / Motivation (Affective): Responses Obtained in Interviews
\(\left.\left.$$
\begin{array}{|l|l|l|}\hline \begin{array}{l}\text { SEI Perceived Impact on Learning /Motivation (Affective): Responses } \\
\text { Obtained in Interviews (N=61) } \\
\mathbf{1 9 9 7}\end{array} & \begin{array}{l}\text { To 2000 } \\
\text { Number of } \\
\text { Students } \\
\text { Indicating } \\
\text { Issue } \\
\text { Relevant }\end{array}\end{array}
$$\right) \begin{array}{l}\% of <br>

Interviewees\end{array}\right]\)|  |
| :--- |
| Relevance Important |
| Feedback On Demand Important |
| Feedback Explanation Important |
| Interactivity Important |
| Fun, Humour Positive Comment |
| Examples Important (Real Life) |
| Novelty Value Added Interest |
| Variety In Link / Unit Contents Important |
| Interest Engaged |
| Give Exemplars |
| Expectations Were Not Met |
| Fun, Humour Negative Comment |

Table 2.3.51: SHS Perceived Impact on Learning / Motivation (Affective):Open Responses Obtained in Exit Questionnaires

| SHS Perceived Impact on Learning / Motivation (Affective):Open <br> Responses Obtained in Exit Questionnaires (N = 34) | Number | \% |
| :--- | :--- | :--- |
| $\mathbf{1 9 9 9}$ to 2000 |  |  |$\quad$| aspects of the material became irritating (abi) | 11 |
| :--- | :--- |

Table 2.3.52: DMLE Perceived Impact on Learning / Motivation (Affective): Open Responses Obtained in Questionnaires

| DMLE Perceived Impact on Learning / Motivation (Affective): Open Responses Obtained in Questionnaires | Semester 1 <br> 1998 to <br> 1999 Total $(N=7)$ | Semester <br> 11998 to <br> 1999 <br> Total \% $(N=7)$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & (N=7) \end{aligned}$ | Semester <br> 11999 to <br> 2000 <br> Total \% $(N=7)$ | Semester 1 <br> 2000 to <br> 2001 <br> Total $(\mathbf{N}=\mathbf{3 2})$ | Semester <br> 12000 to <br> 2001 <br> Total \% $(\mathrm{N}=32)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| feedback on demand important | 4 | 57\% | 3 | 43\% | 7 | 22\% |
| relevance | 3 | 43\% | 7 | 100\% | 27 | 84\% |
| interactivity important | 3 | 43\% | 5 | 71\% | 9 | 28\% |
| feedback explanation important | 1 | 14\% | 6 | 86\% | 11 | 34\% |
| novelty value adds interest | 1 | 14\% |  |  | 2 | 6\% |
| fun / humour positive | 1 | 14\% | 1 | 14\% | 6 | 19\% |
| assessment motivates |  |  | 3 | 57\% | 6 | 19\% |
| computer adds interest |  |  | 2 | 29\% | 14 | 44\% |
| examples important - real life |  |  | 3 | 43\% | 2 | 6\% |
| challenge |  |  |  |  | 16 | 50\% |
| too much text has negative effect |  |  |  |  | 11 | 34\% |
| engaged by computer-based material |  |  |  |  | 7 | 22\% |
| visual display added interest |  |  |  |  | 7 | 22\% |
| video added interest (vidai) |  |  |  |  | 7 | 22\% |
| variety important |  |  |  |  | 6 | 19\% |
| computer adds enjoyment |  |  |  |  | 4 | 13\% |
| video did not add interest |  |  |  |  | 3 | 9\% |


| Table 2.3.52 (cont'd) <br> DMLE Perceived Impact on <br> Learning / Motivation (Affective): <br> Open Responses Obtained in <br> Questionnaires | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \text { Total } \\ & (\mathrm{N}=7) \end{aligned}$ | Semester <br> 11998 to <br> 1999 <br> Total \% $(N=7)$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & (N=7) \end{aligned}$ | Semester <br> 11999 to <br> 2000 <br> Total \% $(N=7)$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 2000 \text { to } \\ & 2001 \\ & \text { Total } \\ & (\mathrm{N}=32) \\ & \hline \end{aligned}$ | Semester 12000 to <br> 2001 <br> Total \% $(\mathbf{N}=\mathbf{3 2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| text alone is boring |  |  |  |  | (1) | 6\% |
| eye strain / fatigue |  |  |  |  | 2 | 6\% |
| simulations added interest |  |  |  |  | 2 | 6\% |
| graphics add interest |  |  |  |  | 1 | 3\% |
| variety in style of presentation |  |  |  |  | 1 | 3\% |
| malfunctions have negative effect |  |  |  |  | 1 | 3\% |
| content not satisfactory |  |  |  |  | 1 | 3\% |

Table 2.3.53: HBS Perceived Impact on Learning / Motivation (Affective): Open Responses Obtained in Questionnaires Semester 11999 to 2000

| HBS Open Responses Obtained in Questionnaires by \% <br> Rank Order | Totals by <br> Category <br> (N=17) | \% Totals <br> by <br> Category <br> $(\mathbf{N}=17)$ |
| :--- | :--- | :--- |
| relevance | 12 | $71 \%$ |
| games | 3 | $18 \%$ |
| interactivity important | 1 | $6 \%$ |
| feedback on demand important | 1 | $6 \%$ |
| fun / humour positive | 1 | $6 \%$ |
| examples important - real life | 1 | $6 \%$ |
| simulations added interest | 1 | $6 \%$ |

Table 2.3.54: Woolwich MNE Group: Perceived Impact on Learning / Motivation (Affective), Open Responses Obtained in Questionnaires

| Woolwich MNE Group: <br> Perceived Impact on Learning <br> /Motivation (Affective) <br> Open Responses Obtained in <br> Questionnaires <br> 1999 to 2000 | First <br> Quest're <br> Total by <br> Category $N=5$ | First Quest're Total \% | Second Quest're Total by Category $\mathbf{N}=\mathbf{2}$ | Second Quest're Total \% | Third <br> Quest're <br> Total by <br> Category $N=5$ | Third Quest're Total \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| relevance | 5 | 100\% | 2 | 100\% |  |  |
| assessment motivates | 5 | 100\% | 2 | 100\% | 4 | 80\% |
| too much text has negative effect |  |  | 1 | 50\% | 3 | 60\% |
| breaks in text important |  |  | 1 | 50\% |  |  |
| variety important |  |  | 1 | 50\% |  |  |
| examples important real life |  |  | 2 | 100\% | 4 | 80\% |
| interactivity important |  |  |  |  | 1 | 20\% |
| fun / humour positive |  |  |  |  | 1 | 20\% |

### 2.3.7.3 Preferred Computer-based Environments

Table 2.3.55: SEI Responses: Preferred Computer-based Environments at Scale Points 4 to 5

Questionnaire Item:
Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |

In your opinion, which of the above environments most appropriately
describes this computer-based module?

| Totals at Scale Points 4t05 <br> $\mathbf{1 9 9 9}$ to 2000 | Entrance <br> $\mathbf{N}=150$ | Entrance | Midpoint <br> $\mathbf{N}=\mathbf{4 0}$ | Midpoint | Exit <br> $\mathbf{N}=46$ | Exit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of Respondents by <br> Category Total N Possible <br> $\mathbf{1 5 0}$ | Total N <br> by <br> Question <br> Items | Total \% <br> $\mathbf{N}$ by <br> Question <br> Item | Total N by <br> Question <br> Items | Total \% N <br> by Question <br> Item | Total N by <br> Question <br> Items | Total \% N <br> by Question <br> Item |
| Combination of Electronic <br> Book, Game and Simulated <br> Environment | 112 | $75 \%$ | 28 | $70 \%$ | 36 | $78 \%$ |
| Simulated Environment | 88 | $59 \%$ | 22 | $55 \%$ | 36 | $78 \%$ |
| Game Approach | 82 | $55 \%$ | 25 | $63 \%$ | 30 | $65 \%$ |
| Electronic Book | 67 | $45 \%$ | 17 | $43 \%$ | 20 | $43 \%$ |

( Note only responses in revised questionnaires used for results regarding computer-based environment preference. While the overall responses to the Computer Based Environment Items spanned 11 response batches, only the results from questionnaires 14 , $15,16,17$ and 19 have been used for analysis This was due to some potential ambiguty in the responses obtained in earlier questionnaires, which was eliminated by re-designing the questıonnaires.)

Table 2.3.56: SHS Preferred Computer-based Environments: Entrance Responses at Scale Points 4 to 5 Semester 1999-2000
(Note Only questions relatıng to environment used - other questions relating to confidence with material not used as no further data gathered on this at midpoint or exit)

Questionnaire Item:
Please indicate your preference ( 1 : not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |


| SHS Preferred Computer-based Environments: <br> Responses at Scale Points 4 to 5 Semester 1 1999- - <br> $\mathbf{2 0 0 0}$ (Entrance) <br> $\mathbf{N}=81$ | Total Responses <br> (at points 4 to5) <br> Using N of <br> Item Questionnaires | Total \% Responses <br> (at points 4 to5) <br> Using N of <br> Item Questionnaires |
| :--- | :--- | :--- |
| Combination of Electronic Book, Game and <br> Simulated Environment | 61 | $75 \%$ |
| Simulated Environment | 55 | $68 \%$ |
| Game Approach | 48 | $59 \%$ |
| Electronic Book | 38 | $47 \%$ |

(Note' only SHS entrance questionnaires sought responses to these items therefore $\mathrm{N}=81$ )

Table 2.3.57: DMLE Preferred Computer-based Environments: Responses at Scale Points 4 to 5 Semester 11999 to 2000

Questionnaire Item:
Please indicate your preference ( 1 : not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |


| DMLE Preferred Computer-based Environments: Responses at Scale Points 4 to 5 Semester <br> $\mathbf{1 1 9 9 9}$ to 2000 (N=7) | Total | \% |
| :--- | :--- | :--- |
| Electronic Book (text shown on screen) | 4 | $57 \%$ |
| Game Approach where points are scored for correct answers | 5 | $71 \%$ |
| Simulated Environment (e.g. office scene with sources of information and tasks to be undertaken) | 6 | $86 \%$ |
| Combination of Electronic Book, Computer Game and Simulated Environment | 7 | $100 \%$ |

Table 2.3.58: Woolwich MNE Preferred Computer-based Environments:
Responses at Scale Points 4 to 5 Semester 11999 / 2000
Questionnaire Item:
Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |


| Woolwich MNE Preferred Computer-based Environments: Responses at Scale <br> Points 4 to 5 Semester 1 1999/2000 (N=5) | Total N <br> at 4 to 5 Level | Total \% |
| :--- | :--- | :--- |
| Electronic Book | 0 | $0 \%$ |
| Game Approach | 2 | $40 \%$ |
| Simulated Environment | 3 | $60 \%$ |
| Combination of Electronic Book, Computer Game and Simulated Environment | 3 | $60 \%$ |

### 2.3.7.4 Perceived Effectiveness of Navigation Elements

Table 2.3.59: SEI Midpoint Effectiveness of Navigation Elements: Responses at Scale Points 4 to 5

Questionnaire Item:
The module makes use of a range of elements. Please rate each of these, you have used so far, in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | 1 | 2 | 3 | 4 | 5 | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |


| The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your |
| :--- |
| use of the module on a scale of 1 (not effective) -5 (highly effective) and offer a comment of explanation. |

Questionnaire Item:

| Element | 1 | 2 | 3 | 4 | 5 | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |  |  |  |  |


| SEI Midpoint Effectiveness of Navigation Elements: Responses at <br> Scale Points 4 to 5 <br> (Total N by Questionnaire Returns=191) <br> 1997 to 2000 | Total N <br> Possible by <br> Question <br> Item | Total N <br> Actual by <br> Question <br> Items | Total \% N <br> Actual by <br> Question <br> Item |
| :--- | :--- | :--- | :--- |
| Navigation Feet (green/ red) | 143 | 118 | $83 \%$ |
| Structure Map(showing contents) | 143 | 118 | $83 \%$ |
| Main Map (showing overview) | 143 | 97 | $68 \%$ |
| Hypertext Links | 143 | 76 | $53 \%$ |
| Button Links | 143 | 75 | $52 \%$ |
| Glossary Window | 143 | 47 | $33 \%$ |
| History Window | 143 | 27 | $19 \%$ |

(NB not all questionnaires addressed all items)
Table 2.3.60: SEI Exit Effectiveness of Navigation Elements: Responses at Scale Points 4 to 5

| SEI Exit Effectiveness of Navigation Elements: <br> Responses at Scale Points 4 to 5 | Total N <br> Possible by <br> Question <br> Item | Total N <br> Actual by <br> Question <br> Items | Total \% N <br> Actual by <br> Question <br> Item |
| :--- | :--- | :--- | :--- |
| Structure Map (showing contents) | 177 | 148 | $84 \%$ |
| Navigation Feet (green / red) | 177 | 145 | $82 \%$ |
| Main Map (showing overview) | 177 | 118 | $67 \%$ |
| Hypertext Links | 202 | 114 | $56 \%$ |
| Button Links | 202 | 108 | $53 \%$ |
| Glossary Window | 177 | 63 | $36 \%$ |
| History Window | 177 | 18 | $10 \%$ |

### 2.3.7.5 Perceived Effectiveness of Exercise Elements

Table 2.3.61: SEI Midpoint Effectiveness of Exercise Elements: Responses at Scale Points 4 to 5
Questionnaire Item:
The module makes use of a range of self-contained, interactive exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Scenarios Used |  |  |  |  |  |  |


| SEI Midpoint Effectiveness of Exercise Elements: <br> Responses at Scale Points 4 to 5 <br> Number of Respondents by Rank Order of \% <br> (Total N by Questionnaire Returns =191) | Total N <br> Possible by <br> Question <br> Item | Total N <br> Actual by <br> Question <br> Items | Total \% N <br> Actual by <br> Question <br> Item |
| :--- | :--- | :--- | :--- |
| Scenarios Used | 143 | 99 | $69 \%$ |
| Relevance to Module | 143 | 98 | $69 \%$ |
| Interactive Exercises | 143 | 95 | $66 \%$ |
| Text Used | 143 | 86 | $60 \%$ |
| Graphics Used | 143 | 80 | $56 \%$ |
| Tasks Specified | 143 | 80 | $56 \%$ |
| Colours Used | 143 | 79 | $55 \%$ |
| Feedback Given | 143 | 78 | $55 \%$ |
| Difficulty of Exercises | 143 | 55 | $38 \%$ |
| Notepad Exercises | 143 | 34 | $24 \%$ |

(Note' not all questionnaires addressed all items therefore variation from N of returns, \% calculated using possible N by Question)

Table 2.3.62: SEI Exit Effectiveness of Exercise Elements: Responses at Scale Points 4 to 5

| SEI Exit Effectiveness of Exercise Elements: <br> Responses at Scale Points 4 to 5 | Total N <br> Possible by <br> Question <br> Item | Total N Actual <br> by <br> QuestionItems | Total \% <br> N Actual <br> (y <br> Question <br> Item |
| :--- | :--- | :--- | :--- |
| Total N Possible 202 <br> $\mathbf{1 9 9 7}$ to 2000 | 177 | 131 | $74 \%$ |
| Relevance to Module | 177 | 126 | $71 \%$ |
| Scenarios Used | 202 | 139 | $69 \%$ |
| Interactive Exercises | 177 | 119 | $67 \%$ |
| Colours Used | 177 | 118 | $67 \%$ |
| Graphics Used | 177 | 110 | $62 \%$ |
| Text Used | 177 | 94 | $53 \%$ |
| Feedback Given | 177 | 88 | $50 \%$ |
| Tasks Specified | 177 | 73 | $41 \%$ |
| Difficulty of Exercises | 202 | 49 | $24 \%$ |
| Notepad Exercises |  |  |  |

Table 2.3.63: SEI Exercise Elements: Responses Obtained to Scale Point Statements at 4 to 5 Level

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| The interactive exercises helped me to understand the material |  |  |  |  |  |


| SEI Exercise Elements: Responses Obtained to Scale Point Statements at 4 to 5 Level $1999 \text { to } 2000$ | Midpoint <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathrm{N}=40$ | Midpoint <br> Total \% N <br> Actual by <br> Question <br> Item | Exit Total NActual by <br> Question <br> Items <br> $\mathrm{N}=46$ | Exit Total \% N <br> Actual by Question Item |
| :---: | :---: | :---: | :---: | :---: |
| The interactive exercises helped me to understand the material | 25 | 63\% | 37 | 80\% |
| The interactive exercises were not essential so I focused on other material | 9 | 23\% | 7 | 15\% |
| The on-screen feedback given for the interactive exercises helps me check I'm learning | 24 | 60\% | 24 | 52\% |

Table 2.3.64: SEI Exercise Elements: Open Responses Obtained in Questionnaires

| SEI Exercise Elements: <br> Open Responses Obtained <br> in Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses $(N=468)$ | Entrance <br> Total \% <br> Responses $(N=468)$ | Midpoint <br> Total <br> Responses $(N=191)$ | Midpoint Total \% Responses ( $\mathrm{N}=191$ ) | Exit <br> Total <br> Responses $(N=166)$ | Exit <br> Total \% <br> Responses $(N=166)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exercises Material Aided Learning / Understanding | 5 | 1\% | 68 | 36\% | 24 | 14\% |
| Exercises Add Interest | 19 | 4\% | 31 | 16\% | 24 | 14\% |
| More Exercises Wanted |  |  | 33 | 17\% | 28 | 17\% |
| Exercises Helped Check Learning | 3 | 1\% | 28 | 15\% | 13 | 8\% |
| Exercises Provoked Thought Positive Comment |  |  | 37 | 19\% | 7 | 4\% |
| Make Exercises More Complex | 3 | 1\% | 14 | 7\% | 11 | 7\% |
| Exercises Add Fun, Enjoyment |  |  | 9 | 5\% | 9 | 5\% |
| Exercise Variety Important | 3 | 1\% | 3 | 2\% | 1 | 1\% |
| Exercises Offered Practice | 2 | 0\% | 2 | 1\% | 6 | 4\% |
| Fewer Exercises Wanted |  |  | 2 | 1\% | 2 | 1\% |
| Make Exercises Less Complex |  |  | 1 | 1\% |  |  |
| Exercises Provoked Thought Negative Comment |  |  |  |  | 1 | 1\% |

(Note. Open response items were developed over the time of the study, therefore varied in phrasing and focus over time. The
responses were categorised in terms of the comments made by respondents and the results are shown in the table below. The actual
questions posed are listed in the appendices for the questionnaires used.)
Table 2.3.65: SEI Exercise Elements: Responses Obtained to Interview Questions

| SEI Exercise Elements: Responses Obtained to Interview Questions <br> (N=61) $\mathbf{1 9 9 7}$ to 2000 | Total Number of <br> Interviewees Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| On Screen Exercise Issues |  |  |
| Exercises Provoked Thought Positive Comment | 38 | $62 \%$ |
| Exercises Material Aided Learning/Understanding | 36 | $59 \%$ |
| Exercises Helped Check Learning | 35 | $57 \%$ |
| Exercises Add Interest | 35 | $57 \%$ |
| Exercises Offered Practice | 25 | $41 \%$ |
| Make Exercises More Complex | 20 | $33 \%$ |
| More Exercises Wanted | 18 | $30 \%$ |
| Exercises Add Fun, Enjoyment | 16 | $26 \%$ |
| Exercise Variety lmportant | 8 | $13 \%$ |
| Make Exercises Less Complex | 3 | $5 \%$ |
| Exercises Made It Realistic | 3 | $5 \%$ |
| Exercises Provoked Thought Negative Comment | 2 | $3 \%$ |
| Some Exercises Too Long | 2 | $3 \%$ |
| Fewer Exercises Wanted | 1 | $2 \%$ |

(Note: Interview questions were developed in relation to the comments made by interviewees, therefore varied in phrasing and focus
The responses were categorised in terms of the comments made by respondents and the results are shown in the table below. The opening questions posed are listed in the appendices for the interviews conducted.)

Table 2.3.66: SHS Exercise / Simulation Elements: Open Responses Obtained in Questionnaires

| SHS Exercise / Simulation <br> Elements: Open Responses <br> Obtained in Questionnaires <br> $\mathbf{1 9 9 9} / 2000$ | Total <br> by Item <br> Entrance <br> (N=81) | Total <br> Entrance <br> $\%$ | by Item <br> Midpoint <br> $(\mathbf{N}=51)$ | Total <br> by Item <br> Exit <br> $\mathbf{N}=34)$ | Midpoint <br> $\%$ | Exit <br> $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| exercises aided learning | 4 | $4 \%$ | 3 | $5 \%$ |  |  |
| practical focus motivates | 5 | $6 \%$ | 2 | $4 \%$ | 26 | $76 \%$ |
| offers practice | 5 | $6 \%$ |  |  | 29 | $85 \%$ |
| more exercises wanted |  |  | 2 | $4 \%$ |  |  |
| exercises add interest | 2 | $2 \%$ | 1 | $2 \%$ |  |  |

Table 2.3.67: SHS Exit Exercise / Simulation Elements: Responses to Statements at
Scale Points 4 to 5
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:


| SHS Exit Exercise / Simulation Elements: Responses to Statements <br> at Scale Points $\mathbf{4}$ to $\mathbf{5} \mathbf{( N \mathbf { N } = \mathbf { 3 4 } )} \mathbf{1 9 9 9}$ to 2000 | Agree + (4 to 5) <br> Number | \% |
| :--- | :--- | :--- |
| The interactive table setting exercise helped me to learn the setting layout | $\mathbf{1 5}$ | $44 \%$ |
| The interactive table setting exercise gave enough feedback | $\mathbf{1 2}$ | $\mathbf{3 5 \%}$ |
| The interactive table setting exercise was not essential so I focused on other material | $\mathbf{1 3}$ | $\mathbf{3 8 \%}$ |
| The interactive maps increased my depth of thought | $\mathbf{8}$ | $\mathbf{2 4 \%}$ |
| I was unsure what to do with the interactive maps | $\mathbf{1 4}$ | $41 \%$ |
| The on screen feedback for the interactive exercise helped me check my learning | $\mathbf{8}$ | $\mathbf{2 4 \%}$ |

Table 2.3.68: SHS Exercise / Simulation Elements: Exit Open Responses Obtained in Questionnaires

| SHS Exercise / Simulation Elements: Exit Open Responses Obtained in <br> Questionnaires $(\mathbf{N}=\mathbf{3 4}) \mathbf{1 9 9 9}$ to 2000 | Number | \% |
| :--- | :--- | :--- |
| role play provoked thought (rppth) | 27 | $\mathbf{7 9 \%}$ |

Table 2.3.69: DMLE Exercise / Simulation Elements in Material: Responses at Scale Points 4 to 5 Semester 11998 to 1999
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Simulation Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Exercise / Simulation Elements in Material: <br> Responses at Scale Points 4 to 5 Sem 1 1998 to 1999 (N=7) | Total | Total \% |
| :--- | :--- | :--- |
| Simulation Elements of Program | 4 | $57 \%$ |
| Feedback Given In Simulations | 4 | $57 \%$ |
| The simulations helped me to understand the material | 5 | $71 \%$ |

[^1]Table 2.3.70: DMLE Exercise / Simulation Elements in Material: Responses at Scale Points 4 to 5 Semester 11999 to 2000

Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Text Elements of Program |  |  |  |  |  |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've <br> used |  |  |  |  |  |


| DMLE Exercise / Simulation Elements in Material Responses at Scale <br> Points 4 to 5 Sem 1 1999 to 2000 (N $=7$ ) | Total | $\mathbf{\%}$ |
| :--- | :--- | :--- |
| Simulation Elements of Program | 5 | $71 \%$ |
| Feedback Given In Simulations | 4 | $57 \%$ |
| The simulations helped me to understand the material | 7 | $100 \%$ |
| The interactive exercises helped me to understand the material | 6 | $86 \%$ |
| The Slideman exercise increased my depth of thought | 4 | $57 \%$ |
| The Mondo exercise increased my depth of thought | 5 | $71 \%$ |

(Note due to an error in the questonnaires some items were inserted which were unintended, these were disregarded in the calculations of results)

Table 2.3.71: DMLE Exercise / Simulation Elements: Open Responses Obtained in Questionnaires Semester 1 1998 / 99 to Semester 12000 / 01

| DMLE Exercise / Simulation <br> Elements: Open Responses <br> Obtained in Questionnaires <br> Semester 1998/99 to <br> Semester 1 2000/01 | $\begin{aligned} & \hline \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \text { Total } \\ & \text { by } \\ & \text { Category } \\ & (N=7) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \text { Total } \\ & \% \end{aligned}$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \\ & \text { Total by } \\ & \text { Category } \\ & (\mathrm{N}=7) \\ & \hline \end{aligned}$ | Semester 1 1999 to 2000 Total \% | Semester <br> 2000 to <br> 2001 <br> Total by <br> Category $(N=32)$ | Semester 1 2000 to 2001 Total \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| exercises aided learning | 4 | 57\% | 1 | 14\% |  |  |
| feedback on demand important | 4 | 57\% | 3 | 43\% | 7 | 22\% |
| interactivity important | 3 | 43\% | 5 | 71\% | 9 | 28\% |
| challenge | 2 | 29\% | 4 | 57\% | 16 | 50\% |
| offers practice | 1 | 14\% |  |  | 1 | 3\% |
| simulations added interest | 1 | 14\% | 4 | 57\% | 2 | 6\% |
| feedback explanation important | 1 | 14\% | 6 | 86\% | 11 | 34\% |
| simulations aided learning | 1 | 14\% | 5 | 71\% | 29 | 91\% |
| exercises help check learning |  |  | 3 | 43\% | 1 | 3\% |
| games |  |  | 1 | 14\% | 16 | 50\% |

Table 2.3.72: Woolwich MNE Group Exercise / Simulation Elements: Open Responses Obtained To Questions / Summary Statements (Q3) in Questionnaires Semester 1 1999/00 to Semester 2 1999/00

| Woolwich MNE Group Exercise / Simulation Elements: Open Responses Obtained in Questionnaires | $\begin{aligned} & \text { Q1 } \\ & \text { Semester } 1 \\ & 1999 / 00 \text { to } \\ & \text { Semester } 2 \\ & 1999 / 00 \\ & \text { Total by } \\ & \text { Category } \\ & (N=5) \end{aligned}$ | Q 1 Semester 1 $1999 / 00$ to Semester 2 $1999 / 00$ Total $\%$ | Q 2 <br> Semester 1 <br> 1999/00 to <br> Semester 2 <br> 1999/00 <br> Total by <br> Category $(\mathrm{N}=2)$ | Q 2 Semester 1 1999 /00 to Semester 2 $1999 / 00$ Total $\%$ | Q3 <br> Semester 1 <br> 1999/00 to <br> Semester 2 <br> 1999/00 <br> Total by <br> Category $(\mathrm{N}=5)$ | Q 3 <br> Semester 1 <br> 1999/00 to <br> Semester 2 <br> 1999/00 <br> Total <br> \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| feedback explanation important | 5 | 100\% | 2 | 100\% | 4 | 80\% |
| feedback on demand important | 5 | 100\% | 2 | 100\% | 3 | 60\% |
| offers practice | 4 | 80\% | 2 | 100\% | 4 | 80\% |
| offered multiple attempts | 4 | 80\% |  |  | 4 | 80\% |
| problem solving provoked thought | 4 | 80\% | 2 | 100\% |  |  |
| exercises aided learning | 3 | 60\% | 1 | 50\% | 4 | 80\% |
| make exercises more complex | 3 | 60\% | 1 | 50\% | 4 | 80\% |
| more exercises wanted | 3 | 60\% | 1 | 50\% |  |  |
| demonstrations valuable | 1 | 20\% | 1 | 50\% |  |  |
| simulations aided learning |  |  |  |  | 4 | 80\% |
| interactivity important |  |  |  |  | 1 | 20\% |

### 2.3.7.6 Perceived Effectiveness of "Usability" Related Elements

Table 2.3.73: SEI "Usability" Related: Open Responses Obtained in Questionnaires

| SEI "Usability" Related <br> Open Responses <br> Obtained in <br> Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> $\mathbf{( N = 1 6 6 )}$ | Exit <br> Total \% <br> Responses <br> $(\mathbf{N}=166)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ease Of Use Important | 276 | $59 \%$ | 123 | $64 \%$ | 97 | $58 \%$ |
| Links Were Confusing |  |  | 61 | $32 \%$ | 25 | $15 \%$ |
| Too Many Links |  |  | 9 | $5 \%$ | 2 | $1 \%$ |
| Map Aided Navigation <br> Positive Comment |  |  | 36 | $19 \%$ | 22 | $13 \%$ |
| Map Aided Navigation <br> Negative Comment |  |  | 1 | $1 \%$ |  |  |
| Too Many Windows On <br> Screen |  |  | 11 | $6 \%$ | 2 | $1 \%$ |


| Table 2.3.73 (cont'd.) <br> SEI "Usability" Related <br> Open Responses <br> Obtained in <br> Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $\mathbf{( N = 1 9 1 )}$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> (N=166) | Exit <br> Total \% <br> Responses <br> $(\mathbf{N}=166)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Malfunctions Found | 27 | $6 \%$ | 16 | $8 \%$ | 24 | $14 \%$ |
| Note Taking Better On <br> Computer <br> Positive Comment | 11 | $2 \%$ | 5 | $3 \%$ | 3 | $2 \%$ |
| Note Taking Better On <br> Computer <br> Negative Comment | 25 | $5 \%$ | 17 | $9 \%$ | 14 | $8 \%$ |
| Reading From Screen <br> Causes Eye Strain/Fatigue | 33 | $7 \%$ | 16 | $8 \%$ | 19 | $11 \%$ |
| Layout Style Not <br> Consistent | 1 | $0 \%$ | 11 | $6 \%$ | 9 | $5 \%$ |
| Could Revisit Information <br> Easily | 7 | $1 \%$ | 24 | $13 \%$ | 17 | $10 \%$ |

(Note 1 Open response items were developed over the time of the study, therefore varied in phrasing and focus over time The responses were categorised in terms of the comments made by respondents and the results are shown in the table below The actual questions posed are listed in the appendices for the questionnarres used

Note 2 ' where previous use of computers was stated by respondent the score was entered as "experienced" No differentiation was attempted regarding levels of experience.
Note 3• Exit does not include semester 299 to 00)
Table 2.3.74: SEI "Usability" Related: Responses Obtained in Interviews

| SEI "Usability" Related: Responses Obtained in Interviews <br> (N=61) 1997 to 2000 | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Ease Of Use Important | 44 | $72 \%$ |
| Links Were Confusing | 31 | $51 \%$ |
| Too Many Links | 4 | $7 \%$ |
| Map Aided Navigation Positive Comment | 25 | $41 \%$ |
| Map Aided Navigation Negative Comment | 4 | $7 \%$ |
| Too Many Windows On Screen | 13 | $21 \%$ |
| Malfunctions Found | 16 | $26 \%$ |
| Note Taking Better On Computer Positive Comment | 8 | $13 \%$ |
| Note Taking Better On Computer Negative Comment | 10 | $16 \%$ |
| Reading From Screen Causes Eye Strain/Fatigue | 16 | $26 \%$ |
| Layout Style Not Consistent | 20 | $33 \%$ |
| Could Revisit Information Easily | 23 | $38 \%$ |

(Note Interview questions were developed in relation to the comments made by interviewees, therefore vanied in phrasing and focus
The responses were categorised in terms of the comments made by respondents and the results are shown in the table below. The opening questions posed are listed in the appendices for the interviews conducted)

Table 2.3.75: SHS "Usability" Related: Open Responses Obtained in Questionnaires

| SHS "Usability" <br> Related: Open <br> Responses <br> Obtained in <br> Questionnaires <br> 1999/2000 | Total by Item |  | Total by Item |  | Total by Item |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item Category | $\begin{aligned} & \text { Entrance } \\ & (\mathrm{N}=81) \\ & \hline \end{aligned}$ | Entrance \% | Midpoint $(\mathrm{N}=51)$ | Midpoint $\%$ | Exit ( $\mathbf{N}=34$ ) | Exit \% |
| ease of use important | 53 | 65\% | 44 | 86\% | 33 | 97\% |
| could revisit info easily | 16 | 20\% | 8 | 16\% | 26 | 76\% |
| malfunctions have negative effect | 8 | 10\% | 11 | 22\% | 12 | 35\% |
| too much information |  |  | 4 | 8\% | 11 | 32\% |
| links confusing |  |  | 1 | 2\% | 0 |  |
| content not satisfactory |  |  | 1 | 2\% | 13 | 38\% |
| tutorial in computer use desired |  |  |  |  | 25 | 74\% |
| printed user manual desired |  |  |  |  | 27 | 79\% |

Table 2.3.76: DMLE "Usability" Issues: Open Responses Obtained in Questionnaires

| DMLE <br> "Usability" <br> Issues: Open <br> Responses <br> Obtained in <br> Questionnaires | Semester 1 1998 to 1999 Total $(N=7)$ | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \\ & \text { Total \% } \\ & (\mathrm{N}=7) \end{aligned}$ | Semester 1 1999 to 2000 Total $(N=7)$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \\ & \text { Total \% } \\ & (\mathrm{N}=7) \end{aligned}$ | Semester 1 <br> 2000 to <br> 2001 <br> Total $(\mathbf{N}=32)$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 2000 \text { to } 2001 \\ & \text { Total \% } \\ & (\mathrm{N}=32) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ease of use important | 4 | 57\% | 7 | 100\% | 16 | 50\% |
| eye strain / fatigue | 1 | 14\% |  |  | 2 | 6\% |
| malfunctions have negative effect | 2 | 29\% | 1 | 14\% | 1 | 3\% |
| too much text has negative effect |  |  | 1 | 14\% |  |  |
| visual display aided learning |  |  | 1 | 14\% |  |  |

(Note where previous use of computers was stated by respondent the score was entered as "experienced". No differentiation was attempted regarding levels of experience)

Table 2.3.77: HBS "Usability" Issues: Open Responses Obtained in Questionnaires Semester 11999 to 2000

| HBS "Usability" Issues: Open Responses Obtained in <br> Questionnaires Semester 1 1999 to 2000 | Totals by <br> Category <br> $(\mathbf{N}=17)$ | \% Totals <br> by <br> Category <br> $(\mathbf{N}=17)$ |
| :--- | :--- | :--- |
| ease of use important (eu) | 6 | $35 \%$ |

Table 2.3.78: Woolwich MNE Group "Usability" Related: Open Responses Obtained in Questionnaires

| Woolwich MNE Group "Usability" <br> Issues: Open Responses Obtained in <br> Questionnaires <br> $\mathbf{1 9 9 9}$ to 2000 | First <br> Quest're <br> Total by <br> Category <br> $(\mathbf{N}=5)$ | First <br> Quest're <br> Total <br> $\%$ | Second <br> Quest're <br> Total by <br> Category <br> $(\mathbf{N}=2)$ | Second <br> Quest're <br> Total <br> $\%$ | Third <br> Quest're <br> Total by <br> Category <br> $(\mathbf{N}=5)$ | Third <br> Quest're <br> Total <br> $\%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ease of use important | 1 | $20 \%$ | 1 | $50 \%$ | 4 | $80 \%$ |
| too many windows | 1 | $20 \%$ |  |  |  |  |
| simple language helps |  |  |  |  | 4 | $80 \%$ |

### 2.3.6.7 Perceived Impact of Presentation Related Elements

Table 2.3.79: SEI Perceived Impact of Presentation Elements: Responses to 5 Point Scale Statements at Scale Points 4 to 5

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used |  |  | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SEI Perceived Impact of Presentation Elements <br> Responses to 5 Point Scale Statements <br> at Scale Points 4 to 5 <br> 1999 to 2000 | Midpoint <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathrm{N}=40$ | Midpoint <br> Total \% N <br> Actual by <br> Question <br> Item | Exit <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathrm{N}=46$ | Exit <br> Total \% N <br> Actual by <br> Question <br> Item |
| :---: | :---: | :---: | :---: | :---: |
| The presentation of this multi-media material is as good as others I've experienced | 17 | 43\% | 28 | 61\% |
| The visual elements of the windows were motivating for me | 12 | 30\% | 22 | 48\% |
| The time flexibility is more important to me than the quality of the presentation | 12 | 30\% | 15 | 33\% |
| My view of this material has been influenced by other multimedia material I've used | 5 | 13\% | 12 | 26\% |

Table 2.3.80: SHS Exit Perceived Impact of Presentation Elements: Responses to 5 Point Scale Statements at Scale Points 4 to 5

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:


| SHS Exit Perceived Impact of Presentation Elements: Responses to 5 Point Scale Statements <br> at Scale Points $\mathbf{4}$ to $5 \mathbf{5} \mathbf{N}=\mathbf{3 4}) \mathbf{1 9 9 9}$ to 2000 | Agree /+ <br> $(4$ to 5) |  |
| :--- | :--- | :--- |
|  | Number | $\%$ |
| I found the Visual Elements (look) of the screen display motivating | 21 | $62 \%$ |
| The presentation of this multi-media material was better than others I've experienced | 15 | $44 \%$ |
| The presentation of this multi-media material was as good as others I've experienced | 14 | $41 \%$ |
| My view of this material has been influenced by other multi-media I've used | 11 | $32 \%$ |
| Time flexibility was more important to me than quality of presentation | 10 | $29 \%$ |
| The presentation of this multi-media material was not as good as others I've experienced | 6 | $18 \%$ |

(Note' presentation comparison question asked at three levels to guage where material was considered to sit in comparison with
comparable material experienced by learners)
Table 2.3.81: SHS Perceived Impact of Presentation Elements: Open Responses Obtained in Questionnaires

| SHS Perceived Impact of <br> Presentation Elements: Open <br> Responses Obtained in <br> Questionnaires 1999 /2000 | Total <br> by Item <br> Entrance <br> $(\mathbf{N}=81)$ | \% <br> Entrance | Total <br> by Item <br> Midpoint <br> $(\mathbf{N}=51)$ | \% <br> Midpoint | Total by <br> Item <br> Exit (N=34) | \% Exit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| visual display aided learning |  |  | 32 | $63 \%$ | 31 |  |
| eye strain/ fatigue | 12 | $15 \%$ |  |  |  |  |
| visual display add interest |  |  | 9 | $18 \%$ |  |  |

Table 2.3.82: SHS Perceived Impact of Presentation Elements: Open Responses Obtained in Questionnaires
$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline \begin{array}{l}\text { SHS Perceived } \\ \text { Impact of } \\ \text { Presentation } \\ \text { Elements: Open }\end{array} & \begin{array}{l}\text { Total by } \\ \text { Item } \\ \text { Entrance } \\ \text { (Nesponses }\end{array} & & \text { Entrance \% } \\ \text { Obtained in } \\ \text { Questionnaires } \\ \mathbf{1 9 9 9 / 2 0 0 0}\end{array} \quad \begin{array}{l}\text { Total } \\ \text { by Item } \\ \text { Midpoint } \\ \mathbf{( N = 5 1 )}\end{array}\right)$

## Table 2.3.83: DMLE Perceived Impact of Presentation Elements: Responses at

 Scale Points 4 to 5 Semester 11998 to 1999Questionnaire Item:
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Text Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | | DMLE Perceived Impact of Presentation Elements Sem 1 1998 to 1999 Totals at Scale <br> Points 4 to $5(N=7)$ | Total | Total \% |
| :--- | :--- | :--- |
| I found the visual elements (look) of the windows motivating | 6 | $86 \%$ |
| The content is more important to me than the quality of the presentation | 2 |  |
| The presentation of this multi-media material is as good as others I've experienced | $29 \%$ |  |
| My view of this material has been influenced by other multi-media material I've used | 3 | $43 \%$ |

(Note: The question regarding the presentation being as good as, or better than other material experienced was asked with the intention of differentiating the two levels. It was considered useful to know which of these categories might be perceived by respondents as applicable.)

## Table 2.3.84: DMLE Perceived Impact of Presentation Elements: Responses to 5 Point Scale Statements at Scale Points 4 to 5 Semester 11999 to 2000

Questionnaire Item:
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Text Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Perceived Impact of Presentation Elements: Responses to 5 Point Scale Statements at Scale <br> Points 4 to 5 Sem 11999 to 2000 ( $\mathbf{N}=7)$ | Total | \% |
| :--- | :--- | :--- |
| I found the visual elements (look) of the windows motivating | 5 | $71 \%$ |
| The content is more important to me than the quality of the presentation | 1 | $14 \%$ |
| The presentation of this multi-media material is as good as others I've experienced | 4 | $57 \%$ |
| My view of this material has been influenced by other multi-media material I've used | $\mathbf{3}$ | $43 \%$ |

(Note due to an error in the questionnaire some items were entered twice, only the first response was used for calculations)

Table 2.3.85: DMLE Perceived Impact of Presentation Elements in Exercises: Responses at Scale Points 4 to 5 Semester 11999 to 2000

| DMLE Perceived Impact of Presentation Elements in Exercises: <br> Responses at Scale Points 4 to 5 Sem 1 1999 to 2000 (N=7) | Total | \% |
| :--- | :--- | :--- |
| Exercise Elements |  |  |
| Graphics Used | 5 | $71 \%$ |
| Colours Used | 6 | $86 \%$ |
| Text Used | 5 | $71 \%$ |
| Videos Used | 1 | $14 \%$ |

(Note The question regarding the presentation being as good as, or better than other material experienced was asked with the intention of differentiating the two levels. It was considered useful to know which of these categories might be perceived by respondents as applicable.)

### 2.3.7.8 Perceived Impact of Text Elements

## Table 2.3.86: SEI Text Related Open Responses Obtained in Questionnaires

| SEI <br> Text Related Open <br> Responses Obtained in <br> Questionnaires 1997 to 2000 | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=\mathbf{4 6 8})$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> $(\mathbf{N}=166)$ | Exit <br> Total $\%$ <br> Responses |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Text Alone Is Boring | 107 | $23 \%$ | 62 | $32 \%$ | 42 | $25 \%$ |
| Too Much Text | 12 | $3 \%$ | 44 | $23 \%$ | 33 | $20 \%$ |
| Hard Copy Wanted | 11 | $2 \%$ | 27 | $14 \%$ | 28 | $17 \%$ |
| Text Valuable | 12 | $3 \%$ | 27 | $14 \%$ | 18 | $11 \%$ |
| Breaks In Text Important | 6 | $1 \%$ | 19 | $10 \%$ | 14 | $8 \%$ |
| Simple Language Helps | 8 | $2 \%$ | 12 | $6 \%$ | 7 | $4 \%$ |

(Note Open response items were developed over the time of the study, therefore varied in phrasing and focus over time The responses were categorised in terms of the comments made by respondents and the results are shown in the table below. The actual questions posed are listed in the appendices for the questionnaires used.
Note: does not include Exit Semester 21999 to 2000 as question format changed)
Table 2.3.87: SEI Text Related Responses Obtained in Interviews

| SEI Text Related Responses Obtained in Interviews (N=61) <br> 1997 to 2000 | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Text Window Issues |  |  |
| Text Valuable | 24 | $39 \%$ |
| Too Much Text | 16 | $26 \%$ |
| Text Alone Is Boring | 28 | $46 \%$ |
| Simple Language Helps | 10 | $16 \%$ |
| Breaks In Text Important | 40 | $66 \%$ |
| Hard Copy Wanted | 20 | $33 \%$ |

(Note' Interview questions were developed in relation to the comments made by interviewees, therefore varied in phrasing and focus.
The responses were categorised in terms of the comments made by respondents and the results are shown in the table below The opening questions posed are listed in the appendices for the interviews conducted, as are the detailed maps of the interviews concemed.)

Table 2.3.88: SEI Text Related 5 Point Scale Statements: Responses at Scale Points 4 to 5

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |


| SEI Text Related 5 Point Scale Statements: <br> Responses at Scale Points 4 to 5 | Midpoint <br> Total N <br> Actual by <br> Question <br> Ittems <br> $\mathbf{N}=\mathbf{4 0}$ | Midpoint <br> Total \% N <br> Actual by <br> Question <br> Item | Exit <br> Total N <br> Actual by <br> Question <br> Items <br> N 2000 | Exit <br> Total \% N <br> Actual by <br> Question <br> Item |
| :--- | :--- | :--- | :--- | :--- |
| This material contained too much text | 14 | $35 \%$ | 13 | $28 \%$ |
| I find myself wanting to read this material from a <br> print out rather than on screen | 14 | $35 \%$ | 27 | $59 \%$ |
| I would have been better reading a book | 3 | $8 \%$ | 2 | $4 \%$ |

Table 2.3.89: SHS Text Related 5 Point Scale Statements: Responses at Scale Points 4 to 5

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:

| terms of the following statements: | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |


| SHS Text Related 5 Point Scale Statements: Responses at Scale Points 4 to 5 <br> Exit (N = 34) 1999 to 2000 | Number <br> At Level 4 <br> to 5 | \% |
| :--- | :--- | :--- |
| I would have been better reading a book | 3 | $8 \%$ |
| This material contained too much text | 4 | $12 \%$ |
| I find myself wanting to read from the Metablock rather than on screen | 8 | $24 \%$ |
| Question and answer workbook desired | 25 | $74 \%$ |

Table 2.3.90: SHS Perceived Impact of On-Screen Text: Open Responses Obtained in Questionnaires 1999/2000

| SHS Perceived <br> Impact of On-Screen <br> Text: Open <br> Responses Obtained <br> in Questionnaires <br> 1999/2000 | Total by <br> Item <br> Entrance <br> (N=81) |  | Entrance \% | Total by <br> Item <br> Midpoint <br> $\mathbf{( N = 5 1 )}$ | Midpoint \% | Total by <br> Item <br> Exit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| text alone is boring | 34 | $42 \%$ | 5 | Exit \% |  |  |
| $\mathbf{( N = 3 4 )}$ |  |  |  |  |  |  |$|$|  |
| :--- |
| too much text has <br> negative effect |
| text valuable |

Table 2.3.91: DMLE Perceived Impact of On-Screen Text: Responses at Scale Points 4 to 5 Semester 11998 to 1999

Questionnaire Item:
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:
Text Elements of Program

| 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:
Questionnaire Item:

| The text helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Perceived Impact of On-Screen Text: Responses at Scale Points 4 to 5 Sem 1 1998 <br> to $1999(\mathbf{N}=7$ ) | Total | Total \% |
| :--- | :--- | :--- |
| Text Elements of Program | 6 | $86 \%$ |
| The text helped me to understand the material | 6 | $86 \%$ |
| This material contained too much text | 1 | $\mathbf{1 4 \%}$ |
| I find myself wanting to read the text material from a print out rather than on screen | 2 | $29 \%$ |

Table 2.3.92: DMLE Perceived Impact of On-Screen Text: Responses at Scale Points 4 to 5 Semester 11999 to 2000

| DMLE Perceived Impact of On-Screen Text: Responses at Scale Points 4 to 5 Sem 11999 <br> to 2000 (N=7) | Total | \% |
| :--- | :--- | :--- |
| Text Elements of Program | 7 | $100 \%$ |
| The text helped me to understand the material | 7 | $100 \%$ |
| This material contained too much text | 1 | $14 \%$ |
| I find myself wanting to read the text material from a print out rather than on screen | 3 | $43 \%$ |

Table 2.3.93: DMLE Perceived Impact of On-Screen Text: Open Responses Obtained in Questionnaires Semester 1998/99 to Semester 12000 / 01

| DMLE Perceived Impact of On-Screen Text: Open Responses Obtained in Questionnaires | Semester 1 1998 to 1999 Total by Category $\mathrm{N}=7$ | $\begin{aligned} & \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \\ & \text { Total \% } \end{aligned}$ | $\begin{aligned} & \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & \text { by Category } \\ & \mathrm{N}=7 \end{aligned}$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 1999 \text { to } \\ & 2000 \text { Total } \\ & \% \end{aligned}$ | Semester 1 <br> 2000 to <br> 2001 Total <br> by Category $\mathbf{N}=32$ | $\begin{aligned} & \text { Semester } 1 \\ & 2000 \text { to } \\ & 2001 \text { Total } \\ & \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| too much text has negative effect | 2 | 29\% | 1 | 14\% | 11 | 34\% |
| breaks in text important | 1 | 14\% |  |  |  |  |
| hard copy wanted | 1 | 14\% |  |  | 1 | 3\% |
| text valuable |  |  | 3 | 43\% |  |  |
| text alone is boring |  |  | 1 | 14\% | 2 | 6\% |
| simple language helps |  |  | 1 | 14\% | 1 | 3\% |
| eye strain / fatigue |  |  |  |  | 2 | 6\% |

Table 2.3.94: Woolwich MNE Group Perceived Impact of On-Screen Text: Open Responses Obtained in Questionnaires

| Woolwich MNE First <br> Questionnaire <br> 1999 to 2000 | First <br> Quest're <br> Total by <br> Category | First <br> Quest're <br> Total \% | Second <br> Quest're <br> Total by <br> Category | Second <br> Quest're <br> Total \% | Third <br> Quest're <br> Total by <br> Category | Third <br> Quest're <br> Total \% |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| text valuable | 3 | $60 \%$ | 2 | $100 \%$ | 4 | $80 \%$ |
| hard copy wanted | 1 | $20 \%$ |  |  | 3 | $60 \%$ |
| too much text has negative effect | 1 | $20 \%$ | 1 | $50 \%$ | 3 | $60 \%$ |
| recall (text) alone boring | 1 | $20 \%$ |  |  |  |  |
| breaks in text important |  |  | 1 | $50 \%$ |  |  |

### 2.3.7.9 Perceived Impact of Graphics / Multimedia Elements

Table 2.3.95: SEI Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires

| SEI Graphics / Multimedia <br> Elements: Open Responses <br> Obtained in Questionnaires | Entrance <br> Total <br> Responses <br> $(\mathbf{N}=468)$ | Entrance <br> Total \% <br> Responses <br> $(\mathbf{N}=468)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Midpoint <br> Total <br> Responses <br> $(\mathbf{N}=191)$ | Exit <br> Total <br> Responses <br> $(\mathbf{N}=166)$ | Exit <br> Total <br> Responses <br> $(\mathbf{N}=166)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Material Was Not Multimedia/ <br> Multimedia Should Be Used | 64 | $\mathbf{1 4 \%}$ | 34 | $18 \%$ | 21 | $13 \%$ |
| Graphics Add Interest | 30 | $6 \%$ | 32 | $17 \%$ | 19 | $11 \%$ |
| Colour Important | 20 | $4 \%$ | 28 | $15 \%$ | 20 | $12 \%$ |
| Graphics Aid Learning | 8 | $2 \%$ | 19 | $10 \%$ | 5 | $3 \%$ |
| Graphics Valuable | 7 | $1 \%$ | 9 | $5 \%$ | 6 | $4 \%$ |
| Graphics Break Text | 1 | $0 \%$ | 8 | $4 \%$ | 4 | $2 \%$ |
| Graphics Add Fun/Humour | 1 | $0 \%$ | 6 | $3 \%$ | 5 | $3 \%$ |
| More Graphics Wanted |  |  | 5 | $3 \%$ | 3 | $2 \%$ |

(Note Open response items were developed over the time of the study, therefore varied in phrasing and focus over time The responses were categorised in terms of the comments made by respondents and the results are shown in the table below The actual questions posed are listed in the appendices for the questionnaires used )

Table 2.3.96: SEI Perceived Impact of Graphics / Multimedia Elements: Responses Obtained in Interviews

| SEI Perceived Impact of Graphics / Multimedia Elements: Responses <br> Obtained in Interviews | Total Number of <br> Interviewees Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Graphics Valuable | 32 | $\mathbf{5 2 \%}$ |
| Graphics Add Interest | 27 | $44 \%$ |
| Graphics Add Fun / Humour | 26 | $43 \%$ |
| Colour Important | 24 | $39 \%$ |
| Material Was Not Multimedia / Multimedia Should Be Used | 24 | $39 \%$ |
| Graphics Break Text | 23 | $38 \%$ |
| Graphics Aid Learning | 18 | $30 \%$ |
| More Graphics Wanted | 3 | $5 \%$ |

[^2]Table 2.3.97: SHS Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires 1999 / 2000

| SHS Perceived Impact of <br> Graphics / Multimedia Elements: <br> Open Responses Obtained in <br> Questionnaires <br> $\mathbf{1 9 9 9 / 2 0 0 0}$ | Total by Item <br> Entrance <br> $\mathbf{( N = 8 1 )}$ | Entrance \% | Total by <br> Item <br> Midpoint <br> $\mathbf{( N = 5 1 )}$ | Midpoint \% | Total by <br> Item <br> Exit <br> $\mathbf{N =} \mathbf{3 4 )}$ | Exit \% <br> graphics aid learning |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| graphics add interest | 14 | $17 \%$ | 20 | $39 \%$ | 32 | $94 \%$ |
| graphics valuable | 25 | $31 \%$ | 6 | $12 \%$ | 31 | $91 \%$ |
| more graphics wanted | 17 | $21 \%$ | 8 | $16 \%$ | 32 | $94 \%$ |

Table 2.3.98: SHS Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires 1999 / 2000

| SHS Perceived Impact of <br> Graphics / Multimedia Elements: <br> Open Responses Obtained in <br> Questionnaires 1999 / 2000 | Overall <br> Total <br> by Item <br> Entrance <br> $\mathbf{N}=81)$ | Entrance <br> \% | Total <br> by Item <br> Midpoint <br> $\mathbf{( N = 5 1 )}$ | Midpoint <br> \% | Total <br> by Item <br> Exit <br> (N $\mathbf{3 4})$ | Exit \% |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| multimedia important | 28 | $35 \%$ | 37 | $73 \%$ | 32 | $94 \%$ |
| video aided learning |  |  | 44 | $86 \%$ | 33 | $97 \%$ |
| simulations aided learning |  |  | 34 | $67 \%$ |  |  |
| (exe/sim...) helps check learning | 20 | $25 \%$ | 3 | $6 \%$ |  |  |
| video added interest |  |  | 22 | $43 \%$ | 31 | $91 \%$ |
| simulations added interest |  |  | 11 | $22 \%$ |  |  |
| virtual reality desired | 4 | $5 \%$ |  |  |  |  |
| simulated environment motivates | 3 | $4 \%$ |  |  |  |  |

Table 2.3.99: DMLE Perceived Impact of Graphics / Multimedia Elements: Responses at Scale Points 4 to 5 Semester 11998 to 1999

Questionnaire Item:
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Text Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Perceived Impact of Graphics /Multimedia Elements: Responses at Scale <br> Points 4 to 5 Semester 1 1998 to 1999 ( $\mathbf{N}=7$ ) | Total | Total \% |
| :--- | :--- | :--- |
| Sound Elements of Simulation | 1 | $14 \%$ |
| Picture Elements of Video Clips | 3 | $43 \%$ |
| Sound Elements of Video Clips | 3 | $43 \%$ |
| Visual Elements (look) of Program | 4 | $57 \%$ |

Table 2.3.100: DMLE Perceived Impact of Graphics / Multimedia Elements: Responses at Scale Points 4 to 5 Semester 11999 to 2000
Questionnaire Item:
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Text Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Perceived Impact of Graphics / Multimedia Elements: <br> Responses at Scale Points 4 to 5 Semester 1 1999 to 2000 (N=7) | Total | \% |
| :--- | :--- | :--- |
| Sound Elements of Simulation | 2 | $29 \%$ |
| Picture Elements of Video Clips | 1 | $14 \%$ |
| Sound Elements of Video Clips | 1 | $14 \%$ |
| Visual Elements (look) of Program | 7 | $100 \%$ |

Table 2.3.101: DMLE Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires (1998 / 2001)

| DMLE Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires | Semester 1 <br> 1998 to 1999 <br> Total by <br> N (poss)=7 | $\begin{aligned} & \hline \text { Semester } 1 \\ & 1998 \text { to } \\ & 1999 \\ & \text { Total \% } \end{aligned}$ | Semester 1 1999 to 2000 Total by N (poss) $=7$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 1999 \text { to } 2000 \\ & \text { Total \% } \end{aligned}$ | Semester 1 2000 to 2001 by Category $(\mathbf{N}=\mathbf{3 2})$ | $\begin{aligned} & \hline \text { Semester } 1 \\ & 2000 \text { to } 2001 \\ & \text { Total \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| graphics aid learning | 1 | 14\% | 4 | 57\% | 2 | 6\% |
| video aided learning | 1 | 14\% | 3 | 43\% | 10 | 31\% |
| video did not add interest | 1 | 14\% | 4 | 86\% | 3 | 9\% |
| multimedia important |  |  | 5 | 71\% | 1 | 3\% |
| simulations aided learning |  |  | 5 | 71\% | 2 | 29\% |
| simulations added interest |  |  | 4 | 57\% | 2 | 6\% |
| colour important |  |  | 2 | 29\% | 1 | 3\% |
| variety in style of presentation |  |  | 2 | 29\% | 1 | 3\% |
| video added interest |  |  | 2 | 29\% | 7 | 22\% |
| visual display aided learning |  |  | 1 | 14\% | 13 | 41\% |
| visual display added interest |  |  |  |  | 7 | 22\% |
| graphics add interest |  |  |  |  | 1 | 3\% |

Table 2.3.102: HBS Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires Semester 11999 to 2000

| HBS Perceived Impact of Graphics / Multimedia Elements: <br> Open Responses Obtained in Questionnaires Semester 1 <br> 1999 to 2000 $(\mathbf{N}=17)$ | Totals by <br> Category | \% Totals <br> by <br> Category |
| :--- | :--- | :--- |
| games | 3 | $18 \%$ |
| interactivity important | 1 | $6 \%$ |
| simulations added interest | 1 | $6 \%$ |

Table 2.3.103: Woolwich MNE Group Perceived Impact of Graphics / Multimedia Elements: Open Responses Obtained in Questionnaires

| Woolwich MNE Group Perceived <br> Impact of Graphics / Multimedia <br> Elements: Open Responses <br> Obtained in Questionnaires | First <br> Quest're <br> Total <br> $\mathbf{N}=5$ | First <br> Quest're <br> Total \% | Second <br> Quest're <br> Total <br> $\mathbf{N}=2$ | Second <br> Quest're <br> Total \% | Third <br> Quest're <br> Total <br> $\mathbf{N}=5$ | Third <br> Quest're <br> Total \% |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| graphics aid learning | 2 | $40 \%$ | 2 | $100 \%$ | 4 |  |
| simulations aided learning | 2 | $40 \%$ | 2 | $100 \%$ | 4 | $80 \%$ |
| visual display aids learning | 2 | $40 \%$ | 1 | $50 \%$ |  |  |
| demonstrations valuable | 1 | $20 \%$ | 1 | $50 \%$ | 2 | $40 \%$ |
| exercises aided learning |  |  |  |  | 4 | $80 \%$ |
| interactivity important |  |  |  |  | 1 | $20 \%$ |

### 2.3.7.10 Perceived Comparison With Other Modes

Table 2.3.104: SEI Comparison With Other Modes Responses to 5 Point Scale Statements: Responses at Scale Points 4 to 5
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| This material is more motivating than some lectures I've experienced |  |  |  |  |  |


| SEI Comparison With Other Modes Responses to 5 Point Scale Statements: Responses at Scale Points 4 to 5 $1999 \text { to } 2000$ | Midpoint <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathrm{N}=40$ | Midpoint <br> Total \% N <br> Actual by <br> Question <br> Item | Exit <br> Total N <br> Actual by <br> Question <br> Items <br> $\mathrm{N}=46$ | Exit <br> Total \% N Actual by Question Item |
| :---: | :---: | :---: | :---: | :---: |
| This material is more motivating than some lectures I've experienced | 32 | 80\% | 36 | 78\% |
| This material is more motivating than most lectures I've experienced | 16 | 40\% | 20 | 43\% |
| This material is more motivating than the best lectures I've experienced | 3 | 8\% | 3 | 7\% |

Table 2.3.105: SEI Comparisons With Other Modes: Open Responses Obtained in Questionnaires

| SEI Comparisons With <br> Traditional Modes: <br> Open Responses Obtained <br> in Questionnaires <br> 1997 to 2000 | Entrance <br> Total <br> Responses $(N=468)$ | Entrance <br> Total \% <br> Responses <br> ( $\mathrm{N}=468$ ) | Midpoint <br> Total <br> Responses $(\mathrm{N}=191)$ | Midpoint <br> Total \% <br> Responses <br> ( $\mathrm{N}=191$ ) | Exit <br> Total <br> Responses $(N=166)$ | Exit <br> Total \% <br> Responses $(N=166)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Computer Better Than Lecture Positive Comment | 33 | 7\% | 55 | 29\% | 36 | 22\% |
| Computer Better Than Book Positive Comment | 18 | 4\% | 49 | 26\% | 13 | 8\% |
| I Prefer Computer to Book or Lecture |  |  | 20 | 10\% | 32 | 19\% |
| Would Take This Class If Non-Computer Based (in previous table) |  |  | 14 | 7\% | 23 | 14\% |
| Computer Better Than Book Negative Comment | 3 | 1\% | 11 | 6\% | 5 | 3\% |
| Computer Better Than Lecture <br> Negative Comment | 7 | 1\% | 10 | 5\% | 2 | 1\% |
| Computer Better Than Case Study <br> Positive Comment |  |  | 17 | 9\% |  |  |
| Computer Better Than Case Study <br> Negative Comment |  |  | 13 | 7\% |  |  |
| Would Not Want All Classes On Computer | 4 | 1\% |  |  |  |  |
| Lectures Vary With Lecturers |  |  | 1 | 1\% |  |  |

(Note Open response items were developed over the time of the study, therefore varied in phrasing and focus over time. The
responses were categorised in terms of the comments made by respondents and the results are shown in the table below The actual questions posed are listed in the appendices for the questionnaires used)

Table 2.3.106: SEI Comparisons With Other Modes: Responses Obtained in Interviews

| SEI Comparisons With Other Modes: Responses Obtained <br> in Interviews (N=61) $\mathbf{1 9 9 7}$ to 2000 | Total <br> Number of <br> Students <br> Indicating <br> Issue <br> Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Computer Better Than Book Positive Comment | 37 | $61 \%$ |
| Computer Better Than Lecture Positive Comment | 34 | $56 \%$ |
| Lectures Vary With Lecturers | 18 | $30 \%$ |
| Computer Better Than Book Negative Comment | 12 | $20 \%$ |
| Would Not Want All Classes On Computer | 9 | $15 \%$ |
| Computer Better Than Lecture Negative Comment | 5 | $8 \%$ |
| I Prefer Computer to Book or Lecture | 5 | $8 \%$ |
| Lecture Imposes Structure | 3 | $5 \%$ |

## Table 2.3.107: SHS Comparison With Other Modes: Exit Responses to 5 point Scale Statements at the 4 to 5 Level

Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:

| This material was more motivating than some lectures I've experienced | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| SHS Comparison With Other Modes: Exit Responses to 5 point Scale <br> Statements at the 4 to 5 Level (N = 34) $\mathbf{1 9 9 9}$ to 2000 | Agree /+(4 to 5) <br> Number | \% |
| :--- | :--- | :--- |
| This material was more motivating than some lectures I've experienced | 23 | $68 \%$ |
| This material was more motivating than most lectures I've experienced | 11 | $32 \%$ |
| This material was more motivating than the best lectures I've experienced | 5 | $15 \%$ |

Table 2.3.108: SHS Comparison With Other Modes: Open Responses in Questionnaire

| SHS Comparison With Other <br> Modes: Open Responses in <br> Questionnaire 1999 /2000 | Total by <br> Item |  | Total by Item |  | Total by <br> Item |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Item Category | Entrance <br> $(\mathbf{N}=\mathbf{8 1})$ | Entrance <br> \% | Midpoint (N= <br> $\mathbf{5 1 )}$ | Midpoint <br> $\%$ | Exit <br> $(\mathbf{N}=\mathbf{3 4})$ | Exit \% |
| better than book | 11 | $14 \%$ | 35 | $69 \%$ | 28 | $82 \%$ |
| better than lecture |  |  | 31 | $61 \%$ | 16 | $47 \%$ |
| better than case studies |  |  | 17 | $33 \%$ | 17 | $50 \%$ |
| not better than book | 7 | $9 \%$ | 9 | $18 \%$ |  |  |
| Not better than case studies |  |  | 12 | $24 \%$ |  |  |
| not better than lecture |  |  | 5 | $10 \%$ |  |  |
| not better than practical labs | 5 | $6 \%$ |  |  | 1 | $3 \%$ |

Table 2.3.109: DMLE Comparison With Other Modes Responses to 5 Point Scale Statements: Responses at Scale Points 4 to 5: Semester 11998 to 1999
Questionnaire Item:
Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| This material is more motivating than some lectures I've experienced | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| DMLE Comparison With Other Modes Responses to 5 Point Scale Statements: Responses <br> at Scale Points 4 to 5: Semester 11998 to 1999 (N=7) | Total | Total \% |
| :--- | :--- | :--- |
| This material is more motivating than some lectures I've experienced | 6 | $86 \%$ |
| This material is more motivating than most lectures I've experienced | 6 | $86 \%$ |
| This material is more motivating than the best lectures I've experienced | 3 | $43 \%$ |

Table 2.3.110: DMLE Comparison With Other Modes Responses to 5 Point Scale Statements: Responses at Scale Points 4 to 5 Semester 11999 to 2000

| DMLE Comparison With Other Modes Responses to 5 Point Scale Statements: <br> Responses at Scale Points 4 to 5 Semester 11999 to $2000(N=7)$ | Total | $\%$ |
| :--- | :--- | :--- |
| This material is more motivating than some lectures I've experienced | 7 |  |
| This material is more motivating than most lectures I've experienced | 5 | $71 \%$ |
| This material is more motivating than the best lectures I've experienced | 2 | $29 \%$ | | (Note due to an error in questionnaires some items were duplicated, only the inital items were used in calculations and discussion of |
| :--- |
| results) |

## Appendix 3: Results by Batch SEI Case Study 1

## A3.1: SEI Items by Questionnaires

| Items Rated by Respondents | Questionnaires With Item Included | Total N of Quest're Batches Containing Item | Total N of Items |
| :---: | :---: | :---: | :---: |
| Content / Subject Confidence Levels |  |  |  |
| Skills \& Entrepreneurial Characteristics | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Opportunity v Idea in Business | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Team Building in Business | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Market Research \& Sources | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Getting Into Business | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| The Business Plan | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Finance Issues | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Patents, Licences \& Legal Issues | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Strategic Marketing | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Funding | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| The Investor's Viewpoint | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Survival Strategies | 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19 | 18 | 858 |
| Content Appropriateness |  |  |  |
| Ratings of Appropriateness | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Computer Based Environment Preference |  |  |  |
| Electronic Book | 14,15,16,17,19 | 5 | 236 |
| Game Approach | 14,15,16,17,19 | 5 | 236 |
| Simulated Environment | 14,15,16,17,19 | 5 | 236 |
| Combination of Electronic Book, Game and Simulated Environment | 14,15,16,17,19 | 5 | 236 |
| Teaching / Learning Elements |  |  |  |
| Induction Session 1 | 2 | 1 | 25 |
| Induction Session 2 | 2 | 1 | 25 |
| Tutorial Support | 2 | 1 | 25 |
| Study Session Ratings | 2 | 1 | 25 |
| Reference Book Ratings | 2 | 1 | 25 |
| Additional Reference Ratings | 2 | 1 | 25 |
| Personal Notes Ratings | 2 | 1 | 25 |
| Speaking to Friends | 2 | 1 | 25 |
|  |  |  |  |
| Main Text Windows | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Hypertext Links | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Button Links | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Interactive Exercises | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Notepad Exercises | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Personal Learning Summaries | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Problem Solving Exercise | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Business Plan Evaluation | 2,4,6,7,9,10,12,13,15,16,19 | 11 | 345 |
| Decision Explorer Facility | 2 | 1 | 25 |
| Visual Elements of Windows | 2,15,16,19 | 4 | 111 |
| Visual Elements of Interactive Exercises | 2,15,16,19 | 4 | 111 |
| Navigation Elements |  |  |  |
| History Window | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Navigation Feet (green / red) | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Glossary Window | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Main Map (showing overview) | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |


| Items Rated by Respondents (cont'd) | Questionnaires With Item Included | Total N of Quest're Batches Containing Item | Total N of Items |
| :---: | :---: | :---: | :---: |
| Structure Map (showing contents) | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| On Screen Exercise Issues |  |  |  |
| Graphics Used | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Colours Used | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Scenarios Used | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Text Used | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Tasks Specified | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Feedback Given | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Relevance to Module | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Difficulty of Exercises | 4,6,7,9,10,12,13,15,16,19 | 10 | 320 |
| Viewpoint Statements |  |  |  |
| I would have been better reading a book | 15,16,19 | 3 | 86 |
| I worked through all elements of the material | 15,16,19 | 3 | 86 |
| The interactive exercises helped me to understand the material | 15,16,19 | 3 | 86 |
| The interactive exercises were not essential so I focused on other material | 15,16,19 | 3 | 86 |
| The visual elements of the windows were motivating for me | 15,16,19 | 3 | 86 |
| The learning summaries increased my depth of thought | 15,16,19 | 3 | 86 |
| The notepad exercises / summaries increased my depth of thought | 15,16,19 | 3 | 86 |
| I skimmed the material, rather than read it all, in order to save time | 15,16,19 | 3 | 86 |
| I revisited the material when I found other things related to it | 15,16,19 | 3 | 86 |
| My view of this material has been influenced by other multi-media material I've used | 15,16,19 | 3 | 86 |
| This material is more motivating than some lectures I've experienced | 15,16,19 | 3 | 86 |
| This material is more motivating than most lectures I've experienced | 15,16,19 | 3 | 86 |
| This material is more motivating than the best lectures I've experienced | 15,16,19 | 3 | 86 |
| The time flexibility is more important to me than the quality of the presentation | 15,16,19 | 3 | 86 |
| The presentation of this multi-media material is as good as others I've experienced | 15,16,19 | 3 | 86 |
| This material contained too much text | 15,16,19 | 3 | 86 |
| I find myself wanting to read this material from a print out rather than on screen | 15,16,19 | 3 | 86 |
| I'm not sure whether I'm learning what I should be from this computer based material | 15,16,19 | 3 | 86 |


| Items Rated by Respondents <br> (continued) | Questionnaires With Item Included | Total N of <br> Quest're Batches <br> Containing Item | Total N of <br> Items |
| :--- | :--- | :--- | :--- |
| The on-screen feedback given for the <br> interactive exercises helps me check <br> I'm learning | $15,16,19$ | 3 | 86 |
| I would find multiple choice tests <br> helpful to check my learning | $15,16,19$ | 3 | 86 |
| I would find more tutor input helpful | $15,16,19$ | 3 | 86 |
| I feel quite isolated when working <br> with this computer based material | $15,16,19$ | 3 | 86 |
| I find email communication useful for <br> maintaining contact with the class <br> tutor | $15,16,19$ | 3 | 86 |
| I would prefer to have more face to <br> face contact with the class tutor | $15,16,19$ | 86 |  |

## A3.2: SEI Number of Response Opportunities for 5 Point Scale Questions (Confidence

 Levels by Unit Content, Computer Environment Preference, Effectiveness of Other Elements and Responses to Statements)| SEI Possible Totals For Scale Points Questions | Entrance <br> $\mathbf{5 1 3}$ | Midpoint <br> $\mathbf{1 4 3}$ | Exit <br> $\mathbf{2 0 2}$ |
| :--- | :--- | :--- | :--- |
| Content / Subject | Total N <br> Possible by <br> Question <br> Item | Total N <br> Possible by <br> Question <br> Item | Total N <br> Possible by <br> Question <br> Item |
| Skills \& Entrepreneurial Characteristics | 513 | $\mathbf{1 4 3}$ | 202 |
| Opportunity v Idea in Business | 513 | 143 | 202 |
| Team Building in Business | 513 | 143 | 202 |
| Market Research \& Sources | 513 | 143 | 202 |
| Getting Into Business | 513 | 143 | 202 |
| The Business Plan | 513 | 143 | 202 |
| Finance Issues | 513 | 143 | 202 |
| Patents, Licences \& Legal Issues | 513 | 143 | 202 |
| Strategic Marketing | 513 | 143 | 202 |
| Funding | 513 | 143 | 202 |
| The Investor's Viewpoint | 513 | 143 | 202 |
| Survival Strategies | 513 | 143 | 202 |
| Electronic Book |  |  |  |
| Game Approach | 150 | 40 | 46 |
| Simulated Environment | 150 | 40 | 46 |
| Combination of Electronic Book, Game and Simulated Environment | 150 | 40 | 46 |
|  | 150 | 40 | 46 |
| Induction Session 1 |  | 2 |  |
| Induction Session 2 | 0 | 0 | 25 |
| Tutorial Support | 0 | 0 | 25 |
| Study Session Ratings | 0 | 0 | 25 |
| Reference Book Ratings | 0 | 0 | 25 |
| Additional Reference Ratings | 0 | 25 |  |
| Personal Notes Ratings | 0 | 0 | 25 |
| Speaking to Friends | 0 | 0 | 25 |
|  | 0 | 0 | 25 |


| SEI Possible Totals For Scale Points Questions (continued) | $\begin{aligned} & \text { Entrance } \\ & 513 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Midpoint } \\ & 143 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Exit } \\ & 202 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Content / Subject | Total $\mathbf{N}$ Possible by Question Item | Total N <br> Possible by Question Item | Total N Possible by Question Item |
| Main Text Windows | 0 | 143 | 202 |
| Hypertext Links | 0 | 143 | 202 |
| Button Links | 0 | 143 | 202 |
| Interactive Exercises | 0 | 143 | 202 |
| Notepad Exercises | 0 | 143 | 202 |
| Personal Learning Summaries | 0 | 143 | 202 |
| Problem Solving Exercise | 0 | 143 | 202 |
| Business Plan Evaluation | 0 | 143 | 202 |
| Decision Explorer Facility | 0 | 143 | 25 |
| Visual Elements of Windows | 0 | 143 | 25 |
| Visual Elements of Interactive Exercises | 0 | 143 | 25 |
| History Window | 0 | 143 | 177 |
| Navigation Feet (green / red) | 0 | 143 | 177 |
| Glossary Window | 0 | 143 | 177 |
| Main Map (showing overview) | 0 | 143 | 177 |
| Structure Map (showing contents) | 0 | 143 | 177 |
|  |  |  |  |
| Graphics Used | 0 | 143 | 177 |
| Colours Used | 0 | 143 | 177 |
| Scenarios Used | 0 | 143 | 177 |
| Text Used | 0 | 143 | 177 |
| Tasks Specified | 0 | 143 | 177 |
| Feedback Given | 0 | 143 | 177 |
| Relevance to Module | 0 | 143 | 177 |
| Difficulty of Exercises | 0 | 143 | 177 |
|  |  |  |  |
| I would have been better reading a book | 0 | 40 | 46 |
| I worked through all elements of the material | 0 | 40 | 46 |
| The interactive exercises helped me to understand the material | 0 | 40 | 46 |
| The interactive exercises were not essential so I focused on other material | 0 | 40 | 46 |
| The visual elements of the windows were motivating for me | 0 | 40 | 46 |
| The learning summaries increased my depth of thought | 0 | 40 | 46 |
| The notepad exercises / summaries increased my depth of thought | 0 | 40 | 46 |
| I skimmed the material, rather than read it all, in order to save time | 0 | 40 | 46 |
| I revisited the material when I found other things related to it | 0 | 40 | 46 |
| My view of this material has been influenced by other multi-media material I've used | 0 | 40 | 46 |
| This material is more motivating than some lectures I've experienced | 0 | 40 | 46 |
| This material is more motivating than most lectures I've experienced | 0 | 40 | 46 |
| This material is more motivating than the best lectures I've experienced | 0 | 40 | 46 |
| The time flexibility is more important to me than the quality of the presentation | 0 | 40 | 46 |
| The presentation of this multi-media material is as good as others I've experienced | 0 | 40 | 46 |
| This material contained too much text | 0 | 40 | 46 |


| SEI Possible Totals For Scale Points Questions <br> (continued) | Entrance <br> $\mathbf{5 1 3}$ | Midpoint <br> $\mathbf{1 4 3}$ | Exit <br> $\mathbf{2 0 2}$ |
| :--- | :--- | :--- | :--- |
| Content / Subject . | Total N <br> Possible by <br> Question <br> Item | Total N <br> Possible by <br> Question <br> Item | Total N <br> Possible by <br> Question <br> Item |
| I find myself wanting to read this material from a print out rather than on screen | 0 | 40 | 46 |
| I'm not sure whether I'm learning what I should be from this computer based <br> material | 0 | 40 | 46 |
| The on-screen feedback given for the interactive exercises helps me check I'm <br> learning | 0 | 40 | 46 |
| I would find multiple choice tests helpful to check my learning | 0 | 40 | 46 |
| I would find more tutor input helpful | 0 | 40 | 46 |
| I feel quite isolated when working with this computer based material | 0 | 40 | 46 |
| I find email communication useful for maintaining contact with the class tutor | 0 | 40 | 46 |
| I would prefer to have more face to face contact with the class tutor | 0 | 40 | 46 |

## A3.3:SEI Entrance Overall Summary Figures, 5 Point Scale Responses, Semester 2 1996/2000

| SEI Overall Entrance Totals at Scale Points 4 to5 Semester 2 1996/2000 |  |  |  |
| :--- | :--- | :--- | :--- |
| Number of Respondents by Category |  |  |  |
| Content / Subject Confidence Levels | Total <br> $\mathbf{N}$ by <br> Item | Total <br> $\mathbf{N}$ <br> Actual | Total <br> \% N <br> Actual |
| Skills \& Entrepreneurial Characteristics | 513 | $\mathbf{9 2}$ | $18 \%$ |
| Opportunity v Idea in Business | 513 | 74 | $14 \%$ |
| Team Building in Business | 513 | 145 | $28 \%$ |
| Market Research \& Sources | 513 | 133 | $26 \%$ |
| Getting Into Business | 513 | 88 | $17 \%$ |
| The Business Plan | 513 | 60 | $12 \%$ |
| Finance Issues | 513 | 90 | $18 \%$ |
| Patents, Licences \& Legal Issues | 513 | 42 | $8 \%$ |
| Strategic Marketing | 513 | 85 | $17 \%$ |
| Funding | 513 | 61 | $12 \%$ |
| The Investor's Viewpoint | 513 | 69 | $13 \%$ |
| Survival Strategies | 513 | 49 | $10 \%$ |
|  |  |  |  |
| Electronic Book | 150 | 67 | $45 \%$ |
| Game Approach | 150 | 82 | $55 \%$ |
| Simulated Environment | 150 | 88 | $59 \%$ |
| Combination of Electronic Book, Game and Simulated Environment | 150 | 112 | $75 \%$ |

## A3.4: SEI Midpoint Overall 5 Point Scale Question Responses Semester 21997 to1999

| Midpoint Totals at Scale Points 4 to 5 Semester 21997 tol999 | Total $\mathbf{N}$ Possible by Question Item | Total N Actual by Question Item | Total \% N Actual by Question Item |
| :---: | :---: | :---: | :---: |
| Content / Subject Confidence Levels |  |  |  |
| Skills \& Entrepreneurial Characteristics | 143 | 86 | 60\% |
| Opportunity v Idea in Business | 143 | 86 | 60\% |
| Team Building in Business | 143 | 91 | 64\% |
| Market Research \& Sources | 143 | 51 | 36\% |
| Getting Into Business | 143 | 65 | 45\% |
| The Business Plan | 143 | 40 | 28\% |
| Finance Issues | 143 | 23 | 16\% |
| Patents, Licences \& Legal Issues | 143 | 18 | 13\% |
| Strategic Marketing | 143 | 23 | 16\% |
| Funding | 143 | 23 | 16\% |
| The Investor's Viewpoint | 143 | 14 | 10\% |
| Survival Strategies | 143 | 10 | 7\% |
|  |  |  |  |
| Electronic Book | 40 | 17 | 43\% |
| Game Approach | 40 | 25 | 63\% |
| Simulated Environment | 40 | 22 | 55\% |
| Combination of Electronic Book, Game and Simulated Environment | 40 | 28 | 70\% |
|  |  |  |  |
| Induction Session 1 | 0 | 0 | 0\% |
| Induction Session 2 | 0 | 0 | 0\% |
| Tutorial Support | 0 | 0 | 0\% |
| Study Session Ratings | 0 | 0 | 0\% |
| Reference Book Ratings | 0 | 0 | 0\% |
| Additional Reference Ratings | 0 | 0 | 0\% |
| Personal Notes Ratings | 0 | 0 | 0\% |
| Speaking to Friends | 0 | 0 | 0\% |
|  |  | 0 |  |
| Main Text Windows | 143 | 86 | 60\% |
| Hypertext Links | 143 | 76 | 53\% |
| Button Links | 143 | 75 | 52\% |
| Interactive Exercises | 143 | 95 | 66\% |
| Notepad Exercises | 143 | 34 | 24\% |
| Personal Learning Summaries | 143 | 82 | 57\% |
| Problem Solving Exercise | 143 | 59 | 41\% |
| Business Plan Evaluation | 143 | 20 | 14\% |
| Decision Explorer Facility | 0 | 0 | 0\% |
| Visual Elements of Windows | 0 | 0 | 0\% |
| Visual Elements of Interactive Exercises | 0 | 0 | 0\% |


| Midpoint Totals at Scale Points 4 to 5 Semester 21997 tol999 (continued) | Total N Possible by Question Item | Total N <br> Actual by <br> Question <br> Item | Total \% N <br> Actual by <br> Question <br> Item |
| :---: | :---: | :---: | :---: |
| History Window | 143 | 27 | 19\% |
| Navigation Feet (green/red) | 143 | 118 | 83\% |
| Glossary Window | 143 | 47 | 33\% |
| Main Map (showing overview) | 143 | 97 | 68\% |
| Structure Map (showing contents) | 143 | 118 | 83\% |
| On Screen Exercise Issues |  |  |  |
| Graphics Used | 143 | 80 | 56\% |
| Colours Used | 143 | 79 | 55\% |
| Scenarios Used | 143 | 99 | 69\% |
| Text Used | 143 | 86 | 60\% |
| Tasks Specified | 143 | 80 | 56\% |
| Feedback Given | 143 | 78 | 55\% |
| Relevance to Module | 143 | 98 | 69\% |
| Difficulty of Exercises | 143 | 55 | 38\% |
|  |  |  |  |
| I would have been better reading a book | 40 | 3 | 8\% |
| I worked through all elements of the material | 40 | 26 | 65\% |
| The interactive exercises helped me to understand the material | 40 | 25 | 63\% |
| The interactive exercises were not essential so I focused on other material | 40 | 9 | 23\% |
| The visual elements of the windows were motivating for me | 40 | 12 | 30\% |
| The learning summaries increased my depth of thought | 40 | 21 | 53\% |
| The notepad exercises / summaries increased my depth of thought | 40 | 9 | 23\% |
| I skimmed the material, rather than read it all, in order to save time | 40 | 8 | 20\% |
| I revisited the material when I found other things related to it | 40 | 17 | 43\% |
| My view of this material has been influenced by other multi-media material I've used | 40 | 5 | 13\% |
| This material is more motivating than some lectures I've experienced | 40 | 32 | 80\% |
| This material is more motivating than most lectures I've experienced | 40 | 16 | 40\% |
| This material is more motivating than the best lectures I've experienced | 40 | 3 | 8\% |
| The time flexibility is more important to me than the quality of the presentation | 40 | 12 | 30\% |
| The presentation of this multi-media material is as good as others I've experienced | 40 | 17 | 43\% |
| This material contained too much text | 40 | 14 | 35\% |
| I find myself wanting to read this material from a print out rather than on screen | 40 | 14 | 35\% |
| I'm not sure whether I'm learning what I should be from this computer based material | 40 | 11 | 28\% |
| The on-screen feedback given for the interactive exercises helps me check I'm learning | 40 | 24 | 60\% |
| I would find multiple choice tests helpful to check my learning | 40 | 25 | 63\% |
| I would find more tutor input helpful | 40 | 8 | 20\% |
| I feel quite isolated when working with this computer based material | 40 | 6 | 15\% |
| I find email communication useful for maintaining contact with the class tutor | 40 | 8 | 20\% |
| I would prefer to have more face to face contact with the class tutor | 40 | 8 | 20\% |

## A.3.5: Exit Overall 5 Point Scale Question Responses Semester 21997 to1999

| SEI Exit Totals at Scale Points 4 to 5 Semester 2 1997 to1999 (Max N Possible 202) |  |  |  |
| :--- | :--- | :--- | :--- |
|  | N <br> Possible | N <br> Actual | $\%$ |
| Skills \& Entrepreneurial Characteristics | 202 | 157 | $78 \%$ |
| Opportunity v Idea in Business | 202 | 130 | $64 \%$ |
| Team Building in Business | 202 | 142 | $70 \%$ |
| Market Research \& Sources | 202 | 130 | $64 \%$ |
| Getting Into Business | 202 | 132 | $65 \%$ |
| The Business Plan | 202 | 150 | $74 \%$ |
| Finance Issues | 202 | 107 | $53 \%$ |
| Patents, Licences \& Legal Issues | 202 | 92 | $46 \%$ |
| Strategic Marketing | 202 | 110 | $54 \%$ |
| Funding | 202 | 144 | $71 \%$ |
| The Investor's Viewpoint | 202 | 146 | $72 \%$ |
| Survival Strategies | 202 | 124 | $61 \%$ |
| Electronic Book |  |  |  |
| Game Approach | 46 | 20 | $43 \%$ |
| Simulated Environment | 46 | 30 | $65 \%$ |
| Combination of Electronic Book, Game and Simulated Environment | 46 | 36 | $78 \%$ |
|  | 46 | 36 | $78 \%$ |
| Induction Session l |  |  |  |
| Induction Session 2 | 25 | 16 | $64 \%$ |
| Tutorial Support | 25 | 11 | $44 \%$ |
| Study Session Ratings | 25 | 1 | $4 \%$ |
| Reference Book Ratings | 25 | 15 | $60 \%$ |
| Additional Reference Ratings | 25 | 8 | $32 \%$ |
| Personal Notes Ratings | 25 | 3 | $12 \%$ |
| Speaking to Friends | 25 | 11 | $44 \%$ |
| Main Text Windows | 25 | 9 | $36 \%$ |
| Hypertext Links | 202 | 125 | $62 \%$ |
| Button Links | 202 | 114 | $56 \%$ |
| Interactive Exercises | 202 | 108 | $53 \%$ |
| Notepad Exercises | 202 | 139 | $69 \%$ |
| Personal Learning Summaries | 202 | 49 | $24 \%$ |
| Problem Solving Exercise | 202 | 118 | $58 \%$ |
| Business Plan Evaluation | 202 | 123 | $61 \%$ |
| Decision Explorer Facility | 202 | 107 | $53 \%$ |
| Visual Elements of Windows | 25 | 4 | $2 \%$ |
| Visual Elements of Interactive Exercises | 25 | 10 | $5 \%$ |
|  | 25 | 16 | $8 \%$ |


| SEI Exit Totals at Scale Points 4 to 5 Semester 21997 tol999 (Max N Possible 202) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \mathbf{N} \\ & \text { Possible } \end{aligned}$ | N Actual | \% |
| History Window | 177 | 18 | 10\% |
| Navigation Feet (green / red) | 177 | 145 | 82\% |
| Glossary Window | 177 | 63 | 36\% |
| Main Map (showing overview) | 177 | 118 | 67\% |
| Structure Map (showing contents) | 177 | 148 | 84\% |
| On Screen Exercise Issues |  |  |  |
| Graphics Used | 177 | 118 | 67\% |
| Colours Used | 177 | 119 | 67\% |
| Scenarios Used | 177 | 126 | 71\% |
| Text Used | 177 | 110 | 62\% |
| Tasks Specified | 177 | 88 | 50\% |
| Feedback Given | 177 | 94 | 53\% |
| Relevance to Module | 177 | 131 | 74\% |
| Difficulty of Exercises | 177 | 73 | 41\% |
|  |  |  |  |
| I would have been better reading a book | 46 | 2 | 4\% |
| I worked through all elements of the material | 46 | 34 | 74\% |
| The interactive exercises helped me to understand the material | 46 | 37 | 80\% |
| The interactive exercises were not essential so I focused on other material | 46 | 7 | 15\% |
| The visual elements of the windows were motivating for me | 46 | 22 | 48\% |
| The learning summaries increased my depth of thought | 46 | 24 | 52\% |
| The notepad exercises / summaries increased my depth of thought | 46 | 9 | 20\% |
| I skimmed the material, rather than read it all, in order to save time | 46 | 4 | 9\% |
| I revisited the material when I found other things related to it | 46 | 26 | 57\% |
| My view of this material has been influenced by other multi-media material I've used | 46 | 12 | 26\% |
| This material is more motivating than some lectures I've experienced | 46 | 36 | 78\% |
| This material is more motivating than most lectures I've experienced | 46 | 20 | 43\% |
| This material is more motivating than the best lectures I've experienced | 46 | 3 | 7\% |
| The time flexibility is more important to me than the quality of the presentation | 46 | 15 | 33\% |
| The presentation of this multi-media material is as good as others I've experienced | 46 | 28 | 61\% |
| This material contained too much text | 46 | 13 | 28\% |
| I find myself wanting to read this material from a print out rather than on screen | 46 | 27 | 59\% |
| I'm not sure whether I'm learning what I should be from this computer based material | 46 | 13 | 28\% |
| The on-screen feedback given for the interactive exercises helps me check I'm learning | 46 | 24 | 52\% |
| I would find multiple choice tests helpful to check my learning | 46 | 31 | 67\% |
| I would find more tutor input helpful | 46 | 18 | 39\% |
| I feel quite isolated when working with this computer based material | 46 | 15 | 33\% |
| I find email communication useful for maintaining contact with the class tutor | 46 | 25 | 54\% |
| I would prefer to have more face to face contact with the class tutor | 46 | 15 | 33\% |

## A.3.6: Open Responses Results Exit Semester 21996 to 1997

| SEI Open Responses Results | $\begin{aligned} & \hline \text { Q2 Exit Sem } 296 \text { to } 97 \\ & \mathrm{~N}=25 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Q2 Exit Sem } 296 \text { to } 97 \\ & \mathrm{~N}=25 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Lack of Location Flexibility (access issues) | 5 | 20\% |
| Self Management Important | 4 | 16\% |
|  |  |  |
| Text Window Issues |  |  |
| Too Much Text | 2 | 8\% |
| Breaks In Text Important | 3 | 12\% |
| Hard Copy Wanted | 4 | 16\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 6 | 24\% |
| Make Exercises More Complex | 3 | 12\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Break Text | 1 | 4\% |
| More Graphics Wanted | 2 | 8\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 1 | 4\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Interactivity Important | 6 | 24\% |
| Feedback On Demand Important | 1 | 4\% |
| Feedback Explanation Important | 1 | 4\% |
| Variety In Link / Unit Contents Important | 1 | 4\% |
| Relevance Important | 13 | 52\% |
| Examples Important (Real Life) | 2 | 8\% |
| Human Contact Important | 5 | 20\% |
| Assessment Motivates | 3 | 12\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 9 | 36\% |
| Malfunctions Found | 3 | 12\% |
| Note Taking Better On Computer Negative Comment | 1 | 4\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 2 | 8\% |

## A.3.7: Open Responses Entrance Semester 11997 to 1998

| SEI Open Responses | $\begin{aligned} & \text { Entrance Sem } 197 \text { to } 98 \\ & \mathbf{N}=84 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Entrance Sem } 197 \text { to } 98 \\ & \mathbf{N}=84 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 2 | 2\% |
| Time Flexibility Positive Comment | 2 | 2\% |
| Pace Flexibility | 3 | 4\% |
| Self Management Important | 1 | 1\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 1 | 1\% |
| Text Alone Is Boring | 1 | 1\% |
| Hard Copy Wanted | 1 | 1\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 1 | 1\% |
| Colour Important | 1 | 1\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 2 | 2\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 2 | 2\% |
| Interactivity Important | 11 | 13\% |
| Feedback On Demand Important | 3 | 4\% |
| Feedback Explanation Important | 2 | 2\% |
| Variety In Link / Unit Contents Important | 2 | 2\% |
| Relevance Important | 74 | 88\% |
| Examples Important (Real Life) | 3 | 4\% |
| Novelty Value Added Interest | 12 | 14\% |
| Human Contact Important | 7 | 8\% |
| Assessment Motivates | 6 | 7\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 56 | 67\% |
| Malfunctions Found | 6 | 7\% |
| Note Taking Better On Computer Positive Comment | 2 | 2\% |
| Note Taking Better On Computer Negative Comment | 7 | 8\% |
| Reading From Screen Causes Eye Strain/Fatigue | 2 | 2\% |
|  |  |  |
| Experienced Using Computer | 78 | 93\% |
| Experienced Using Email | 58 | 69\% |
| Experienced Using Internet | 64 | 76\% |
| Access to Computer at Home | 42 | 50\% |
| Use Office Type Software | 75 | 89\% |
| Use Specialised/Specific Software | 22 | 26\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 1 | 1\% |
| Computer Better Than Lecture Positive Comment | 23 | 27\% |
| Computer Better Than Lecture Negative Comment | 5 | 6\% |
| Learning Impact Issues |  |  |
|  |  |  |
| Computer Material Aided Learning / Understanding | 1 | 1\% |
| Computer Aids Information Retrieval | 13 | 15\% |

## A.3.8: Open Responses Exit Semester 11997 to 1998

| SEI Open Responses | $\begin{aligned} & \text { Exit Semester } 197 \text { to } 98 \\ & \mathrm{~N}=15 \end{aligned}$ | $\begin{aligned} & \text { Exit Semester } 197 \text { to } 98 \\ & \mathbf{N}=15 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Route Flexibility | 1 | 7\% |
| Time Flexibility Positive Comment | 4 | 27\% |
| Pace Flexibility | 5 | 33\% |
| Lack of Location Flexibility (access issues) | 2 | 13\% |
| Self Management Important | 6 | 40\% |
| Text Window Issues |  |  |
|  |  |  |
| Text Valuable | 7 | 47\% |
| Too Much Text | 3 | 20\% |
| Text Alone Is Boring | 1 | 7\% |
| Simple Language Helps | 1 | 7\% |
| Breaks In Text Important | 1 | 7\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 2 | 13\% |
| Make Exercises More Complex | 2 | 13\% |
| Exercises Add Fun, Enjoyment | 1 | 7\% |
| Exercises Add Interest | 2 | 13\% |
| Exercises Helped Check Learning | 2 | 13\% |
| Exercises Material Aided Learning / Understanding | 3 | 20\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 2 | 13\% |
| Graphics Add Interest | 2 | 13\% |
| Colour Important | 3 | 20\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Feedback On Demand Important | 1 | 7\% |
| Feedback Explanation Important | 4 | 27\% |
| Variety In Link / Unit Contents Important | 1 | 7\% |
| Relevance Important | 12 | 80\% |
| Examples Important (Real Life) | 1 | 7\% |
| Novelty Value Added Interest | 3 | 20\% |
| Human Contact Important | 3 | 20\% |
| Improvement in Confidence Level | 11 | 73\% |
| Assessment Motivates | 2 | 13\% |
| Workload Too Heavy For This Class | 4 | 27\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 7 | 47\% |
| Links Were Confusing | 2 | 13\% |
| Too Many Links | 1 | 7\% |
| Map Aided Navigation Positive Comment | 5 | 33\% |
| Note Taking Better On Computer Negative Comment | 1 | 7\% |
| Layout Style Not Consistent | 1 | 7\% |
|  |  |  |
| Could Revisit Information Easily | 2 | 13\% |
| Experienced Using Computer | 12 | 80\% |
| Experienced Using Email | 9 | 60\% |
| Experienced Using Internet | 6 | 40\% |
| Access to Computer at Home | 6 | 40\% |


| SEI Open Responses (continued) | Exit Semester 1 1997 to <br> $\mathbf{1 9 9 8}$ <br> $\mathbf{N}=15$ | Exit Semester 1 1997 to <br> $\mathbf{1 9 9 8}$ <br> $\mathbf{N}=\mathbf{1 5}$ |
| :--- | :--- | :--- |
|  |  |  |
| Usability Issues | Total | Total \% |
| Use Office Type Software | 13 | $87 \%$ |
| Use Specialised / Specific Software | 1 | $7 \%$ |
| Would Take This Class If Non-Computer Based | 10 | $67 \%$ |
|  |  |  |
| Comparisons With Traditional Modes | 1 | $7 \%$ |
| Computer Better Than Book Positive Comment | 1 | $7 \%$ |
| Computer Better Than Book Negative Comment | 12 | $80 \%$ |
| Computer Better Than Lecture Positive Comment | 1 | $7 \%$ |
| Computer Better Than Lecture Negative Comment | 11 | $73 \%$ |
| I Prefer Computer to Book or Lecture |  |  |
|  |  | $13 \%$ |
| Learning Impact Issues | 2 | $27 \%$ |
| Computer Material Aided Learning / Understanding | 4 |  |
| Computer Aids Information Retrieval |  |  |

## A.3.9: Open Responses Entrance Semester 21997 to 1998

| SEI Open Responses | Entrance Sem 297 to 98 <br> $\mathbf{N}=\mathbf{4 1}$ | Entrance Sem 297 to 98 <br> $\mathbf{N}=\mathbf{4 1}$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 1 | $2 \%$ |
| Pace Flexibility | 1 | $2 \%$ |
| Lack of Location Flexibility (access issues) | 5 | $12 \%$ |
| Self Management Important | 7 | $17 \%$ |
|  |  |  |
| Text Window Issues | 1 | $2 \%$ |
| Too Much Text | 1 | $2 \%$ |
| Text Alone Is Boring | 1 | $2 \%$ |
| Breaks In Text Important |  |  |
|  | 1 | $2 \%$ |
| Graphics / MM Issues | 1 | $15 \%$ |
| Graphics Valuable | 6 |  |
| Graphics Add Interest |  | $2 \%$ |
| Material Was Not Multimedia /Multimedia Should Be Used | $24 \%$ |  |
|  | 1 | $10 \%$ |
| Learner Motivation Issues | 10 | $2 \%$ |
| Fun, Humour Positive Comment | 4 | $80 \%$ |
| Interactivity Important | 1 | $2 \%$ |
| Feedback On Demand Important | 33 | $17 \%$ |
| Feedback Explanation Important | 1 | $85 \%$ |
| Relevance Important | 7 |  |
| Novelty Value Added Interest | 35 |  |
| Human Contact Important | 7 |  |
| Improvement in Confidence Level |  |  |
| Assessment Motivates |  |  |
|  |  |  |
|  |  |  |


| SEI Open Responses (cont'd.) | Entrance Sem 297 to 98 <br> $\mathbf{N}=41$ | Entrance Sem 297 to 98 <br> $\mathbf{N}=41$ |
| :--- | :--- | :--- |
| Usability Issues | 17 | Total $\%$ |
| Ease Of Use Important | 1 | $41 \%$ |
| Malfunctions Found | 2 | $2 \%$ |
| Note Taking Better On Computer Positive Comment | 6 | $5 \%$ |
| Note Taking Better On Computer Negative Comment | 4 | $15 \%$ |
| Reading From Screen Causes Eye Strain / Fatigue |  | $10 \%$ |
|  | 25 |  |
| Usability Issues | 21 | $61 \%$ |
| Experienced Using Computer | 18 | $51 \%$ |
| Experienced Using Email | 11 | $44 \%$ |
| Experienced Using Internet | 23 | $27 \%$ |
| Access to Computer at Home | 7 | $56 \%$ |
| Use Office Type Software |  | $17 \%$ |
| Use Specialised / Specific Software |  |  |
|  | 1 | $2 \%$ |
| Comparisons With Traditional Modes | 3 | $7 \%$ |
| Computer Better Than Book Positive Comment | 1 | $2 \%$ |
| Computer Better Than Lecture Positive Comment |  |  |
| Computer Better Than Lecture Negative Comment |  | $5 \%$ |
|  | Learning Impact Issues | 17 |
| Computer Material Aided Learning / Understanding | 2 | $41 \%$ |
| Computer Aids Information Retrieval |  |  |

## A.3.10: Open Responses Midpoint Semester 21997 to 1998

| SEI Open Responses | Midpoint Sem 2 97 to 98 <br> $\mathbf{N}=\mathbf{2 3}$ | Midpoint Sem 297 to 98 <br> $\mathbf{N}=\mathbf{2 3}$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | $\mathbf{T o t a l} \%$ |
| Personal Control Important | 3 | $\mathbf{1 3 \%}$ |
| Route Flexibility | 5 | $22 \%$ |
| Time Flexibility Positive Comment | 7 | $30 \%$ |
| Time Flexibility Negative Comment | 1 | $4 \%$ |
| Pace Flexibility | 8 | $35 \%$ |
| Lack of Location Flexibility (access issues) | 3 | $13 \%$ |
| Self Management Important | 14 | $61 \%$ |
| Text Window Issues |  |  |
| Text Valuable | 10 | $43 \%$ |
| Too Much Text | 6 | $26 \%$ |
| Text Alone Is Boring | 2 | $9 \%$ |
| Simple Language Helps | 4 | $17 \%$ |
| Breaks In Text Important | 1 | $4 \%$ |
| Hard Copy Wanted | 3 | $13 \%$ |
|  |  |  |


| SEI Open Responses (continued) | $\begin{array}{\|l\|l\|} \hline \begin{array}{l} \text { Midpoint Sem } 297 \text { to } 98 \\ \mathrm{~N}=23 \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \begin{array}{l} \text { Midpoint Sem } 297 \text { to } 98 \\ \mathbf{N}=23 \end{array} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| On Screen Exercise Issues | Total | Total \% |
| More Exercises Wanted | 4 | 17\% |
| Make Exercises More Complex | 5 | 22\% |
| Make Exercises Less Complex | 1 | 4\% |
| Exercise Variety Important | 1 | 4\% |
| Exercises Add Fun, Enjoyment | 1 | 4\% |
| Exercises Add Interest | 6 | 26\% |
| Exercises Helped Check Learning | 5 | 22\% |
| Exercises Material Aided Learning / Understanding | 8 | 35\% |
| Exercises Provoked Thought Positive Comment | 4 | 17\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 3 | 13\% |
| Graphics Aid Learning | 2 | 9\% |
| Graphics Add Fun / Humour | 1 | 4\% |
| More Graphics Wanted | 3 | 13\% |
| Graphics Add Interest | 2 | 9\% |
| Colour Important | 6 | 26\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 4 | 17\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 2 | 9\% |
| Fun, Humour Negative Comment | 1 | 4\% |
| Interactivity Important | 4 | 17\% |
| Feedback On Demand Important | 1 | 4\% |
| Feedback Explanation Important | 3 | 13\% |
| Variety In Link / Unit Contents Important | 3 | 13\% |
| Relevance Important | 18 | 78\% |
| Examples Important (Real Life) | 3 | 13\% |
| Novelty Value Added Interest | 2 | 9\% |
| Human Contact Important | 6 | 26\% |
| Improvement in Confidence Level | 20 | 87\% |
| Workload Too Heavy For This Class | 7 | 30\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 19 | 83\% |
| Links Were Confusing | 11 | 48\% |
| Too Many Links | 1 | 4\% |
| Map Aided Navigation Positive Comment | 13 | 57\% |
| Malfunctions Found | 4 | 17\% |
| Note Taking Better On Computer Negative Comment | 1 | 4\% |
| Reading From Screen Causes Eye Strain/Fatigue | 2 | 9\% |
| Layout Style Not Consistent | 1 | 4\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 2 | 9\% |
| Experienced Using Computer | 22 | 96\% |
| Experienced Using Email | 21 | 91\% |
| Experienced Using Internet | 16 | 70\% |
| Access to Computer at Home | 7 | 30\% |
| Use Office Type Software | 18 | 78\% |
| Use Specialised/Specific Software | 5 | 22\% |
| Would Take This Class If Non-Computer Based | 14 | 61\% |


| SEI Open Responses (continued) | Midpoint Sem 297 to 98 <br> $\mathbf{N}=\mathbf{2 3}$ | Midpoint Sem 297 to 98 <br> $\mathbf{N} \mathbf{2 3}$ |
| :--- | :--- | :--- |
| Comparisons With Traditional Modes | Total | Total \% |
| Computer Better Than Book Positive Comment | 1 | $4 \%$ |
| Computer Better Than Book Negative Comment | 1 | $4 \%$ |
| Computer Better Than Lecture Positive Comment | 18 | $78 \%$ |
| Computer Better Than Lecture Negative Comment | 1 | $4 \%$ |
| I Prefer Computer to Book or Lecture | 19 | $83 \%$ |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 13 | $57 \%$ |
| Hyperlinks Material Aided Learning / Understanding | 5 | $22 \%$ |
| Computer Aids Information Retrieval | 4 | $17 \%$ |

## A.3.11: Open Responses Exit Semester 21997 to 1998

| SEI Open Responses | $\begin{aligned} & \text { Exit Sem } 297 \text { to } 98 \\ & \mathbf{N}=24 \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 297 \text { to } 98 \\ & \mathbf{N}=24 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 11 | 46\% |
| Route Flexibility | 4 | 17\% |
| Time Flexibility Positive Comment | 10 | 42\% |
| Pace Flexibility | 6 | 25\% |
| Lack of Location Flexibility (access issues) | 3 | 13\% |
| Self Management Important | 7 | 29\% |
| Text Window Issues |  |  |
| Text Valuable | 1 | 4\% |
| Too Much Text | I | 4\% |
| Text Alone Is Boring | 1 | 4\% |
| Breaks In Text Important | 1 | 4\% |
| Hard Copy Wanted | 6 | 25\% |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 1 | 4\% |
| Make Exercises More Complex | 1 | 4\% |
| Exercises Add Fun, Enjoyment | 1 | 4\% |
| Exercises Add Interest | 4 | 17\% |
| Exercises Helped Check Learning | 1 | 4\% |
| Exercises Material Aided Learning / Understanding | 3 | 13\% |
| Exercises Provoked Thought Positive Comment | 1 | 4\% |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 1 | 4\% |
| Colour Important | 1 | 4\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 2 | 8\% |
| Learner Motivation Issues |  |  |
| Interactivity Important | 2 | 8\% |
| Feedback On Demand Important | 1 | 4\% |
| Feedback Explanation Important | 3 | 13\% |
| Variety In Link / Unit Contents Important | 3 | 13\% |
| Relevance Important | 14 | 58\% |
| Examples Important (Real Life) | 2 | 8\% |
| Human Contact Important | 3 | 13\% |
| Improvement in Confidence Level | 19 | 79\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Exit Sem } 297 \text { to } 98 \\ & \mathbf{N}=24 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 297 \text { to } 98 \\ & \mathbf{N}=24 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
|  | Total | Total \% |
| Assessment Motivates | 6 | 25\% |
| Workload Too Heavy For This Class | 7 | 29\% |
| Usability Issues |  |  |
|  |  |  |
| Ease Of Use Important | 15 | 63\% |
| Links Were Confusing | 4 | 17\% |
| Map Aided Navigation Positive Comment | 5 | 21\% |
| Malfunctions Found | 5 | 21\% |
| Note Taking Better On Computer Positive Comment | 1 | 4\% |
| Note Taking Better On Computer Negative Comment | 1 | 4\% |
| Reading From Screen Causes Eye Strain / Fatigue | 2 | 8\% |
| Layout Style Not Consistent | 1 | 4\% |
|  |  |  |
| Usability Issues |  |  |
| Experienced Using Computer | 22 | 92\% |
| Experienced Using Email | 21 | 88\% |
| Experienced Using Internet | 16 | 67\% |
| Access to Computer at Home | 8 | 33\% |
| Use Office Type Software | 17 | 71\% |
| Use Specialised / Specific Software | 6 | 25\% |
| Would Take This Class If Non-Computer Based | 13 | 54\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Negative Comment | 1 | 4\% |
| Computer Better Than Lecture Positive Comment | 21 | 88\% |
| Computer Better Than Lecture Negative Comment | 1 | 4\% |
| I Prefer Computer to Book or Lecture | 21 | 88\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 9 | 38\% |
| Hyperlinks Material Aided Learning / Understanding | 2 | 8\% |
| Computer Aids Information Retrieval | 6 | 25\% |

## A3.12: Open Responses Entrance Semester 11998 to 1999

| SEI Open Responses | Ent Sem 198 to 99 <br> $\mathbf{N}=123$ | Ent Sem 198 to 99 <br> $\mathbf{N}=123$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 10 | $8 \%$ |
| Route Flexibility | 3 | $2 \%$ |
| Time Flexibility Positive Comment | 6 | $5 \%$ |
| Pace Flexibility | 26 | $21 \%$ |
| Lack of Location Flexibility (access issues) | 24 | $20 \%$ |
| Self Management Important | 24 | $20 \%$ |
| Text Window Issues |  |  |
| Text Valuable | 7 | $6 \%$ |
| Too Much Text | 3 | $2 \%$ |
| Text Alone Is Boring | 44 | $36 \%$ |
| Simple Language Helps | 4 | $3 \%$ |
| Breaks In Text Important | 3 | $2 \%$ |
| Hard Copy Wanted | 3 | $2 \%$ |


| SEI Open Responses (continued) | $\begin{aligned} & \hline \text { Ent Sem } 198 \text { to } 99 \\ & \mathbf{N}=123 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Ent Sem } 198 \text { to } 99 \\ \mathbf{N}=123 \end{array}$ |
| :---: | :---: | :---: |
| On Screen Exercise Issues | Total | Total \% |
| Make Exercises More Complex | 3 | 2\% |
| Exercise Variety Important | 3 | 2\% |
| Exercises Add Interest | 7 | 6\% |
| Exercises Offered Practice | 1 | 1\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 5 | 4\% |
| Graphics Aid Learning | 1 | 1\% |
| Graphics Add Fun / Humour | 1 | 1\% |
| Graphics Add Interest | 15 | 12\% |
| Colour Important | 9 | 7\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 28 | 23\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 7 | 6\% |
| Interactivity Important | 44 | 36\% |
| Feedback On Demand Important | 24 | 20\% |
| Feedback Explanation Important | 12 | 10\% |
| Variety In Link / Unit Contents Important | 3 | 2\% |
| Relevance Important | 68 | 55\% |
| Examples Important (Real Life) | 8 | 7\% |
| Novelty Value Added Interest | 15 | 12\% |
| Human Contact Important | 37 | 30\% |
| Improvement in Confidence Level | 93 | 76\% |
| Confirmation of Initially Confident Confidence Level | 55 | 45\% |
| Confirmation of Initially High Confidence Level | 7 | 6\% |
| Assessment Motivates | 14 | 11\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 78 | 63\% |
| Malfunctions Found | 11 | 9\% |
| Note Taking Better On Computer Positive Comment | 6 | 5\% |
| Note Taking Better On Computer Negative Comment | 5 | 4\% |
| Reading From Screen Causes Eye Strain/Fatigue | 10 | 8\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 1 | 1\% |
| Experienced Using Computer | 103 | 84\% |
| Experienced Using Email | 88 | 72\% |
| Experienced Using Internet | 78 | 63\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 8 | 7\% |
| Computer Better Than Book Negative Comment | 1 | 1\% |
| Computer Better Than Lecture Positive Comment | 3 | 2\% |
| Computer Better Than Lecture Negative Comment | 1 | 1\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 59 | 48\% |
| Hyperlinks Material Aided Learning / Understanding | 1 | 1\% |
| Computer Aids Information Retrieval | 33 | 27\% |

## A.3.13: Open Responses Midpoint Semester 11998 to 1999

| SEI Open Responses |  | $\begin{aligned} & \text { Mid Sem } 198 \text { to } 99 \\ & \mathbf{N}=48 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total |
| Personal Control Important | 1 | 2\% |
| Route Flexibility | 2 | 4\% |
| Time Flexibility Positive Comment | 10 | 21\% |
| Pace Flexibility | 9 | 19\% |
| Lack of Location Flexibility (access issues) | 10 | 21\% |
| Self Management Important | 16 | 33\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 10 | 21\% |
| Too Much Text | 11 | 23\% |
| Text Alone Is Boring | 23 | 48\% |
| Simple Language Helps | 5 | 10\% |
| Breaks In Text Important | 4 | 8\% |
| Hard Copy Wanted | 4 | 8\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 5 | 10\% |
| Make Exercises More Complex | 4 | 8\% |
| Exercise Variety Important | 1 | 2\% |
| Exercises Add Fun, Enjoyment | 3 | 6\% |
| Exercises Add Interest | 10 | 21\% |
| Exercises Helped Check Learning | 5 | 10\% |
| Exercises Material Aided Learning / Understanding | 3 | 6\% |
| Exercises Provoked Thought Positive Comment | 4 | 8\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 5 | 10\% |
| Graphics Aid Learning | 1 | 2\% |
| Graphics Break Text | 3 | 6\% |
| More Graphics Wanted | 1 | 2\% |
| Graphics Add Interest | 9 | 19\% |
| Colour Important | 10 | 21\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 14 | 29\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Interactivity Important | 28 | 58\% |
| Feedback On Demand Important | 7 | 15\% |
| Feedback Explanation Important | 8 | 17\% |
| Give Exemplars | 1 | 2\% |
| Variety In Link / Unit Contents Important | 7 | 15\% |
| Relevance Important | 25 | 52\% |
| Examples Important (Real Life) | 5 | 10\% |
| Novelty Value Added Interest | 7 | 15\% |
| Human Contact Important | 6 | 13\% |
| Improvement in Confidence Level | 34 | 71\% |
| Confirmation of Initially Confident Confidence Level | 23 | 48\% |
| Confirmation of Initially High Confidence Level | 5 | 10\% |
| Assessment Motivates | 6 | 13\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Mid Sem } 198 \text { to } 99 \\ & \mathbf{N}=48 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Mid Sem } 198 \text { to } 99 \\ & \mathbf{N}=48 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| Usability Issues | Total | Total \% |
| Ease Of Use Important | 28 | 58\% |
| Links Were Confusing | 15 | 31\% |
| Too Many Links | 1 | 2\% |
| Map Aided Navigation Positive Comment | 12 | 25\% |
| Too Many Windows On Screen | 3 | 6\% |
| Malfunctions Found | 4 | 8\% |
| Note Taking Better On Computer Positive Comment | 4 | 8\% |
| Note Taking Better On Computer Negative Comment | 3 | 6\% |
| Reading From Screen Causes Eye Strain / Fatigue | 7 | 15\% |
| Layout Style Not Consistent | 4 | 8\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 7 | 15\% |
| Experienced Using Computer | 45 | 94\% |
| Experienced Using Email | 44 | 92\% |
| Experienced Using Internet | 38 | 79\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 6 | 13\% |
| Computer Better Than Book Negative Comment | 1 | 2\% |
| Computer Better Than Lecture Positive Comment | 2 | 4\% |
| Computer Better Than Lecture Negative Comment | 2 | 4\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 28 | 58\% |
| Hyperlinks Material Aided Learning / Understanding | 5 | 10\% |
| Computer Aids Information Retrieval | 2 | 4\% |

## A.3.14: Open Responses Exit Semester 11998 to 1999

| SEI Open Responses | $\begin{aligned} & \text { Exit Sem } 198 \text { to } 99 \\ & \mathbf{N}=56 \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 198 \text { to } 99 \\ & \mathbf{N}=56 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 2 | 4\% |
| Time Flexibility Positive Comment | 5 | 9\% |
| Pace Flexibility | 11 | 20\% |
| Lack of Location Flexibility (access issues) | 16 | 29\% |
| Self Management Important | 13 | 23\% |
| Text Window Issues |  |  |
| Text Valuable | 3 | 5\% |
| Too Much Text | 12 | 21\% |
| Text Alone Is Boring | 21 | 38\% |
| Simple Language Helps | 5 | 9\% |
| Breaks In Text Important | 4 | 7\% |
| Hard Copy Wanted | 9 | 16\% |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 10 | 18\% |
| Fewer Exercises Wanted | , | 2\% |
| Make Exercises More Complex | 4 | 7\% |
| Exercises Add Fun, Enjoyment | 4 | 7\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Exit Sem } 198 \text { to } 99 \\ & \mathrm{~N}=56 \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 198 \text { to } 99 \\ & \mathrm{~N}=56 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| On Screen Exercise Issues | Total | Total \% |
| Exercises Add Interest | 10 | 18\% |
| Exercises Helped Check Learning | 3 | 5\% |
| Exercises Material Aided Learning / Understanding | 8 | 14\% |
| Exercises Provoked Thought Positive Comment | 1 | 2\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 3 | 5\% |
| Graphics Aid Learning | 2 | 4\% |
| Graphics Add Fun / Humour | 4 | 7\% |
| Graphics Break Text | 2 | 4\% |
| More Graphics Wanted | 1 | 2\% |
| Graphics Add Interest | 5 | 9\% |
| Colour Important | 9 | 16\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 11 | 20\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 5 | 9\% |
| Interactivity Important | 13 | 23\% |
| Feedback On Demand Important | 9 | 16\% |
| Feedback Explanation Important | 9 | 16\% |
| Give Exemplars | 1 | 2\% |
| Expectations Were Not Met | 1 | 2\% |
| Variety In Link / Unit Contents Important | 10 | 18\% |
| Relevance Important | 19 | 34\% |
| Examples Important (Real Life) | 4 | 7\% |
| Novelty Value Added Interest | 8 | 14\% |
| Human Contact Important | 8 | 14\% |
| Improvement in Confidence Level | 30 | 54\% |
| Confirmation of Initially Confident Confidence Level | 27 | 48\% |
| Confirmation of Initially High Confidence Level | 11 | 20\% |
| Assessment Motivates | 12 | 21\% |
| Usability Issues |  |  |
| Ease Of Use Important | 35 | 63\% |
| Links Were Confusing | 11 | 20\% |
| Map Aided Navigation Positive Comment | 9 | 16\% |
| Malfunctions Found | 9 | 16\% |
| Note Taking Better On Computer Positive Comment | 1 | 2\% |
| Note Taking Better On Computer Negative Comment | 6 | 11\% |
| Reading From Screen Causes Eye Strain / Fatigue | 10 | 18\% |
| Layout Style Not Consistent | 4 | 7\% |
| Could Revisit Information Easily | 10 | 18\% |
| Experienced Using Computer | 45 | 80\% |
| Experienced Using Email | 44 | 79\% |
| Experienced Using Internet | 36 | 64\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 7 | 13\% |
| Computer Better Than Lecture Positive Comment | 3 | 5\% |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 25 | 45\% |
| Hyperlinks Material Aided Learning / Understanding | 3 | 5\% |
| Computer Aids Information Retrieval | 1 | 2\% |

## A.3.15: Open Responses Entrance Semester 21998 to 1999

| SEI Open Responses | $\begin{aligned} & \text { Entrance Sem } 298 \text { to } 99 \\ & \mathbf{N}=70 \end{aligned}$ | $\begin{aligned} & \text { Entrance Sem } 298 \text { to } 99 \\ & \mathbf{N}=70 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 6 | 9\% |
| Route Flexibility | 2 | 3\% |
| Time Flexibility Positive Comment | 7 | 10\% |
| Pace Flexibility | 9 | 13\% |
| Lack of Location Flexibility (access issues) | 11 | 16\% |
| Self Management Important | 12 | 17\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 1 | 1\% |
| Too Much Text | 1 | 1\% |
| Text Alone Is Boring | 27 | 39\% |
| Simple Language Helps | 3 | 4\% |
| Hard Copy Wanted | 4 | 6\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| Exercises Add Interest | 2 | 3\% |
| Exercises Offered Practice | 1 | 1\% |
| Exercises Helped Check Learning | 1 | 1\% |
| Exercises Material Aided Learning / Understanding | 1 | 1\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Add Interest | 2 | 3\% |
| Colour Important | 2 | 3\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 16 | 23\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 2 | 3\% |
| Interactivity Important | 22 | 31\% |
| Feedback On Demand Important | 13 | 19\% |
| Feedback Explanation Important | 2 | 3\% |
| Variety In Link / Unit Contents Important | 1 | 1\% |
| Relevance Important | 31 | 44\% |
| Examples Important (Real Life) | 3 | 4\% |
| Novelty Value Added Interest | 4 | 6\% |
| Human Contact Important | 14 | 20\% |
| Improvement in Confidence Level | 62 | 89\% |
| Confirmation of Initially Confident Confidence Level | 35 | 50\% |
| Confirmation of Initially High Confidence Level | 16 | 23\% |
| Assessment Motivates | 8 | 11\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 46 | 66\% |
| Malfunctions Found | 8 | 11\% |
| Note Taking Better On Computer Negative Comment | 2 | 3\% |
| Reading From Screen Causes Eye Strain/Fatigue | 10 | 14\% |
| Layout Style Not Consistent | 1 | 1\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Entrance Sem } 298 \text { to } 99 \\ & \mathbf{N}=70 \end{aligned}$ | $\begin{aligned} & \text { Entrance Sem } 298 \text { to } 99 \\ & \mathbf{N}=70 \end{aligned}$ |
| :---: | :---: | :---: |
| Usability Issues | Total | Total \% |
| Could Revisit Information Easily | 3 | 4\% |
| Experienced Using Computer | 55 | 79\% |
| Experienced Using Email | 58 | 83\% |
| Experienced Using Internet | 56 | 80\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 4 | 6\% |
| Computer Better Than Book Negative Comment | 1 | 1\% |
| Computer Better Than Lecture Positive Comment | 3 | 4\% |
| Would Not Want All Classes On Computer | 4 | 6\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 2 | 3\% |
| Hyperlinks Material Aided Learning / Understanding | 2 | 3\% |
| Computer Aids Information Retrieval | 45 | 64\% |

## A.3.16: Open Responses Midpoint Semester 21998 to 1999

| SEI Open Responses | $\begin{aligned} & \text { Midpoint Sem } 298 \text { to } 99 \\ & \mathbf{N}=32 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Midpoint Sem } 298 \text { to } 99 \\ & \mathbf{N}=32 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Route Flexibility | 2 | 6\% |
| Time Flexibility Positive Comment | 5 | 16\% |
| Pace Flexibility | 8 | 25\% |
| Lack of Location Flexibility (access issues) | 5 | 16\% |
| Self Management Important | 3 | 9\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 2 | 6\% |
| Too Much Text | 3 | 9\% |
| Text Alone Is Boring | 11 | 34\% |
| Simple Language Helps | 1 | 3\% |
| Breaks In Text Important | 2 | 6\% |
| Hard Copy Wanted | 5 | 16\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 3 | 9\% |
| Exercises Add Fun, Enjoyment | 2 | 6\% |
| Exercises Add Interest | 5 | 16\% |
| Exercises Helped Check Learning | 2 | 6\% |
| Exercises Material Aided Learning / Understanding | 5 | 16\% |
| Exercises Provoked Thought Positive Comment | 1 | 3\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Break Text | 1 | 3\% |
| Graphics Add Interest | 3 | 9\% |
| Colour Important | 3 | 9\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 4 | 13\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Midpoint Sem } 298 \text { to } 99 \\ & \mathbf{N}=32 \end{aligned}$ | $\begin{aligned} & \text { Midpoint Sem } 298 \text { to } 99 \\ & \mathbf{N}=32 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Motivation Issues | Total | Total \% |
| Fun, Humour Positive Comment | 1 | 3\% |
| Interactivity Important | 7 | 22\% |
| Feedback On Demand Important | 4 | 13\% |
| Feedback Explanation Important | 2 | 6\% |
| Variety In Link / Unit Contents Important | 5 | 16\% |
| Relevance Important | 8 | 25\% |
| Novelty Value Added Interest | 7 | 22\% |
| Human Contact Important | 3 | 9\% |
| Improvement in Confidence Level | 22 | 69\% |
| Confirmation of Initially Confident Confidence Level | 12 | 38\% |
| Confirmation of Initially High Confidence Level | 2 | 6\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 21 | 66\% |
| Links Were Confusing | 8 | 25\% |
| Map Aided Navigation Positive Comment | 4 | 13\% |
| Too Many Windows On Screen | 1 | 3\% |
| Malfunctions Found | 3 | 9\% |
| Note Taking Better On Computer Negative Comment | 5 | 16\% |
| Reading From Screen Causes Eye Strain/ Fatigue | 2 | 6\% |
| Layout Style Not Consistent | 1 | 3\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 2 | 6\% |
| Experienced Using Computer | 28 | 88\% |
| Experienced Using Email | 25 | 78\% |
| Experienced Using Internet | 24 | 75\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 3 | 9\% |
| Computer Better Than Book Negative Comment | 1 | 3\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 1 | 3\% |
| Computer Aids Information Retrieval | 11 | 34\% |

A3.17: Open Responses Exit Semester 21998 to 1999

| SEI Open Responses | $\begin{array}{\|l\|} \hline \text { Exit Sem } 298 \text { to } 99 \\ \mathbf{N}=36 \end{array}$ | $\begin{aligned} & \text { Exit Sem } 298 \text { to } 99 \\ & \mathbf{N}=36 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 2 | 6\% |
| Route Flexibility | 1 | 3\% |
| Time Flexibility Positive Comment | 7 | 19\% |
| Pace Flexibility | 3 | 8\% |
| Lack of Location Flexibility (access issues) | 7 | 19\% |
| Self Management Important | 12 | 33\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 3 | 8\% |
| Too Much Text | 9 | 25\% |
| Text Alone Is Boring | 16 | 44\% |
| Simple Language Helps | 1 | 3\% |
| Breaks In Text Important | 3 | 8\% |
| Hard Copy Wanted | 7 | 19\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 5 | 14\% |
| Exercises Add Fun, Enjoyment | 1 | 3\% |
| Exercises Add Interest | 6 | 17\% |
| Exercises Offered Practice | 2 | 6\% |
| Exercises Helped Check Learning | 2 | 6\% |
| Exercises Material Aided Learning / Understanding | 4 | 11\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Aid Learning | 3 | 8\% |
| Graphics Add Interest | 8 | 22\% |
| Colour Important | 6 | 17\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 4 | 11\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Interactivity Important | 7 | 19\% |
| Feedback On Demand Important | 4 | 11\% |
| Feedback Explanation Important | 3 | 8\% |
| Give Exemplars | 1 | 3\% |
| Variety In Link / Unit Contents Important | 5 | 14\% |
| Relevance Important | 12 | 33\% |
| Examples Important (Real Life) | 3 | 8\% |
| Novelty Value Added Interest | 5 | 14\% |
| Human Contact Important | 5 | 14\% |
| Improvement in Confidence Level | 21 | 58\% |
| Confirmation of Initially Confident Confidence Level | 16 | 44\% |
| Confirmation of Initially High Confidence Level | 12 | 33\% |
| Assessment Motivates | 3 | 8\% |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Exit Sem } 298 \text { to } 99 \\ & \mathbf{N}=36 \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 298 \text { to } 99 \\ & \mathbf{N}=36 \end{aligned}$ |
| :---: | :---: | :---: |
| Usability Issues |  |  |
| Ease Of Use Important | 23 | 64\% |
| Links Were Confusing | 4 | 11\% |
| Too Many Links | 1 | 3\% |
| Map Aided Navigation Positive Comment | 3 | 8\% |
| Too Many Windows On Screen | 1 | 3\% |
| Malfunctions Found | 6 | 17\% |
| Note Taking Better On Computer Negative Comment | 5 | 14\% |
| Reading From Screen Causes Eye Strain/Fatigue | 6 | 17\% |
| Layout Style Not Consistent | 2 | 6\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 1 | 3\% |
| Experienced Using Computer | 29 | 81\% |
| Experienced Using Email | 33 | 92\% |
| Experienced Using Internet | 31 | 86\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 3 | 8\% |
| Computer Better Than Book Negative Comment | 3 | 8\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 1 | 3\% |
| Computer Aids Information Retrieval | 8 | 22\% |

## A.3.18: Open Responses Entrance Semester 11999 to 2000

| SEI Open Responses | Entrance Sem 199 to 00 <br> $\mathbf{N}=\mathbf{8 5}$ | Entrance Sem 199 to 00 <br> $\mathbf{N}=\mathbf{8 5}$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | $\mathbf{T o t a l} \%$ |
| Personal Control Important | 1 | $1 \%$ |
| Route Flexibility | 1 | $1 \%$ |
| Time Flexibility Positive Comment | 5 | $6 \%$ |
| Pace Flexibility | 15 | $18 \%$ |
| Lack of Location Flexibility (access issues) | 13 | $15 \%$ |
| Self Management Important | 6 | $7 \%$ |
|  |  |  |
| Text Window Issues | 3 | $4 \%$ |
| Text Valuable | 7 | $8 \%$ |
| Too Much Text | 30 | $35 \%$ |
| Text Alone Is Boring | 1 | $1 \%$ |
| Simple Language Helps | 2 | $2 \%$ |
| Breaks In Text Important | 2 | $2 \%$ |
| Hard Copy Wanted |  |  |
|  |  | $\mathbf{1 2 \%}$ |
| On Screen Exercise Issues | 10 | $2 \%$ |
| Exercises Add Interest | 2 |  |
| Exercises Helped Check Learning | 4 |  |
| Exercises Material Aided Learning / Understanding |  |  |
|  |  |  |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Entrance Sem } 199 \text { to } 00 \\ & \mathbf{N}=85 \end{aligned}$ | $\begin{aligned} & \text { Entrance Sem } 199 \text { to } 00 \\ & \mathrm{~N}=85 \end{aligned}$ |
| :---: | :---: | :---: |
| Graphics / MM Issues | Total | Total \% |
| Graphics Aid Learning | 5 | 6\% |
| Graphics Break Text | 1 | 1\% |
| Graphics Add Interest | 11 | 13\% |
| Colour Important | 7 | 8\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 10 | 12\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 3 | 4\% |
| Interactivity Important | 25 | 29\% |
| Feedback On Demand Important | 7 | 8\% |
| Feedback Explanation Important | 1 | 1\% |
| Variety In Link / Unit Contents Important | 5 | 6\% |
| Relevance Important | 40 | 47\% |
| Examples Important (Real Life) | 1 | 1\% |
| Novelty Value Added Interest | 11 | 13\% |
| Human Contact Important | 19 | 22\% |
| Improvement in Confidence Level | 70 | 82\% |
| Confirmation of Initially Confident Confidence Level | 43 | 51\% |
| Confirmation of Initially High Confidence Level | 8 | 9\% |
| Assessment Motivates | 16 | 19\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 50 | 59\% |
| Malfunctions Found | 1 | 1\% |
| Note Taking Better On Computer Negative Comment | 4 | 5\% |
| Reading From Screen Causes Eye Strain/Fatigue | 4 | 5\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 3 | 4\% |
| Experienced Using Computer | 69 | 81\% |
| Experienced Using Email | 57 | 67\% |
| Experienced Using Internet | 61 | 72\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 3 | 4\% |
| Computer Better Than Book Negative Comment | 1 | 1\% |
| Learning Impact Issues |  |  |
|  |  |  |
| Computer Material Aided Learning / Understanding | 4 | 5\% |
| Computer Aids Information Retrieval | 52 | 61\% |

A3.19: Open Responses Midpoint Semester 11999 to 2000

| SEI Open Responses | $\begin{aligned} & \text { Midpoint Sem } 199 \text { to } 00 \\ & \mathbf{N}=40 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Midpoint Sem } 199 \text { to } 00 \\ & \mathbf{N}=40 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Route Flexibility | 2 | 5\% |
| Time Flexibility Positive Comment | 3 | 8\% |
| Pace Flexibility | 4 | 10\% |
| Lack of Location Flexibility (access issues) | 6 | 15\% |
| Self Management Important | 13 | 33\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 4 | 10\% |
| Too Much Text | 12 | 30\% |
| Text Alone Is Boring | 7 | 18\% |
| Simple Language Helps | 1 | 3\% |
| Breaks In Text Important | 6 | 15\% |
| Hard Copy Wanted | 4 | 10\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 9 | 23\% |
| Fewer Exercises Wanted | 2 | 5\% |
| Make Exercises More Complex | 4 | 10\% |
| Exercises Add Fun, Enjoyment | 1 | 3\% |
| Exercises Add Interest | 3 | 8\% |
| Exercises Helped Check Learning | 12 | 30\% |
| Exercises Material Aided Learning / Understanding | 16 | 40\% |
| Exercises Provoked Thought Positive Comment | 6 | 15\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 1 | 3\% |
| Graphics Aid Learning | 2 | 5\% |
| Graphics Add Fun / Humour | 1 | 3\% |
| Graphics Add Interest | 5 | 13\% |
| Colour Important | 5 | 13\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 1 | 3\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 1 | 3\% |
| Interactivity Important | 5 | 13\% |
| Feedback On Demand Important | 2 | 5\% |
| Feedback Explanation Important | 8 | 20\% |
| Variety In Link / Unit Contents Important | 5 | 13\% |
| Relevance Important | 25 | 63\% |
| Examples Important (Real Life) | 3 | 8\% |
| Novelty Value Added Interest | 1 | 3\% |
| Human Contact Important | 4 | 10\% |
| Improvement in Confidence Level | 28 | 70\% |
| Confirmation of Initially Confident Confidence Level | 18 | 45\% |
| Confirmation of Initially High Confidence Level | 8 | 20\% |
| Assessment Motivates | 7 | 18\% |


| SEI Open Responses (continued) | Midpoint Sem 1 99 to 00 <br> $\mathbf{N}=40$ | Midpoint Sem 199 to 00 <br> $\mathbf{N}=\mathbf{4 0}$ |
| :--- | :--- | :--- |
| Usability Issues | Total | Total \% |
| Ease Of Use Important | 22 | $55 \%$ |
| Links Were Confusing | 15 | $38 \%$ |
| Too Many Links | 4 | $10 \%$ |
| Map Aided Navigation Positive Comment | 6 | $15 \%$ |
| Too Many Windows On Screen | 4 | $10 \%$ |
| Malfunctions Found | 1 | $3 \%$ |
| Note Taking Better On Computer Positive Comment | 1 | $3 \%$ |
| Note Taking Better On Computer Negative Comment | 8 | $20 \%$ |
| Reading From Screen Causes Eye Strain / Fatigue | 1 | $3 \%$ |
| Layout Style Not Consistent | 5 | $13 \%$ |
|  |  |  |
| Usability Issues | 7 | $18 \%$ |
| Could Revisit Information Easily | 34 | $85 \%$ |
| Experienced Using Computer | 27 | $68 \%$ |
| Experienced Using Email | 28 | $70 \%$ |
| Experienced Using Internet |  |  |
|  |  | $5 \%$ |
| Comparisons With Traditional Modes | 2 | $5 \%$ |
| Computer Better Than Book Positive Comment | 2 |  |
| Computer Better Than Book Negative Comment |  | $50 \%$ |
|  |  |  |
| Learning Impact Issues | 20 |  |
| Computer Aids Information Retrieval |  |  |

## A3.20: Open Responses Exit Semester 11999 to 2000

| SEI Open Responses | Exit Sem 199 to 00 <br> $\mathbf{N}=10$ | Exit Sem 199 to 00 <br> $\mathbf{N}=10$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | Total \% |
| Route Flexibility | 3 | $30 \%$ |
| Time Flexibility Positive Comment | 2 | $20 \%$ |
| Pace Flexibility | 1 | $10 \%$ |
| Lack of Location Flexibility (access issues) | 4 | $40 \%$ |
| Self Management Important | 3 | $30 \%$ |
|  |  |  |
| Text Window Issues | 4 | $40 \%$ |
| Text Valuable | 6 | $60 \%$ |
| Too Much Text | 3 | $30 \%$ |
| Text Alone Is Boring | 2 | $20 \%$ |
| Breaks In Text Important | 2 | $20 \%$ |
| Hard Copy Wanted |  |  |
|  | 4 | $40 \%$ |
| On Screen Exercise Issues | 1 | $10 \%$ |
| More Exercises Wanted | 1 | $10 \%$ |
| Fewer Exercises Wanted | 1 | $10 \%$ |
| Make Exercises More Complex | 2 | $20 \%$ |
| Exercise Variety Important | 2 | $20 \%$ |
| Exercises Add Fun, Enjoyment | 4 | $50 \%$ |
| Exercises Add Interest | 5 | $60 \%$ |
| Exercises Offered Practice | 6 |  |
| Exercises Helped Check Learning |  |  |
| Exercises Material Aided Learning / Understanding |  |  |


| SEI Open Responses (continued) | $\begin{aligned} & \text { Exit Sem } 199 \text { to } 00 \\ & \mathbf{N}=10 \end{aligned}$ | $\begin{aligned} & \text { Exit Sem } 199 \text { to } 00 \\ & \mathbf{N}=10 \end{aligned}$ |
| :---: | :---: | :---: |
| On Screen Exercise Issues (continued) | Total | Total \% |
| Exercises Provoked Thought Positive Comment | 5 | 50\% |
| Exercises Provoked Thought Negative Comment | 1 | 10\% |
| Graphics / MM Issues |  |  |
| Graphics Add Fun / Humour | 1 | 10\% |
| Graphics Break Text | 1 | 10\% |
| Graphics Add Interest | 4 | 40\% |
| Colour Important | 1 | 10\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 3 | 30\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Interactivity Important | 2 | 20\% |
| Feedback On Demand Important | 4 | 40\% |
| Feedback Explanation Important | 6 | 60\% |
| Variety In Link / Unit Contents Important | 1 | 10\% |
| Relevance Important | 8 | 80\% |
| Examples Important (Real Life) | 5 | 50\% |
| Human Contact Important | 4 | 40\% |
| Improvement in Confidence Level | 10 | 100\% |
| Confirmation of Initially Confident Confidence Level | 6 | 60\% |
| Confirmation of Initially High Confidence Level | 4 | 40\% |
| Assessment Motivates | 7 | 70\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 8 | 80\% |
| Links Were Confusing | 4 | 40\% |
| Too Many Windows On Screen | 1 | 10\% |
| Malfunctions Found | 1 | 10\% |
| Note Taking Better On Computer Positive Comment | 1 | 10\% |
| Reading From Screen Causes Eye Strain / Fatigue | 1 | 10\% |
| Layout Style Not Consistent | 1 | 10\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 4 | 40\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 2 | 20\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Aids Information Retrieval | 2 | 20\% |

## A3.21: Open Responses Entrance Semester 21999 to 2000

| SEI Open Responses | $\begin{aligned} & \text { Entrance Sem } 299 \text { to } 00 \\ & \mathrm{~N}=65 \end{aligned}$ | $\begin{aligned} & \text { Entrance Sem } 299 \text { to } 00 \\ & \mathrm{~N}=65 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 1 | 2\% |
| Time Flexibility Positive Comment | 1 | 2\% |
| Pace Flexibility | 5 | 8\% |
| Self Management Important | 3 | 5\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Alone Is Boring | 4 | 6\% |
| Hard Copy Wanted | 1 | 2\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Aid Learning | 2 | 3\% |
| Graphics Add Interest | 1 | 2\% |
| Colour Important | 1 | 2\% |
| Material Was Not Multimedia/ Multimedia Should Be Used | 2 | 3\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Interactivity Important | 5 | 8\% |
| Feedback On Demand Important | 1 | 2\% |
| Interest Engaged | 1 | 2\% |
| Variety In Link / Unit Contents Important | 1 | 2\% |
| Relevance Important | 6 | 9\% |
| Novelty Value Added Interest | 3 | 5\% |
| Technical Elements of Interest (Programming etc) | 2 | 3\% |
| Technical Elements Do Not Interest (Programming etc) | 5 | 8\% |
| Word Processing Does Not Interest | 1 | 2\% |
| Word Processing of Interest | 3 | 5\% |
| Internet of Interest | 13 | 20\% |
| Design Software of Interest | 3 | 5\% |
| Stats Software Does Not Interest | 1 | 2\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 29 | 45\% |
| Note Taking Better On Computer Positive Comment | 1 | 2\% |
| Note Taking Better On Computer Negative Comment | 1 | 2\% |
| Reading From Screen Causes Eye Strain/Fatigue | 3 | 5\% |
|  |  |  |
| Usability Issues |  |  |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 1 | 2\% |
| Computer Better Than Lecture Positive Comment | 1 | 2\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learming / Understanding | 2 | 3\% |
| Computer Aids Information Retrieval | 24 | 37\% |
| Less Than Comfortable Using Computer | 4 | 6\% |
| Comfortable Using Computer | 56 | 86\% |
| Computer Aids Presentation of Material | 4 | 6\% |
| Computer Aids Communication | 2 | 3\% |

## A3.22: Open Responses Midpoint Semester 21999 to 2000

| SEI Open Responses | $\text { Midpoint Sem } 299 \text { to } 00$ $N=48$ | $\begin{aligned} & \text { Midpoint Sem } 299 \text { to } 00 \\ & \mathbf{N}=48 \end{aligned}$ |
| :---: | :---: | :---: |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 8 | 17\% |
| Route Flexibility | 2 | 4\% |
| Time Flexibility Positive Comment | 10 | 21\% |
| Pace Flexibility | 20 | 42\% |
| Lack of Location Flexibility (access issues) | 9 | 19\% |
| Self Management Important | 25 | 52\% |
|  |  |  |
| Text Window Issues |  |  |
| Text Valuable | 1 | 2\% |
| Too Much Text | 12 | 25\% |
| Text Alone Is Boring | 19 | 40\% |
| Simple Language Helps | 1 | 2\% |
| Breaks In Text Important | 6 | 13\% |
| Hard Copy Wanted | 11 | 23\% |
|  |  |  |
| On Screen Exercise Issues |  |  |
| More Exercises Wanted | 12 | 25\% |
| Make Exercises More Complex | 1 | 2\% |
| Exercise Variety Important | 1 | 2\% |
| Exercises Add Fun, Enjoyment | 2 | 4\% |
| Exercises Add Interest | 7 | 15\% |
| Exercises Offered Practice | 2 | 4\% |
| Exercises Helped Check Learning | 4 | 8\% |
| Exercises Material Aided Learning / Understanding | 36 | 75\% |
| Exercises Provoked Thought Positive Comment | 22 | 46\% |
|  |  |  |
| Graphics / MM Issues |  |  |
| Graphics Aid Learning | 14 | 29\% |
| Graphics Add Fun / Humour | 4 | 8\% |
| Graphics Break Text | 4 | 8\% |
| More Graphics Wanted | 1 | 2\% |
| Graphics Add Interest | 13 | 27\% |
| Colour Important | 4 | 8\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 11 | 23\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 2 | 4\% |
| Interactivity Important | 10 | 21\% |
| Feedback On Demand Important | 3 | 6\% |
| Feedback Explanation Important | 2 | 4\% |
| Interest Engaged | 1 | 2\% |
| Variety In Link / Unit Contents Important | 8 | 17\% |
| Relevance Important | 20 | 42\% |
| Examples Important (Real Life) | 9 | 19\% |
| Novelty Value Added Interest | 4 | 8\% |
| Human Contact Important | 26 | 54\% |
| Improvement in Confidence Level | 22 | 46\% |


| SEI Open Responses (continued) | Midpoint Sem 2 99 to 00 <br> $\mathbf{N}=\mathbf{4 8}$ | Midpoint Sem 2 99 to 00 <br> $\mathbf{N}=\mathbf{4 8}$ |
| :--- | :--- | :--- |
| Usability Issues | Total | Total \% |
| Ease Of Use Important | 33 | $69 \%$ |
| Links Were Confusing | 12 | $25 \%$ |
| Too Many Links | 3 | $6 \%$ |
| Map Aided Navigation Positive Comment | 1 | $2 \%$ |
| Map Aided Navigation Negative Comment | 1 | $2 \%$ |
| Too Many Windows On Screen | 3 | $6 \%$ |
| Malfunctions Found | 4 | $8 \%$ |
| Reading From Screen Causes Eye Strain / Fatigue | 4 | $8 \%$ |
|  |  |  |
|  |  |  |
| Usability Issues | 6 | $13 \%$ |
| Could Revisit Information Easily |  |  |
|  | 37 | $77 \%$ |
| Comparisons With Traditional Modes | 6 | $73 \%$ |
| Computer Better Than Book Positive Comment | 35 | $15 \%$ |
| Computer Better Than Book Negative Comment | 7 | $2 \%$ |
| Computer Better Than Lecture Positive Comment | 1 | $2 \%$ |
| Computer Better Than Lecture Negative Comment | 1 | $35 \%$ |
| Lectures Vary With Lecturers | $27 \%$ |  |
| I Prefer Computer to Book or Lecture |  |  |
| Computer Better Than Case Study Positive Comment | 17 |  |
| Computer Better Than Case Study Negative Comment | 13 |  |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Aids Information Retrieval |  |  |

## A3.23: Open Responses Exit Semester 21999 to 2000

| SEI Open Responses | Exit Sem 2 99 to 00 <br> $\mathbf{N}=36$ | Exit Sem 2 99 to 00 <br> $\mathbf{N}=36$ |
| :--- | :--- | :--- |
| Learner Management Issues | Total | Total \% |
| Personal Control Important | 28 | $78 \%$ |
| Route Flexibility | 1 | $3 \%$ |
| Time Flexibility Negative Comment | 1 | $3 \%$ |
| Lack of Location Flexibility (access issues) | 33 | $92 \%$ |
| Self Management Important | 34 | $94 \%$ |
|  |  |  |
| Text Window Issues | 2 | $6 \%$ |
| Too Much Text | 27 | $75 \%$ |
| Text Alone Is Boring | 1 | $3 \%$ |
| Simple Language Helps | 33 | $92 \%$ |
| Hard Copy Wanted |  |  |
|  | 21 | $58 \%$ |
| On Screen Exercise Issues | 30 | $83 \%$ |
| More Exercises Wanted | 1 | $3 \%$ |
| Make Exercises More Complex | 26 | $72 \%$ |
| Exercises Add Fun, Enjoyment | 30 | $83 \%$ |
| Exercises Add Interest | 25 | $69 \%$ |
| Exercises Helped Check Learning | 29 | $81 \%$ |
| Exercises Material Aided Learning / Understanding |  |  |
| Exercises Provoked Thought Positive Comment |  |  |
|  |  |  |


| SEI Open Responses (continued) | $\underset{\mathbf{N}=36}{\text { Exit Sem } 299} \text { to } 00$ | $\begin{aligned} & \text { Exit Sem } 299 \text { to } 00 \\ & \mathbf{N}=36 \end{aligned}$ |
| :---: | :---: | :---: |
| Graphics / MM Issues | Total | Total \% |
| Graphics Aid Learning | 2 | 6\% |
| Graphics Add Fun / Humour | 28 | 78\% |
| Graphics Break Text | 32 | 89\% |
| More Graphics Wanted | 2 | 6\% |
| Graphics Add Interest | 30 | 83\% |
| Colour Important | 31 | 86\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 31 | 86\% |
|  |  |  |
| Learner Motivation Issues |  |  |
| Feedback On Demand Important | 31 | 86\% |
| Feedback Explanation Important | 2 | 6\% |
| Variety In Link / Unit Contents Important | 26 | 72\% |
| Relevance Important | 6 | 17\% |
| Examples Important (Real Life) | 33 | 92\% |
| Novelty Value Added Interest | 1 | 3\% |
| Human Contact Important | 27 | 75\% |
|  |  |  |
| Usability Issues |  |  |
| Ease Of Use Important | 28 | 78\% |
| Links Were Confusing | 8 | 22\% |
| Map Aided Navigation Positive Comment | 6 | 17\% |
| Reading From Screen Causes Eye Strain/Fatigue | 24 | 67\% |
|  |  |  |
| Usability Issues |  |  |
| Could Revisit Information Easily | 2 | 6\% |
|  |  |  |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 3 | 8\% |
| Computer Better Than Book Negative Comment | 2 | 6\% |
| Computer Better Than Lecture Positive Comment | 1 | 3\% |
| Would Not Want All Classes On Computer | 1 | 3\% |
|  |  |  |
| Learning Impact Issues |  |  |
| Computer Material Aided Learning / Understanding | 1 | 3\% |

## A3.24: Open Responses Cumulative Entrance, Midpoint and Exit 1997 to 2000

| SEI Table Showing Cumulative Batches <br> $\mathbf{1 9 9 7}$ to 2000 | $\mathbf{N = 4 6 8}$ |  | $\mathbf{N}=191$ |  | $\mathbf{N}=166$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Learner Management Issues | Entrance <br> Total | Entrance <br> Total \% | Midpoint <br> Total | Midpoint <br> Total $\%$ | Exit <br> Total | Exit <br> Total <br> $\%$ |
| Personal Control Important | 21 | $4 \%$ | 12 | $6 \%$ | 15 | $9 \%$ |
| Route Flexibility | 6 | $1 \%$ | 13 | $7 \%$ | 9 | $5 \%$ |
| Time Flexibility Positive Comment | 21 | $4 \%$ | 35 | $18 \%$ | 28 | $17 \%$ |
| Time Flexibility Negative Comment | 0 | $0 \%$ | 1 | $1 \%$ | 0 | $0 \%$ |
| Pace Flexibility | 59 | $13 \%$ | 49 | $26 \%$ | 26 | $16 \%$ |
| Lack of Location Flexibility (access issues) | 53 | $11 \%$ | 33 | $17 \%$ | 37 | $22 \%$ |
| Self Management Important | 53 | $11 \%$ | 71 | $37 \%$ | 45 | $27 \%$ |
|  |  |  |  |  |  |  |


| SEI Table Showing Cumulative Batches 1997 to 2000 (continued) | $\mathrm{N}=468$ <br> Entrance <br> Total | Entrance Total \% | $\mathrm{N}=191$ <br> Midpoint Total | Midpoint Total \% | $\begin{aligned} & \hline \text { N=166 } \\ & \text { Exit } \\ & \text { Total } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Exit } \\ & \text { Total } \\ & \% \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Text Window Issues |  |  |  |  |  |  |
| Text Valuable | 12 | 3\% | 27 | 14\% | 18 | 11\% |
| Too Much Text | 12 | 3\% | 44 | 23\% | 33 | 20\% |
| Text Alone Is Boring | 107 | 23\% | 62 | 32\% | 42 | 25\% |
| Simple Language Helps | 8 | 2\% | 12 | 6\% | 7 | 4\% |
| Breaks In Text Important | 6 | 1\% | 19 | 10\% | 14 | 8\% |
| Hard Copy Wanted | 11 | 2\% | 27 | 14\% | 28 | 17\% |
| On Screen Exercise Issues |  |  |  |  |  |  |
| More Exercises Wanted | 0 | 0\% | 33 | 17\% | 28 | 17\% |
| Fewer Exercises Wanted | 0 | 0\% | 2 | 1\% | 2 | 1\% |
| Make Exercises More Complex | 3 | 1\% | 14 | 7\% | 11 | 7\% |
| Make Exercises Less Complex | 0 | 0\% | 1 | 1\% | 0 | 0\% |
| Exercise Variety Important | 3 | 1\% | 3 | 2\% | 1 | 1\% |
| Exercises Add Fun, Enjoyment | 0 | 0\% | 9 | 5\% | 9 | 5\% |
| Exercises Add Interest | 19 | 4\% | 31 | 16\% | 24 | 14\% |
| Exercises Offered Practice | 2 | 0\% | 2 | 1\% | 6 | 4\% |
| Exercises Helped Check Learning | 3 | 1\% | 28 | 15\% | 13 | 8\% |
| Exercises Material Aided Learning / Understanding | 5 | 1\% | 68 | 36\% | 24 | 14\% |
| Exercises Provoked Thought Positive Comment | 0 | 0\% | 37 | 19\% | 7 | 4\% |
| Exercises Provoked Thought Negative Comment | 0 | 0\% | 0 | 0\% | 1 | 1\% |
| Graphics / MM Issues |  |  |  |  |  |  |
| Graphics Valuable | 7 | 1\% | 9 | 5\% | 6 | 4\% |
| Graphics Aid Learning | 8 | 2\% | 19 | 10\% | 5 | 3\% |
| Graphics Add Fun / Humour | 1 | 0\% | 6 | 3\% | 5 | 3\% |
| Graphics Break Text | 1 | 0\% | 8 | 4\% | 4 | 2\% |
| More Graphics Wanted | 0 | 0\% | 5 | 3\% | 4 | 2\% |
| Graphics Add Interest | 30 | 6\% | 32 | 17\% | 19 | 11\% |
| Colour Important | 20 | 4\% | 28 | 15\% | 20 | 12\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 64 | 14\% | 34 | 18\% | 21 | 13\% |
| Learner Motivation Issues |  |  |  |  |  |  |
| Fun, Humour Positive Comment | 15 | 3\% | 6 | 3\% | 5 | 3\% |
| Fun, Humour Negative Comment | 0 | 0\% | 1 | 1\% | 0 | 0\% |
| Interactivity Important | 117 | 25\% | 54 | 28\% | 30 | 18\% |
| Feedback On Demand Important | 52 | 11\% | 17 | 9\% | 20 | 12\% |
| Feedback Explanation Important | 18 | 4\% | 23 | 12\% | 26 | 16\% |
| Give Exemplars | 0 | 0\% | 1 | 1\% | 2 | 1\% |
| Expectations Were Not Met | 0 | 0\% | 0 | 0\% | 1 | 1\% |
| Interest Engaged | 1 | 0\% | 1 | 1\% | 0 | 0\% |
| Variety In Link / Unit Contents Important | 12 | 3\% | 28 | 15\% | 21 | 13\% |
| Relevance Important | 252 | 54\% | 96 | 50\% | 78 | 47\% |
| Examples Important (Real Life) | 15 | 3\% | 20 | 10\% | 17 | 10\% |
| Novelty Value Added Interest | 46 | 10\% | 21 | 11\% | 16 | 10\% |
| Human Contact Important | 84 | 18\% | 45 | 24\% | 28 | 17\% |
| Improvement in Confidence Level | 260 | 56\% | 126 | 66\% | 91 | 55\% |
| Confirmation of Initially Confident Confidence Level | 133 | 28\% | 53 | 28\% | 49 | 30\% |


| SEI Table Showing Cumulative Batches 1997 to 2000 (continued) | $\mathrm{N}=468$ <br> Entrance <br> Total | Entrance Total \% | $\mathrm{N}=191$ <br> Midpoint <br> Total | Midpoint Total \% | $\begin{aligned} & \hline \mathbf{N}=166 \\ & \text { Exit } \\ & \text { Total } \\ & \hline \end{aligned}$ | Exit Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Learner Motivation Issues (continued) |  |  |  |  |  |  |
| Confirmation of Initially High Confidence Level | 31 | 7\% | 15 | 8\% | 27 | 16\% |
| Assessment Motivates | 51 | 11\% | 13 | 7\% | 33 | 20\% |
| Workload Too Heavy For This Class | 0 | 0\% | 7 | 4\% | 11 | 7\% |
| Technical Elements of Interest (Programming etc) | 2 | 0\% | 0 | 0\% | 0 | 0\% |
| Technical Elements Do Not Interest (Programming etc) | 5 | 1\% | 0 | 0\% | 0 | 0\% |
| Word Processing Does Not Interest | 1 | 0\% | 0 | 0\% | 0 | 0\% |
| Word Processing of Interest | 3 | 1\% | 0 | 0\% | 0 | 0\% |
| Internet of Interest | 13 | 3\% | 0 | 0\% | 0 | 0\% |
| Design Software of Interest | 3 | 1\% | 0 | 0\% | 0 | 0\% |
| Stats Software Does Not Interest | 1 | 0\% | 0 | 0\% | 0 | 0\% |
| Usability Issues |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Ease Of Use Important | 276 | 59\% | 123 | 64\% | 97 | 58\% |
| Links Were Confusing | 0 | 0\% | 61 | 32\% | 25 | 15\% |
| Too Many Links | 0 | 0\% | 9 | 5\% | 2 | 1\% |
| Map Aided Navigation Positive Comment | 0 | 0\% | 36 | 19\% | 22 | 13\% |
| Map Aided Navigation Negative Comment | 0 | 0\% | 1 | 1\% | , | 0\% |
| Too Many Windows On Screen | 0 | 0\% | 11 | 6\% | 2 | 1\% |
| Malfunctions Found | 27 | 6\% | 16 | 8\% | 24 | 14\% |
| Note Taking Better On Computer Positive Comment | 11 | 2\% | 5 | 3\% | 3 | 2\% |
| Note Taking Better On Computer Negative Comment | 25 | 5\% | 17 | 9\% | 14 | 8\% |
| Reading From Screen Causes Eye Strain / Fatigue | 33 | 7\% | 16 | 8\% | 19 | 11\% |
| Layout Style Not Consistent | 1 | 0\% | 11 | 6\% | 9 | 5\% |
| Could Revisit Information Easily | 7 | 1\% | 24 | 13\% | 17 | 10\% |
| Experienced Using Computer | 330 | 71\% | 129 | 68\% | 108 | 65\% |
| Experienced Using Email | 282 | 60\% | 117 | 61\% | 107 | 64\% |
| Experienced Using Internet | 277 | 59\% | 106 | 55\% | 89 | 54\% |
| Access to Computer at Home | 53 | 11\% | 7 | 4\% | 14 | 8\% |
| Use Office Type Software | 98 | 21\% | 18 | 9\% | 30 | 18\% |
| Use Specialised / Specific Software | 29 | 6\% | 5 | 3\% | 7 | 4\% |
| Would Take This Class If Non-Computer Based | 0 | 0\% | 14 | 7\% | 23 | 14\% |
| Comparisons With Traditional Modes |  |  |  |  |  |  |
| Computer Better Than Book Positive Comment | 18 | 4\% | 49 | 26\% | 13 | 8\% |
| Computer Better Than Book Negative Comment | 3 | 1\% | 11 | 6\% | 5 | 3\% |
| Computer Better Than Lecture Positive Comment | 33 | 7\% | 55 | 29\% | 36 | 22\% |
| Computer Better Than Lecture Negative Comment | 7 | 1\% | 10 | 5\% | 2 | 1\% |
| Would Not Want All Classes On Computer | 4 | 1\% | 0 | 0\% | 0 | 0\% |
| Lectures Vary With Lecturers | 0 | 0\% | 1 | 1\% | 0 | 0\% |
| Lecture Imposes Structure | 0 | 0\% | 0 | 0\% | 0 | 0\% |


| SEI Table Showing Cumulative Batches <br> 1997 to 2000 (continued) | $\mathbf{N}=468$ |  | $\mathbf{N}=191$ |  | $\mathbf{N}=166$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Comparisons With Traditional Modes <br> (continued) | Entrance <br> Total | Entrance <br> Total \% | Midpoint <br> Total | Midpoint <br> Total $\%$ | Exit <br> Total | Exit <br> Total \% |
| I Prefer Computer to Book or Lecture | 0 | $0 \%$ | 20 | $10 \%$ | 32 | $19 \%$ |
| Computer Better Than Case Study Positive <br> Comment | 0 | $0 \%$ | 17 | $9 \%$ | 0 | $0 \%$ |
| Computer Better Than Case Study Negative <br> Comment | 0 | $0 \%$ | 13 | $7 \%$ | 0 | $0 \%$ |
|  |  |  |  |  |  |  |
| Learning Impact Issues |  |  |  |  |  |  |
| Computer Material Aided Learning / <br> Understanding | 70 | $15 \%$ | 42 | $22 \%$ | 39 | $23 \%$ |
| Hyperlinks Material Aided Learning / <br> Understanding | 3 | $1 \%$ | 10 | $5 \%$ | 5 | $3 \%$ |
| Computer Aids Information Retrieval | 184 | $39 \%$ | 38 | $20 \%$ | 21 | $13 \%$ |
| Less Than Comfortable Using Computer | 4 | $1 \%$ | 0 | $0 \%$ | 0 | $0 \%$ |
| Comfortable Using Computer | 56 | $12 \%$ | 0 | $0 \%$ | 0 | $0 \%$ |
| Computer Aids Presentation of Material | 4 | $1 \%$ | 0 | $0 \%$ | 0 | $0 \%$ |
| Computer Aids Communication | 2 | $0 \%$ | 0 | $0 \%$ | 0 | $0 \%$ |

## A3.25: SEI Interview Response Frequencies 1997 to 2000

| Responses by Category For SEI Interviews 1997 to 2000 <br> $\mathbf{N}=\mathbf{6 1}$ <br> Elements Emerging From Interview Feedback | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Learner Management Issues |  |  |
| Personal Control Important | 9 | $15 \%$ |
| Route Flexibility | 40 | $66 \%$ |
| Time Flexibility Positive Comment | 41 | $67 \%$ |
| Time Flexibility Negative Comment | 2 | $3 \%$ |
| Pace Flexibility | 31 | $51 \%$ |
| Lack of Location Flexibility (access issues) | 28 | $46 \%$ |
| Self Management Important | 53 | $87 \%$ |
|  |  |  |
| Text Window Issues | 24 | $39 \%$ |
| Text Valuable | 16 | $26 \%$ |
| Too Much Text | 28 | $46 \%$ |
| Text Alone Is Boring | 10 | $16 \%$ |
| Simple Language Helps | 40 | $66 \%$ |
| Breaks In Text Important | 20 | $33 \%$ |
| Hard Copy Wanted |  |  |
|  |  |  |
| On Screen Exercise Issues | 18 | $30 \%$ |
| More Exercises Wanted | 1 | $2 \%$ |
| Fewer Exercises Wanted | 20 | $33 \%$ |
| Make Exercises More Complex | 3 | $5 \%$ |
| Make Exercises Less Complex | 8 | $13 \%$ |
| Exercise Variety Important | 16 | $26 \%$ |
| Exercises Add Fun, Enjoyment | 35 | $41 \%$ |
| Exercises Add Interest | 25 | $5 \%$ |
| Exercises Offered Practice | 3 | $5 \%$ |
| Exercises Made It Realistic | 35 |  |
| Exercises Helped Check Learning | 36 |  |
| Exercises Material Aided Learning / Understanding |  |  |
|  |  |  |


| Responses by Category For SEI Interviews 1997 to 2000 $\mathrm{N}=61$ (continued) <br> Elements Emerging From Interview Feedback | Total Number of Students Indicating Issue Relevant | \% of Interviewees |
| :---: | :---: | :---: |
| On Screen Exercise Issues (continued) |  |  |
| Exercises Provoked Thought Positive Comment | 38 | 62\% |
| Exercises Provoked Thought Negative Comment | 2 | 3\% |
| Some Exercises Too Long | 2 | 3\% |
| Graphics / MM Issues |  |  |
| Graphics Valuable | 32 | 52\% |
| Graphics Aid Learning | 18 | 30\% |
| Graphics Add Fun / Humour | 26 | 43\% |
| Graphics Break Text | 23 | 38\% |
| More Graphics Wanted | 3 | 5\% |
| Graphics Add Interest | 27 | 44\% |
| Colour Important | 24 | 39\% |
| Material Was Not Multimedia / Multimedia Should Be Used | 24 | 39\% |
| Learner Motivation Issues |  |  |
| Fun, Humour Positive Comment | 26 | 43\% |
| Fun, Humour Negative Comment | 2 | 3\% |
| Interactivity Important | 28 | 46\% |
| Feedback On Demand Important | 47 | 77\% |
| Feedback Explanation Important | 35 | 57\% |
| Give Exemplars | 6 | 10\% |
| Expectations Were Not Met | 3 | 5\% |
| Interest Engaged | 8 | 13\% |
| Variety In Link / Unit Contents Important | 21 | 34\% |
| Relevance Important | 53 | 87\% |
| Examples Important (Real Life) | 25 | 41\% |
| Novelty Value Added Interest | 23 | 38\% |
| Human Contact Important | 31 | 51\% |
| Usability Issues |  |  |
| Ease Of Use Important | 44 | 72\% |
| Links Were Confusing | 31 | 51\% |
| Too Many Links | 4 | 7\% |
| Map Aided Navigation Positive Comment | 25 | 41\% |
| Map Aided Navigation Negative Comment | 4 | 7\% |
| Too Many Windows On Screen | 13 | 21\% |
| Malfunctions Found | 16 | 26\% |
| Note Taking Better On Computer Positive Comment | 8 | 13\% |
| Note Taking Better On Computer Negative Comment | 10 | 16\% |
| Reading From Screen Causes Eye Strain/Fatigue | 16 | 26\% |
| Layout Style Not Consistent | 20 | 33\% |
| Could Revisit Information Easily | 23 | 38\% |


| Responses by Category For SEI Interviews 1997 to 2000 <br> $\mathbf{N}=\mathbf{6 1}$ (continued) <br> Elements Emerging From Interview Feedback | Total Number of <br> Students Indicating <br> Issue Relevant | \% of <br> Interviewees |
| :--- | :--- | :--- |
| Comparisons With Traditional Modes |  |  |
| Computer Better Than Book Positive Comment | 37 | $61 \%$ |
| Computer Better Than Book Negative Comment | 12 | $20 \%$ |
| Computer Better Than Lecture Positive Comment | 34 | $56 \%$ |
| Computer Better Than Lecture Negative Comment | 5 | $8 \%$ |
| Would Not Want All Classes On Computer | 9 | $15 \%$ |
| Lectures Vary With Lecturers | 18 | $30 \%$ |
| Lecture Imposes Structure | 3 | $5 \%$ |
| I Prefer Computer to Book or Lecture | 5 | $8 \%$ |
|  |  |  |
| Learning Impact Issues |  | $39 \%$ |
| Computer Material Aided Learning / Understanding | 24 | $20 \%$ |
| Hyperlinks Material Aided Learning / Understanding | 12 | $52 \%$ |
| Computer Aids Information Retrieval | 32 |  |

## A3.26: Possible Statistical Comparisons for Differences: SEI

| Possible Statistical <br> Comparisons for Differences: <br> SEI |  | Batches Comparable | Batches Comparable | Batches Comparable |
| :---: | :---: | :---: | :---: | :---: |
| Element Compared | Batches Covered | Ent Q | Mid Q | Exit Q |
| Learner Confidence | All Entrance, Midpoint, Exit | $\begin{aligned} & 1,3,5,8,11, \\ & 14,17 \end{aligned}$ | $\begin{aligned} & \text { 6,9,12,15,(18 } \\ & \text { nil) } \end{aligned}$ | 2,4,7,10,13,16,19 |
| Content Appropriateness | Midpoint Sem 297 to 98 onwards $4,6,7,9,10,12,13,15,16,19$ |  | 6,9, 12, 15, | 4, 7, 10, 13, 16, 19 |
| Preferred Computer-Based Environment | Entrance Sem 199/00 to Exit Sem 299 / 00 <br> Used only those clearly lto 4 (ie Qs 14, 15, 16, 17, 18, 19) |  |  |  |
| E-book | 14, 15, 16, 17, 19 | 14, 17, | 15 | 16,19 |
| Game Approach | 14, 15, 16, 17, 19 | 14, 17, | 15 | 16,19 |
| Simulated Environment | 14, 15, 16, 17, 19 | 14, 17, | 15 | 16, 19 |
| Combination | 14, 15, 16, 17, 19 | 14, 17, | 15 | 16, 19 |
| Effectiveness of Module <br> Elements     |  |  |  |  |
| MainText Windows | 2,4,6,7,9,10,12,13,15,16,19 |  | 6, 9, 12, 15, | $\begin{aligned} & 2,4,7,10,13,16 \\ & 19 \end{aligned}$ |
| Hypertext Links | 2,4,6,7,9,10,12,13,15,16,19 |  | 6, 9, 12, 15, | $\begin{aligned} & 2,4,7,10,13,16 \\ & 19 \end{aligned}$ |
| Button Links | 2,4,6,7,9,10,12,13,15,16,19 |  | 6, 9, 12, 15, | $\begin{aligned} & 2,4,7,10,13,16, \\ & 19 \end{aligned}$ |
| Navigation Elements |  |  |  |  |
| Navigation Feet | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| History Window | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| Glossary Window | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| Main Map | 4,6,7,9,10,12,13,15,16,19 |  | 6,9, 12, 15, | 4, 7, 10, 13, 16, 19 |
| Structure Map | 4,6,7,9,10,12,13,15,16,19 |  | 6,9, 12, 15, | $4,7,10,13,16,19$ |
| Interactive Exercises |  |  |  |  |
| Interactive Exercises per se | 2,4,6,7,9,10,12,13,15,16,19 |  | 6,9,12,15, | 4, 7, 10, 13, 16, 19 |
| Graphics used | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | $4,7,10,13,16,19$ |
| Colours used | 4,6,7,9,10,12,13,15,16,19 |  | 6,9, 12, 15, | 4, 7, 10, 13, 16, 19 |
| Scenarios used | 4,6,7,9,10,12,13,15,16,19 |  | 6,9, 12, 15, | 4, 7, 10, 13, 16, 19 |
| Text used | 4,6,7,9,10,12,13,15,16,19 |  | 6,9, 12, 15, | 4, 7, 10, 13, 16, 19 |
| Tasks specified | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| Feedback given | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| Relevance | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4, 7, 10, 13, 16, 19 |
| Difficulty | 4,6,7,9,10,12,13,15,16,19 |  | 6,9,12, 15, | 4,7,10,13,16,19 |
| Effectiveness of Presentation <br> Elements     |  |  |  |  |
| Visual Elements of Windows | 15, 16, 19 |  | 15, | 16,19 |
| Visual Elements of Interactive Exercises | 15,16, 19 |  | 15, | 16, 19 |
| Viewpoint Statements |  |  |  |  |
| Would have been better with a book | 15,16, 19 |  | 15, | 16,19 |
| Covered all | 15,16, 19 |  | 15, | 16,19 |
| Exercises helped understanding | 15, 16, 19 |  | 15, | 16,19 |


| Possible Statistical <br> Comparisons for Differences: <br> SEI <br> (continued) |  | Batches <br> Comparable | Batches <br> Comparable |  |
| :--- | :--- | :--- | :--- | :--- |
| Element Compared | Batches Covered | Batches <br> Comparable |  |  |
| Exercises not essential | $15,16,19$ | Ent Q | Mid Q | Exit Q |
| Visual elements of windows <br> were motivating | $15,16,19$ |  | 15, | 16,19 |
| Skimmed to save time | $15,16,19$ |  | 15,19 |  |
| Revisited material | $15,16,19$ |  | 15, | 16,19 |
| View influenced by other <br> multimedia | $15,16,19$ |  | 15, | 16,19 |
| More motivating than lectures | $15,16,19$ | 15, | 16,19 |  |
| Time flexibility more important <br> than presentation | $15,16,19$ |  | 15,19 |  |
| Presentation as good as other <br> multimedia | $15,16,19$ |  | 15, | 16,19 |
| Contains too much text | $15,16,19$ |  | 16,19 |  |
| Prefer to read from print out than <br> screen | $15,16,19$ |  | 16,19 |  |
| Not sure about learning | $15,16,19$ |  | 15, | 16,19 |
| Exe feedback helps check <br> learning | $15,16,19$ |  | 15, | 16,19 |
| Want MC tests |  |  | 15, | 16,19 |
| Want more tutor input | $15,16,19$ |  | 15, | 16,19 |
| Feel isolated |  |  | 15, | 16,19 |
| Email with tutor useful | 15,19 |  | 19 |  |
| Prefer F2F with tutor | $15,16,19$ |  | 19 |  |

## A3.27: Possible Statistical Tests for Difference

(Entrance Only / Midpoint Only / Exit Only Responses)
Main Areas of Interest and Batches Tested

|  | Entrance | Midpoint | Exit |
| :--- | :--- | :--- | :--- |
|  | 14,15 | 15 | 16,19 |
|  |  |  |  |
| Element Effectiveness | Nil | $6,9,12,15$ | $4,7,10,13,16,19$ |
|  |  | $6,9,12,15$ | $4,7,10,13,16,19$ |
| Navigation Elements | Nil |  |  |
|  |  | $6,9,12,15$ | $4,7,10,13,16,19$ |
| Interactive Exercises | Nil | 15 | 16,19 |
|  |  | $6,9,12,15$ |  |
| Presentation Elements | Nil | $4,7,10,13,16,19$ |  |
| 5 Point Statements |  |  |  |

## A3.28: Possible Statistical Tests for Change over Time <br> (Entrance and Midpoint / Midpoint and Exit / Entrance, Midpoint and Exit Responses)

## Main Areas of Interest and Batches Tested

|  | Entrance | Midpoint | Exit |
| :--- | :--- | :--- | :--- |
| Environment | 14,15 | 15 | 16,19 |
|  |  |  |  |
| Element <br> Effectiveness | Nil | $6,9,12,15$ | $4,7,10,13,16,19$ |
|  |  |  | $4,7,10,13,16,19$ |
| Navigation <br> Elements | Nil | $6,9,12,15$ | $4,7,10,13,16,19$ |
|  |  | $6,9,12,15$ | 16,19 |
| Interactive <br> Exercises | Nil | 15 | $4,7,10,13,16,19$ |
| Presentation <br> Elements | Nil | $6,9,12,15$ |  |
|  |  |  |  |
| 5 Point Statements | Nil |  |  |

## A3.29 : Significant Correlations Found

Preferred Environment Kendall's Tau Entrance Q14 Correlation Conclusion Drawn from Results Entrance Q14 Those who rated a game approach highly at entrance also rated electronic book lowly at entrance (0.047) ( $\mathrm{N}=35$ )
Those who rated a combination environment highly at entrance also rated simulated environment highly at entrance (0.002) ( $\mathrm{N}=35$ )
(Note Q refers to Questionnaire Number)

## Preferred Environment Kendall's Tau Correlation: Conclusion Drawn from Results Midpoint Q15

Those who rated electronic book highly at midpoint also rated game approach lowly at midpoint ( 0.047 ) $(\mathrm{N}=35)$
Those who rated a combination environment highly at midpoint also rated simulated environment highly at midpoint (0.002) ( $\mathrm{N}=35$ )
(Note ${ }^{\text {Q refers to }}$ Questionnaire Number)

Preferred Environment Kendall's Tau Correlation: Conclusion Drawn from Results Entrance Q14 v Midpoint Q15
Those who rated electronic book approach highly at entrance also rated electronic book highly at midpoint ( 0.000 ) ( $\mathrm{N}=35$ )
Those who rated a combination environment highly at entrance also rated combination environment highly at midpoint ( 0.000 ) $\mathrm{N}=35$ )
(Note' Q refers to Questionnaire Number)

## Preferred Environment Kendall's Tau Correlation Conclusion Drawn from Results Midpoint Q15 v Exit Q16 <br> No relevant significant correlations found ( $\mathrm{N}=7$ )

(Note Q refers to Questionnaire Number)

## Preferred Environment Kendall's Tau Correlation Conclusion Drawn from Results Entrance Q14v Exit Q16 <br> Those who rated a simulated environment highly at entrance also rated a simulated environment highly at exit ( 0.025 ) ( $\mathrm{N}=7$ ) <br> (Note' Q refers to Questionnaire Number)

## Preferred Environment Kendall's Tau Correlation Conclusion Drawn from Results Entrance Q17

Those who rated a simulated environment highly at entrance also rated a game approach highly at entrance (0.044) ( $\mathrm{N}=20$ ) (Note' Q refers to Questionnaire Number)

## Preferred Environment Kendall's Tau Correlation Conclusion Drawn from Results Entrance Q17 v Exit Q19

No significant correlations found ( $\mathrm{N}=20$ )
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q6

Those who rated the structure map highly at mid-point also rated the interactive exercises highly at mid-point ( 0.027 ) ( $\mathrm{N}=7$ )
Those who rated the main map highly at mid-point rated the learning summaries lowly at mid-point ( 0.045 ) ( $\mathrm{N}=7$ )
Those who rated the colours used highly at mid-point also rated the navigation feet highly at mid-point (0.024)( $\mathrm{N}=7$ )
Those who rated the tasks specified in exercises highly at mid-point also rated the notepad exercises highly at mid-point (0.046) $\mathrm{N}=5$ )

Those who rated the difficulty of exercises highly at mid-point also rated the notepad exercises highly at mid-point ( 0.01 ) ( $\mathrm{N}=5$ )
Those who rated the graphics used highly at mid-point also rated the navigation feet highly at mid-point ( 0.009 ) ( $\mathrm{N}=7$ )
Those who rated the colours used in exercises highly at mid-point also rated the graphics used in exercises highly at midpoint ( 0.036 ) $(\mathrm{N}=7)$
Those who rated the relevance highly at mid-point also rated the tasks specified in exercises highly at mid-point (0.027) ( $\mathrm{N}=7$ )
Those who rated the difficulty level of the exercises highly at mid-point also rated the feedback given in exercises highly at mid-point (0.012)
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Exit Q7

Those who rated the main text windows highly at exit also rated the navigation feet highly at exit (0.046) ( $\mathrm{N}=6$ )
Those who rated the interactive exercises highly at exit also rated the Café Poirot exercise highly at exit ( 0.034 ) ( $\mathrm{N}=6$ )
Those who rated the interactive exercises highly at exit also rated the scenarios used highly at exit (0.049) ( $\mathrm{N}=6$ )
Those who rated the interactive exercises highly at exit also rated the tasks specified in exercises highly at exit (0.049)
Those who rated the interactive exercises highly at exit also rated the relevance highly at exit ( 0.016 ) ( $\mathrm{N}=6$ )
Those who rated the notepad exercises highly at exit also rated the button links highly at exit (0.027) ( $\mathrm{N}=5$ )
Those who rated the notepad exercises highly at exit also rated the difficulty of exercises highly at exit ( 0.034 ) $(\mathrm{N}=6$ )
Those who rated the business plan evaluation highly at exit also rated the history window lowly at exit (0.049) ( $\mathrm{N}=6$ )
Those who rated the graphics used in exercises highly at exit also rated the colours used in exercises highly at exit ( 0.01 ) ( $\mathrm{N}=6$ )
Those who rated the tasks specified in exercises highly at exit also rated the relevance highly at exit (0.045) ( $\mathrm{N}=6$ )
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q6 v Exit Q7

Those who rated the interactive exercises highly at mid-point also rated the interactive exercises highly at exit ( 0.016 ) ( $\mathrm{N}=6$ ) Those who rated the learning summaries highly at mid-point also rated the learning summaries highly at exit ( 0.014 ) ( $\mathrm{N}=6$ ) Those who rated the navigation feet highly at mid-point also rated the navigation feet highly at exit ( 0.028 ) ( $\mathrm{N}=6$ )
Those who rated the glossary window lowly at mid-point also rated the glossary window highly at exit ( 0.027 ) $(\mathrm{N}=5)$
Those who rated the scenarios used in exercises highly at mid-point also rated the scenarios used in exercises highly at exit ( 0.045 ) $\mathrm{N}=6$ )
Those who rated the relevance of exercises highly at mid-point also rated the relevance highly at exit (0.014)(N=6)
Those who rated the difficulty of exercises highly at mid-point also rated the difficulty of exercises highly at exit (0.020)
( $\mathrm{N}=6$ )
(Note. Q refers to Questonnaire Number)


Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q9 cont'd
Those who rated the text used in exercises highly at mid-point also rated the feedback in exercises given highly at mid-point (0.007) $(\mathrm{N}=20)$

Those who rated the text used in exercises highly at mid-point also rated the difficulty of exercises highly at mid-point ( 0.021 ) $(\mathrm{N}=21)$
Those who rated the tasks specified in exercises highly at mid-point also rated the feedback given in exercises highly at midpoint (0.008) $(\mathrm{N}=19)$
Those who rated the tasks specified in exercises highly at mid-point also rated the difficulty of exercises highly at mid-point (0.010) $(\mathrm{N}=19)$

Those who rated the feedback given in exercises highly at mid-point also rated the relevance of exercises highly at mid-point (0.006) $(\mathrm{N}=21)$
(Note: Q refers to Questionnare Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Exit Q10

Those who rated the interactive exercises highly at exit also rated the button links highly at exit $(0.006)(N=22)$
Those who rated the interactive exercises highly at exit also rated the difficulty of exercises highly at exit ( 0.046 ) ( $\mathrm{N}=22$ )
Those who rated the notepad exercises highly at exit rated the Café Poirot exercise lowly at exit ( 0.023 ) ( $\mathrm{N}=21$ )
Those who rated the Café Poirot exercise highly at exit also rated the feedback given in exercises highly at exit ( 0.036 ) ( $\mathrm{N}=21$ )
Those who rated the Café Poirot exercise highly at exit also rated the button links highly at exit (0.043) ( $\mathrm{N}=22$ )
Those who rated the Café Poirot exercise highly at exit also rated the history window highly at exit (0.006) ( $\mathrm{N}=22$ )
Those who rated the navigation feet highly at exit also rated the graphics used in exercises highly at exit (0.004) ( $\mathrm{N}=22$ )
Those who rated the navigation feet highly at exit also rated the colours used in exercises highly at exit ( 0.002 ) ( $\mathrm{N}=22$ )
Those who rated the button links highly at exit also rated the main map highly at exit ( 0.040 ) ( $\mathrm{N}=22$ )
Those who rated the button links highly at exit also rated the colours used highly at exit ( 0.044 ) ( $\mathrm{N}=21$ )
Those who rated the button links highly at exit also rated the text used in exercises highly at exit ( 0.043 ) $(\mathrm{N}=21)$
Those who rated the button links highly at exit also rated the feedback given in exercises highly at exit ( 0.040 ) ( $\mathrm{N}=21$ )
Those who rated the button links highly at exit also rated the relevance to module highly at exit ( 0.036 ) ( $\mathrm{N}=21$ )
Those who rated the history window highly at exit also rated the glossary window highly at exit ( 0.039 ) ( $\mathrm{N}=23$ )
Those who rated the graphics used in exercises highly at exit also rated the colours used in exercises highly at exit (0.002) ( $\mathrm{N}=22$ )
Those who rated the colours used in exercises highly at exit also rated the scenarios used in exercises highly at exit ( 0.017 ) ( $\mathrm{N}=22$ )
Those who rated the colours used in exercises highly at exit also rated the relevance of exercises highly at exit ( 0.007 ) ( $\mathrm{N}=22$ )
Those who rated the scenarios used in exercises highly at exit also rated the text used in exercises highly at exit ( 0.005 ) ( $\mathrm{N}=22$ )
Those who rated the scenarios used in exercises highly at exit also rated the relevance of exercises highly at exit ( 0.017 ) ( $\mathrm{N}=22$ )
Those who rated the scenarios used in exercises highly at exit also rated the difficulty of exercises highly at exit ( 0.044 ) ( $\mathrm{N}=22$ )
Those who rated the text used in exercises highly at exit also rated the feedback given in exercises highly at exit ( 0.012 ) ( $\mathrm{N}=22$ )
Those who rated the tasks specified in exercises highly at exit also rated the relevance of exercises highly at exit ( 0.013 ) ( $\mathrm{N}=22$ )
Those who rated the feedback given in exercises highly at exit also rated the difficulty of exercises highly at exit ( 0.048 ) ( $\mathrm{N}=22$ )
Those who rated the relevance of exercises highly at exit also rated the difficulty of exercises highly at exit (0.031) $(\mathrm{N}=22$ )
Those who rated the main text windows highly at midpoint also rated the main text windows highly at exit ( 0.007 ) $(\mathrm{N}=23)$
Those who rated the interactive exercises highly at midpoint also rated the interactive exercises highly at exit ( 0.027 ) ( $\mathrm{N}=23$ )
Those who rated the learning summaries highly at midpoint also rated the learning summaries highly at exit ( 0.004 ) ( $\mathrm{N}=22$ )
(Note Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q9 v Exit Q10

Those who rated the navigation feet highly at midpoint also rated the navigation feet highly at exit ( 0.017 ) ( $\mathrm{N}=23$ )
Those who rated the hypertext links highly at midpoint also rated the hypertext links highly at exit ( 0.019 ) ( $\mathrm{N}=23$ )
Those who rated the button links highly at midpoint also rated the button links highly at exit ( 0.026 ) ( $\mathrm{N}=20$ )
Those who rated the main map highly at midpoint also rated the main map highly at exit $(0.002)(\mathrm{N}=23)$
Those who rated the difficulty of exercises highly at midpoint also rated the difficulty of exercises highly at exit ( 0.013 ) ( $\mathrm{N}=21$ )
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q12

Those who rated the main text windows highly at mid-point also rated the interactive exercises highly at mid-point ( 0.046 ) ( $\mathrm{N}=20$ )
Those who rated the main text windows highly at mid-point also rated the business plan evaluation highly at mid-point (0.029) ( $\mathrm{N}=11$ )

Those who rated the main text windows highly at mid-point also rated the button links ratings highly at mid-point ( 0.036 ) ( $\mathrm{N}=19$ )
Those who rated the main text windows highly at mid-point also rated the text used in exercises highly at mid-point ( 0.019 ) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at mid-point also rated the graphics used in exercises highly at mid-point (0.011) $(\mathrm{N}=20)$

Those who rated the notepad exercises highly at mid-point also rated the colours used in exercises highly at mid-point ( 0.005 ) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at mid-point also rated the scenarios used highly at mid-point ( 0.037 ) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at mid-point also rated the text used in exercises highly at mid-point ( 0.007 ) ( $\mathrm{N}=20$ )
Those who rated the learning summaries highly at mid-point also rated the structure map highly at mid-point $(0.018)(\mathrm{N}=19)$
Those who rated the Café Poirot exercise highly at mid-point also rated the structure map highly at mid-point ( 0.019 ) ( $\mathrm{N}=15$ )
Those who rated the business plan evaluation highly at mid-point also rated the structure map highly at mid-point ( 0.012 ) ( $\mathrm{N}=11$ )
Those who rated the business plan evaluation highly at mid-point also rated the text used in exercises highly at mid-point ( 0.030 ) $(\mathrm{N}=11)$
Those who rated the hypertext links highly at mid-point also rated the button links highly at mid-point ( 0.012 ) ( $\mathrm{N}=19$ )
Those who rated the button links highly at mid-point also rated the glossary window highly at mid-point ( 0.017 ) ( $\mathrm{N}=18$ )
Those who rated the button links highly at mid-point also rated the graphics used highly at mid-point ( 0.025 ) ( $\mathrm{N}=19$ )
Those who rated the button links highly at mid-point also rated the colours used highly at mid-point ( 0.032 ) $(\mathrm{N}=19)$
Those who rated the button links highly at mid-point also rated the text used in exercises highly at mid-point ( 0.010 ) ( $\mathrm{N}=19$ )
Those who rated the history window highly at mid-point also rated the glossary window highly at mid-point ( 0.048 ) ( $\mathrm{N}=18$ )
Those who rated the glossary window highly at mid-point also rated the colours used highly at mid-point ( 0.047 ) ( $\mathrm{N}=18$ )
Those who rated the glossary window highly at mid-point also rated the scenarios used highly at mid-point ( 0.012 ) $(\mathrm{N}=18)$
Those who rated the glossary window highly at mid-point also rated the feedback given highly at mid-point ( 0.009 ) $(\mathrm{N}=17)$
Those who rated the main map highly at mid-point also rated the structure map highly at mid-point $(0.008)$ ( $\mathrm{N}=19$ )
Those who rated the structure map highly at mid-point also rated the text used in exercises highly at mid-point ( 0.036 ) ( $\mathrm{N}=19$ )
Those who rated the graphics used in exercises highly at mid-point also rated the colours used in exercises highly at midpoint ( 0.000 ) $(\mathrm{N}=20)$
Those who rated the graphics used in exercises highly at mid-point also rated the scenarios used in exercises highly at midpoint ( 0.000 ) $(\mathrm{N}=20)$
Those who rated the graphics used in exercises highly at mid-point also rated the tasks specified in exercises highly at midpoint (0.042) $(\mathrm{N}=20)$
Those who rated the colours used highly at mid-point also rated the scenarios used in exercises highly at mid-point ( 0.000 ) ( $\mathrm{N}=20$ )
Those who rated the colours used in exercises highly at mid-point also rated the text used in exercises highly at mid-point (0.034) $\mathrm{N}=20$ )

Those who rated the colours used in exercises highly at mid-point also rated the tasks specified in exercises highly at midpoint $(0.041)(\mathrm{N}=20)$

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q12 (continued)

Those who rated the scenarios used in exercises highly at mid-point also rated the text used in exercises highly at mid-point (0.047) ( $\mathrm{N}=20$ )

Those who rated the scenarios used in exercises highly at mid-point also rated the tasks specified in exercises highly at midpoint (0.007) ( $\mathrm{N}=20$ )
Those who rated the scenarios used in exercises highly at mid-point also rated the feedback given in exercises highly at midpoint (0.039) ( $\mathrm{N}=18$ )
Those who rated the text used in exercises highly at mid-point also rated the tasks specified in exercises highly at mid-point (0.014) $\mathrm{N}=20$ )

Those who rated the text used in exercises highly at mid-point also rated the feedback given in exercises highly at mid-point (0.004) $(\mathrm{N}=18)$

Those who rated the tasks specified in exercises highly at mid-point also rated the feedback given in exercises highly at midpoint (0.003) ( $\mathrm{N}=18$ )

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Exit Q13

Those who rated the main text windows highly at exit also rated the difficulty of exercises highly at exit (0.046) ( $\mathrm{N}=20$ )
Those who rated the interactive exercises highly at exit also rated the Café Poirot exercise highly at exit (0.044) ( $\mathrm{N}=20$ )
Those who rated the interactive exercises highly at exit also rated the tasks specified in exercises highly at exit (0.036) ( $\mathrm{N}=20$ )
Those who rated the interactive exercises highly at exit also rated the relevance of exercises highly at exit (0.002) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at exit also rated the button links highly at exit ( 0.005 ) ( $\mathrm{N}=16$ )
Those who rated the notepad exercises highly at exit also rated the glossary window highly at exit ( 0.027 ) ( $\mathrm{N}=19$ )
Those who rated the notepad exercises highly at exit also rated the main map highly at exit ( 0.010 ) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at exit also rated the structure map highly at exit (0.007) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at exit also rated the graphics used in exercises highly at exit ( 0.013 ) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at exit also rated the colours used in exercises highly at exit (0.007) ( $\mathrm{N}=20$ )
Those who rated the notepad exercises highly at exit also rated the text used in exercises highly at exit $(0.048)(\mathrm{N}=20)$
Those who rated the Café Poirot exercise highly at exit also rated the relevance of exercises highly at exit (0.033) ( $\mathrm{N}=20$ )
Those who rated the navigation feet highly at exit also rated the hypertext links highly at exit ( 0.018 ) $(\mathrm{N}=18)$
Those who rated the navigation feet highly at exit also rated the button links highly at exit ( 0.009 ) ( $\mathrm{N}=15$ )
Those who rated the navigation feet highly at exit also rated the structure map highly at exit (0.001) ( $\mathrm{N}=19$ )
Those who rated the navigation feet highly at exit also rated the text used in exercises highly at exit ( 0.034 ) ( $\mathrm{N}=19$ )
Those who rated the navigation feet highly at exit also rated the relevance to module highly at exit ( 0.002 ) ( $\mathrm{N}=19$ )
Those who rated the hypertext links highly at exit also rated the button links highly at exit ( 0.001 ) ( $\mathrm{N}=16$ )
Those who rated the hypertext links highly at exit also rated the main map highly at exit ( 0.012 ) ( $\mathrm{N}=19$ )
Those who rated the hypertext links highly at exit also rated the structure map highly at exit (0.001) ( $\mathrm{N}=19$ )
Those who rated the button links highly at exit also rated the glossary window highly at exit (0.043) ( $\mathrm{N}=16$ )
Those who rated the button links highly at exit also rated the structure map highly at exit ( 0.005 ) ( $\mathrm{N}=16$ )
Those who rated the button links highly at exit also rated the graphics used highly at exit ( 0.016 ) ( $\mathrm{N}=16$ )
Those who rated the button links highly at exit also rated the colours used highly at exit ( 0.003 ) ( $\mathrm{N}=16$ )
Those who rated the button links highly at exit also rated the tasks specified highly at exit (0.043) ( $\mathrm{N}=16$ )
Those who rated the history window highly at exit also rated the glossary window highly at exit $(0.035)(\mathrm{N}=19)$
Those who rated the main map highly at exit also rated the structure map highly at exit ( 0.003 ) ( $\mathrm{N}=20$ )
Those who rated the structure map highly at exit also rated the colours used highly at exit ( 0.012 ) ( $\mathrm{N}=20$ )
Those who rated the structure map highly at exit also rated the tasks specified highly at exit $(0.030)(\mathrm{N}=20)$
Those who rated the structure map highly at exit also rated the relevance to module highly at exit ( 0.046 ) $(\mathrm{N}=20)$
Those who rated the graphics used highly at exit also rated the colours used highly at exit ( 0.000 ) ( $\mathrm{N}=20$ )
Those who rated the scenarios used in exercises highly at exit also rated the relevance of exercises highly at exit ( 0.033 )
( $\mathrm{N}=20$ )
Those who rated the feedback given in exercises highly at exit also rated the relevance of exercises highly at exit (0.012) ( $\mathrm{N}=19$ )
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q12 v Exit Q13

Those who rated the main text windows highly at midpoint also rated the main text windows highly at exit ( 0.036 ) $(\mathrm{N}=20$ )
Those who rated the interactive exercises highly at midpoint also rated the interactive exercises highly at exit ( 0.000 ) $(\mathrm{N}=20$ )
Those who rated the notepad exercises highly at midpoint also rated the notepad exercises highly at exit $(0.038)(\mathrm{N}=20)$
Those who rated the business plan evaluation exercise highly at midpoint also rated the business plan evaluation exercise highly at exit ( 0.022 ) ( $\mathrm{N}=8$ )
Those who rated the hypertext links highly at midpoint also rated the hypertext links highly at exit (0.042) (N=18)
Those who rated the history window highly at midpoint also rated the history window highly at exit $(0.021)(\mathrm{N}=18)$
Those who rated the main map highly at midpoint also rated the main map highly at exit ( 0.023 ) ( $\mathrm{N}=19$ )
Those who rated the graphics used in exercises highly at midpoint also rated the graphics used in exercises highly at exit (0.005) $(\mathrm{N}=20)$

Those who rated the colours used in exercises highly at midpoint also rated the colours used in exercises highly at exit (0.004) $\mathrm{N}=20$ )

Those who rated the scenarios used in exercises highly at midpoint also rated the scenarios used in exercises highly at exit (0.006) ( $\mathrm{N}=20$ )
(Note' Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q15

Those who rated the main text windows highly at midpoint also rated the navigation feet highly at midpoint ( 0.031 ) ( $\mathrm{N}=7$ )
Those who rated the visual element (look) of windows highly at midpoint also rated the learning summaries highly at midpoint (0.036) ( $\mathrm{N}=6$ )
Those who rated the visual element (look) of windows highly at midpoint also rated the scenarios used highly at midpoint (0.034) $\mathrm{N}=6$ )

Those who rated the interactive exercises highly at midpoint also rated the hypertext links highly at midpoint (0.049) ( $\mathrm{N}=7$ )
Those who rated the interactive exercises highly at midpoint also rated the history window highly at midpoint ( 0.031 ) ( $\mathrm{N}=6$ )
Those who rated the interactive exercises highly at midpoint also rated the glossary window highly at midpoint ( 0.040 ) ( $\mathrm{N}=6$ )
Those who rated the notepad exercises highly at midpoint also rated the hypertext links highly at midpoint ( 0.022 ) ( $\mathrm{N}=6$ )
Those who rated the history window highly at midpoint also rated the glossary window highly at midpoint ( 0.034 ) ( $\mathrm{N}=6$ )
Those who rated the history window highly at midpoint also rated the difficulty of exercises highly at midpoint ( 0.032 ) ( $\mathrm{N}=5$ )
Those who rated the main map highly at midpoint also rated the structure map highly at midpoint ( 0.007 ) ( $\mathrm{N}=7$ )
Those who rated the main map highly at midpoint also rated the scenarios used highly at midpoint (0.034) ( $\mathrm{N}=6$ )
Those who rated the main map highly at midpoint also rated the text used highly at midpoint ( 0.043 ) $(\mathrm{N}=6)$
Those who rated the structure map highly at midpoint also rated the scenarios used highly at midpoint ( 0.034 ) ( $\mathrm{N}=6$ )
Those who rated the structure map highly at midpoint also rated the text used highly at midpoint ( 0.043 ) ( $\mathrm{N}=6$ )
Those who rated the graphics used in exercises highly at midpoint also rated the scenarios used in exercises highly at midpoint ( 0.045 ) $(\mathrm{N}=6)$
Those who rated the graphics used in exercises highly at midpoint also rated the difficulty of exercises highly at midpoint (0.020) ( $\mathrm{N}=6$ )

Those who rated the scenarios used in exercises highly at midpoint also rated the text used in exercises highly at midpoint (0.020) ( $\mathrm{N}=6$ )
(Note' Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Exit Q16

Those who rated the main text windows highly at exit also rated the tasks specified lowly at exit (0.042) ( $\mathrm{N}=5$ )
Those who rated the visual element (look) of windows highly at exit also rated the Café Poirot exercise highly at exit (0.030) ( $\mathrm{N}=7$ )
Those who rated the learning summaries highly at exit also rated the glossary window highly at exit ( 0.046 ) $(\mathrm{N}=7)$
Those who rated the Café Poirot exercise highly at exit also rated the business plan evaluation highly at exit ( 0.01 ) $(\mathrm{N}=7)$
Those who rated the Café Poirot exercise highly at exit also rated the graphics used in exercises highly at exit (0.033) ( $\mathrm{N}=7$ )
Those who rated the Café Poirot exercise highly at exit also rated the text used in exercises highly at exit $(0.030)(\mathrm{N}=7)$
Those who rated the business plan evaluation highly at exit also rated the navigation feet highly at exit ( 0.025 ) ( $\mathrm{N}=7$ )
Those who rated the business plan evaluation highly at exit also rated the graphics used in exercises highly at exit (0.033)
( $\mathrm{N}=7$ )
Those who rated the business plan evaluation highly at exit also rated the text used in exercises highly at exit ( 0.030 ) ( $\mathrm{N}=7$ )
Those who rated the hypertext links highly at exit also rated the main map highly at exit ( 0.033 ) ( $\mathrm{N}=7$ )

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Exit Q16 (continued)

Those who rated the history window highly at exit also rated the feedback given highly at exit ( 0.046 ) ( $\mathrm{N}=7$ )
Those who rated the glossary window highly at exit also rated the main map highly at exit ( 0.018 ) ( $\mathrm{N}=7$ )
Those who rated the glossary window highly at exit also rated the difficulty of exercises highly at exit (0.032) ( $\mathrm{N}=7$ )
Those who rated the main map highly at exit also rated the structure map highly at exit ( 0.047 ) $(\mathrm{N}=7)$
Those who rated the main map highly at exit also rated the feedback in exercises given highly at exit (0.044) ( $\mathrm{N}=7$ )
Those who rated the main map highly at exit also rated the difficulty of exercises highly at exit ( 0.030 ) ( $\mathrm{N}=7$ )
(Note Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Elements Correlation Conclusion Drawn from Results Midpoint Q15 v Exit Q16

No relevant significant correlations found
(Note ${ }^{\prime}$ Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Viewpoint Statements Midpoint Q15 Significant Correlations

Significant negative correlation between "The interactive exercises helped me to understand the material" and "I found the visual elements (look) of the windows motivating" ( 0.045 ) ( $\mathrm{N}=7$ )
Significant negative correlation between "The interactive exercises helped me to understand the material" and "The learning summaries increased my depth of thought" ( 0.022 ) ( $\mathrm{N}=7$ )
Significant negative correlation between "The interactive exercises were not essential so I focused on other material" and "The notepad exercises increased my depth of thought" $(0.035)(\mathrm{N}=7)$
Significant negative correlation between "I found the visual elements (look) of the windows motivating" and "The learning summaries increased my depth of thought " $(0.022)(N=7)$
Significant negative correlation between "The learning summaries increased my depth of thought" and "The presentation of this multi-media material is as good as others I've experienced" $(0.046)(\mathrm{N}=5)$
Significant positive correlation between "The notepad exercises increased my depth of thought" and "I would find more tutor input helpful" (0.040) $(\mathrm{N}=6)$
Significant positive correlation between "I skimmed the material, rather than read it all, in order to save time" and "I would prefer to have more face to face contact with the class tutor" $(0.034)(\mathrm{N}=6)$
Significant negative correlation between "I revisited material when I found other things related to it" and "This material contained too much text" $(0.046)(\mathrm{N}=5)$
Significant negative correlation between "I revisited material when I found other things related to it" and "I'm not sure whether I'm learning what I should from this computer based material" $(0.034)(\mathrm{N}=6)$
Significant negative correlation between "I revisited material when I found other things related to it" and "I would prefer to have more face to face contact with the class tutor" $(0.016)(\mathrm{N}=6)$
Significant negative correlation between "My view of this material has been influenced by other multi-media material I've used" and "The time flexibility is more important to me than the quality of the presentation" $(0.045)(\mathrm{N}=6)$
Significant negative correlation between "This material is more motivating than the best lectures I've experienced" and "I
find myself wanting to read this material from a print out rather than on screen" $(0.012)(N=6)$
(Note. Q refers to Questonnaire Number)

## Kendall's Tau Ratings of Viewpoint Statements Midpoint Q15 Significant Correlations cont'd

Significant positive correlation between "The presentation of this multi-media material is as good as others I've experienced" and "I find email communication useful for maintaining contact with the class tutor" ( 0.032 ) $(\mathrm{N}=5)$
Significant positive correlation between "I'm not sure whether I'm learning what I should from this computer based material" and "I would prefer to have more face to face contact with the class tutor" $(0.020)(N=6)$
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Ratings of Viewpoint Statements Exit Q16 Significant Correlations

Significant positive correlation between "I worked through all elements of the material" and "I found the visual elements (look) of the windows motivating" (0.036) ( $\mathrm{N}=7$ )
Significant negative correlation between "The interactive exercises helped me to understand the material " and "The interactive exercises were not essential so I focused on other material" $(0.015)(\mathrm{N}=7$ )
Significant positive correlation between "The interactive exercises helped me to understand the material " and "The onscreen feedback given for the interactive exercises helps me check I'm learning" $(0.015)(N=7)$

## Kendall's Tau Ratings of Viewpoint Statements Exit Q16 Significant Correlations (continued)

Significant negative correlation between "The interactive exercises helped me to understand the material" and "I found the visual elements (look) of the windows motivating" $(0.012)(\mathrm{N}=7$ )
Significant negative correlation between "The interactive exercises were not essential so I focused on other material" and "The on-screen feedback given for the interactive exercises helps me check I'm learning" (0.006) ( $\mathrm{N}=7$ )
Significant positive correlation between "I found the visual elements (look) of the windows motivating" and "I revisited material when I found other things related to it" $(0.030)(\mathrm{N}=7)$
Significant negative correlation between "I found the visual elements (look) of the windows motivating" and "I would find more tutor input helpful" $(0.050)(\mathrm{N}=7)$
Significant negative correlation between "The learning summaries increased my depth of thought" and "I would find multiple choice tests helpful to check my learning" $(0.006)(\mathrm{N}=7)$
Significant positive correlation between "I skimmed the material, rather than read it all, in order to save time" and "I find myself wanting to read this material from a print out rather than on screen" $(0.033)(\mathrm{N}=7)$
Significant positive correlation between "My view of this material has been influenced by other multi-media material
I've used" and "This material is more motivating than most lectures I've experienced" ( 0.034 ) (N=6)
Significant positive correlation between "My view of this material has been influenced by other multi-media material I've used" and "I would find more tutor input helpful" (0.034) ( $\mathrm{N}=6$ )
Significant positive correlation between "This material is more motivating than most lectures I've experienced" and "I would find more tutor input helpful" ( 0.042 ) $(\mathrm{N}=7)$
Significant negative correlation between "The on-screen feedback given for the interactive exercises helps me check I'm learning" and "I feel quite isolated when working with this computer based material" $(0.026)(\mathrm{N}=7)$
(Note Q refers to Questionnarre Number)

## Kendall's Tau Ratings of Viewpoint Statements Midpoint Q15 v Exit Q16 Significant Correlations

Significant positive correlation between "The interactive exercises helped me to understand the material " and "The interactive exercises helped me to understand the material" $(0.032)(\mathrm{N}=7)$
Significant positive correlation between "This material is more motivating than the best lectures I've experienced" and "This material is more motivating than the best lectures I've experienced" $(0.031)(\mathrm{N}=6)$
Significant positive correlation between "I found email communication useful for maintaining contact with the class tutor" and "I found email communication useful for maintaining contact with the class tutor" $(0.034)(\mathrm{N}=6)$
(Note: Q refers to Questionnaire Number)

## Kendall's Tau Approaches to Learning (ASSIST) Correlations Q15 Significant Correlations

Significant positive correlation between ratings of "Interactive Exercises" and "Deep Approach" (0.016) (N=40)
Significant negative correlation between ratings of "Interactive Exercises" and "Surface Apathetic Approach" (0.048) ( $\mathrm{N}=40$ )
Significant positive correlation between ratings of "Visual Elements (Look) of Interactive Exercises" and "Deep Approach" (0.032) $\quad \mathrm{N}=40$ )
Significant positive correlation between ratings of "Tasks specified in self contained exercises" and "Strategic Approach Adjusted" (0.020) (N=39)
Significant negative correlation between ratings of "Feedback given in self contained exercises" and "Surface
Apathetic Approach" ( 0.042 ) $(\mathrm{N}=38)$
Significant negative correlation between ratings of "I would have been better reading a book" and "Strategic Approach Adjusted" (0.050) ( $\mathrm{N}=40$ )
Significant positive correlation between ratings of "The interactive exercises helped me to understand the material" and
"Deep Approach" ( 0.024 ) ( $\mathrm{N}=40$ )
Significant negative correlation between ratings of "The interactive exercises were not essential, so I focused on other material" and "Deep Approach" ( 0.000 ) ( $\mathrm{N}=40$ )

| Kendall's Tau Approaches to Learning (ASSIST) Correlations Q15 Significant Correlations |
| :--- |
| Significant positive correlation between ratings of "I found the visual elements (look) of the windows motivating" and <br> "Strategic Approach Adjusted" $(0.016)(\mathrm{N}=40)$ |
| Significant positive correlation between ratings of "This material is more motivating than some lectures I've <br> experienced" and "Deep Approach" $(0.029)(\mathrm{N}=39)$ |
| Significant positive correlation between ratings of "This material is more motivating than most lectures I've <br> experienced" and "Deep Approach" $(0.006)(\mathrm{N}=39)$ |
| Significant negative correlation between ratings of "This material contained too much text" and "Strategic Approach <br> Adjusted" ( 0.024$)(\mathrm{N}=38)$ |
| Significant positive correlation between ratings of "This material contained too much text" and "Surface Apathetic <br> Approach" $(0.022)(\mathrm{N}=38)$ |
| Significant positive correlation between ratings of "The on-screen feedback given for the interactive exercises helps me <br> check I'm learning" and "Deep Approach" ( 0.006$)(\mathrm{N}=38)$ |
| Significant negative correlation between ratings of "I would find more tutor input helpful" and "Strategic Approach <br> Adjusted" $(0.048)(\mathrm{N}=39)$ |
| Significant positive correlation between ratings of "Deep Approach" and "Strategic Approach Adjusted" ( 0.001$)$ <br> (N=40) |

(Note Q refers to Questionnaire Number)

## A 3.30: Case 1: SPSS Tables for 5 Point Scale Responses



## Survival Strategles

|  |  |  |  | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| Valid | very confident | 1 | 22 | 2.2 |
|  | Frequency | Percent | Valid Percent | 22 |
|  | confident | 8 | 178 | 178 |
| some confidence | 19 | 422 | 422 | 620 |
|  | little confidence | 9 | 200 | 20.0 |
| no confidence | 8 | 178 | 178 | 822 |
| Total | 45 | 1000 | 1000 | 100.0 |


| A3.30.2: SEI 1996 / 97 Semester 2 Exit Q2 (N=25) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |
|    Cumulative  <br>   Frequency Percent Valid Percent <br>  Percent    <br> Valid maie 16 64.0 69.6 <br>  female 7 28.0 30.4 <br>  Total 23 92.0 100.0 <br>      <br> Missing System 2 8.0  <br> Total  25 100.0  |  |  |  |  |  |


| Skills \& Entroproneurial Characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percont |
| Valld | very confident | 8 | 360 | 375 | 375 |
|  | confident | 12 | 480 | 500 | 875 |
|  | some confidence | 3 | 120 | 125 | 1000 |
|  | Total | 24 | 960 | 100.0 |  |
| Missing | System | 1 | 40 |  |  |
| Total |  | 25 | 1000 |  |  |


| Opportunity v ldea in Business |  |  |  |  |  | Team Building in Business |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |  |  | Frequency | Percent | Valld Percent | Cumulative Percent |
| Valid <br> Missing <br> Total | very confident | 5 | 200 | $\begin{array}{r} 208 \\ 750 \\ 42 \\ 1000 \end{array}$ | 20895.81000 | Valid <br> Missing Total | very confident confident some confidence Total Syatem | 10 | 400 | $\begin{array}{r} 417 \\ 292 \\ 292 \\ 1000 \end{array}$ | 41.77081000 |
|  | confident | 18 | 720 |  |  |  |  | 7 | 280 |  |  |
|  | some confidence | 1 | 40 |  |  |  |  | 7 | 280 |  |  |
|  | Total | 24 | 98.0 |  |  |  |  | 24 | 960 |  |  |
|  | Systom | 1 | 40 |  |  |  |  | 1 | 40 |  |  |
|  |  | 25 | 1000 |  |  |  |  | 25 | 1000 |  |  |
|  |  | arket Resea | h $\&$ Sourc |  |  |  |  | Getting int | Business |  |  |
|  |  | Frequency | Parcent | Valid Percent | Cumulative Percent |  |  | Frequency | Porcent | Valid Percem | Cumulative Percent |
| Valid | very confident | 10 | 400 | 417 | 417 | Valid | very confident | 6 | 240 | 250 | 250 |
|  | confident | 9 | 360 | 375 | 792 |  | conficont | 15 | 600 | 625 | 875 |
|  | some confidence | 4 | 180 | 187 | 958 |  | some confidence | 3 | 120 | 125 | 1000 |
|  | litte confidence | 1 | 40 | 42 | 1000 |  | Total | 24 | 980 | 1000 |  |
|  | Total | 24 | 960 | 1000 |  | Missing | System | 1 | 40 |  |  |
| Missing | System | 1 | 40 |  |  | Total |  | 25 | 1000 |  |  |
| Total |  | 25 | 1000 |  |  |  |  |  |  |  |  |
|  |  | The Busi | ess Plan |  |  |  |  | Financ | Iscues |  |  |
|  |  | Frequency | Percent | Valld Percent | Cumulative Percent |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | very confident | 18 | 720 | 750 | 750 | Valid | very confident | 8 | 320 | 333 | 333 |
|  | confident | 5 | 200 | 208 | 958 |  | confident | 7 | 280 | 292 | 625 |
|  | some confidence | 1 | 4.0 | 42 | 1000 |  | some confidence | 7 | 280 | 292 | 917 |
|  | Total | 24 | 960 | 1000 |  |  | Intte conficence | 2 | 80 | 83 | 1000 |
| Missing | Systom | 1 | 40 |  |  |  | Total | 24 | 980 | 1000 |  |
| Total |  | 25 | 1000 |  |  | Missing | Systom | 1 | 40 |  |  |
|  |  |  |  |  |  | Total |  | 25 | 1000 |  |  |
|  | Pat | ents, Lleence | 1 Legal ls | aves |  |  |  | Strategic | Marketing |  |  |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |  |  | Froquency | Percent | Valid Percent | $\begin{gathered} \text { Cumulative } \\ \text { Percent } \end{gathered}$ |
| Vali'́ | vary confident | 3 | 120 | 12.5 | 125 | Valid | very confident | 4 | 160 | 167 | 16.7 |
|  | confident | 12 | 480 | 50.0 | 625 |  | confidont | 13 | 520 | 542 | 708 |
|  | some confidence | 8 | 320 | 333 | 958 |  | some confidence | 7 | 280 | 292 | 1000 |
|  | little confidence | 1 | 4.0 | 4.2 | 1000 |  | Total | 24 | 960 | 1000 |  |
|  | Total | 24 | 960 | 1000 |  | Missing | Systom | 1 | 40 |  |  |
| Misssing | System | 1 | 40 |  |  |  |  | 25 | 1000 |  |  |
| Total |  | 25 | 1000 |  |  |  |  |  |  |  |  |



| Visual Elements of Interactive Exercises |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Tess than effective | 1 | 4.0 | 42 | 42 |
|  | effective | 7 | 280 | 292 | 333 |
|  | more than effective | 13 | 52.0 | 542 | 875 |
|  | very effective | 3 | 120 | 12.5 | 100.0 |
|  | Total | 24 | 960 | 100.0 |  |
| Missing | System | 1 | 4.0 |  |  |
| Total |  | 25 | 1000 |  |  |



| Punerna Lunneen 8 cegel mecues |  |  |  |  | Etretegle Martuting |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Propanery | Aarama | Vata Porcent | Cumuleove Porcem |  |  | Froguency | Perceme | Vand Peroent | Cumbine Percem |
|  | 29 38 14 3 1 0 3 0 | 345 417 167 36 12 076 24 1000 | 364 427 171 37 12 1000 | 354 780 981 988 1000 |  <br> Total | No Conficience <br> Litis Confidence <br> Some Confidence <br> Confident <br> Very Confidert <br> Totel <br> Syatem | 17 37 23 5 1 83 1 84 | 202 440 274 60 12 988 12 1000 | 205 446 277 60 12 1000 | 203 651 928 908 1000 |
| Puname |  |  |  |  | The Invectors Viowpoint |  |  |  |  |  |
|  | Fropumer | Purcem | Vand Perrem | Cumuletive Percem |  |  | Froguency | Perown | Vand Prowem | Cumbetre Paroent |
|  | $\begin{gathered} 14 \\ 47 \\ 13 \\ 7 \\ 1 \\ 2 \\ 2 \end{gathered}$ | 167 300 135 13 12 076 24 1000 | $\begin{array}{r} 171 \\ 573 \\ 150 \\ 05 \\ 12 \\ 1000 \end{array}$ | 171 744 902 900 1000 |  | No Confidence Untie Conficience some Conficence Confident Very Confident Totel Syatem | 16 <br> 41 <br> 19 <br> 5 <br> 1 <br> 82 <br> 2 <br> 84 | 190 468 226 60 12 876 24 1000 | 195 500 232 61 12 1000 | 195 695 929 988 1000 |
| Sunvel strengiee |  |  |  |  |  |  |  |  |  |  |
|  | Frogiman | Pupery | Vatio Percem | Cumulative Percem |  |  |  |  |  |  |
|  | 17 45 10 4 4 2 | 202 330 190 40 970 24 1000 | 207 349 105 49 1000 | 207 750 051 1000 |  |  |  |  |  |  |






| 330.4: 1997 /98 Semest | T IEst | ( $\mathrm{N}=15$ | (continued) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Onrienty of Exerciese |  |  |  |  |  |
|  | Eropumy | Porem | Vond Percent | Cumuletive Porcemx |  |  | Froguency | Percem | Vold Proome | Cumidave Procom |
| Vom cixion | - | 80 | 214 | 214 | Vand | not ofiecivo | 1 | 67 | 67 | 67 |
| miveren mueno | , | $\pm 7$ | 800 | 114 |  | effective | 5 | 333 | 333 | 400 |
| Hexterecoso | - | 207 | 260 | 1000 |  | more then offiective | 7 | 467 | 46 | 867 |
| Treme | 14 | 03 | 1000 |  |  | hohly effective | 2 | 133 | 133 | 1000 |
| Mower 0rmon | 15 | 1000 |  |  |  |  | 15 | 1000 | 1000 |  |



| A330.5: 1997198 Smmester 2 Eatrance OS (V-41) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| the tresetere Viowpolve |  |  |  |  |  | Survival Stretegies |  |  |  |  |  |
|  |  | Erapmy | Pactem | Vand Parront | Cumuetive Porcent |  |  | Frequency | Percem | Vata Peroone | Cumulative Percem |
| Vavi | no cormionce | 6 | 148 | 146 | 146 | Valid | no conisience | 8 | 195 | 195 | 195 |
|  | uno cortance | 16 | 300 | 300 | 537 |  | mute conficence | 15 | 360 | 368 | 561 |
|  | come cormance | 13 | 317 | 317 | 854 |  | some confictence | 11 | 288 | 288 | 629 |
|  | cortuere | 0 | 146 | 146 | 1000 |  | conficomt | 6 | 140 | 146 | 876 |
|  | Toun | 41 | 1000 | 1000 |  |  | very conficert | 1 | 24 | 24 | 1000 |
|  |  |  |  |  |  |  | Total | 41 | 1000 | 1000 |  |










| 30.7: | 997/98 Semext | er 2 E.sit | (V)24) | continued |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Scenmice ueod in sell combined axprioes |  |  |  |  |  |
| ver <br> Minedre <br> Tole | nat ander rerer anowe Grates <br> mow onen mocen <br> napir ancose <br> Tow <br> sperem | Prognen | Prome <br> 42 <br> 42 <br> 125 <br> 250 <br> 500 <br> 080 <br> 42 <br> 1000 | Vond Percom 43 43 130 261 522 1000 | Cumulative Percenf 43 87 217 478 1000 |  | oflocive more then eflecive maghy effecteve Totel Syatem | Frequeng |  | $V$ ardo Poroent <br> 304 <br> 304 <br> 391 <br> 1000 | Cumeseve Poucon 304 609 1000 |
|  |  |  |  |  |  | Teeks speciriod in selt consuined asmeives |  |  |  |  |  |
|  | moxir ancoue mare one amoser Hotr aneme Pan ombor |  | Preven 13 167 375 333 $26:$ 42 1000 | Vond Perceon <br> 17 <br> 174 <br> 391 <br> 348 <br> 1000 | Cumpletive Percent 87 281 652 1000 |  | olifective more then effective tughly effiective Totel Syatem | Froqueng | $\begin{array}{r} \text { Peroenx } \\ \hline 292 \\ 458 \\ 208 \\ 058 \\ 42 \\ 1000 \\ \hline \end{array}$ | Vand Provent <br> 304 <br> 478 <br> 217 <br> 1000 | Cumperave <br> Peropx <br> 304 <br> 783 <br> 1000 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Emanemat | Pawnom | Vond Percont | Cumulative Porcem |  |  | Froquency | Promen | Vand Perceny | comuleve Poreont |
| vaid <br> Areving <br> toen | nor diexive verat anome crucere mare inen anceve mory enocive Pow srmen | [ 3 | 125 <br> 13 <br> 292 <br> 200 <br> 250 <br> 068 <br> 12 <br> 1000 | 130 07 304 217 261 1000 | 130 217 522 730 1000 |  | suighty chective offective more than effiecteve tughly effective Total Systern | 1 4 0 0 23 1 24 | 42 167 375 375 950 42 1000 | 43 174 301 301 1000 | 43 217 009 1000 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Finguncy | Purame | Vomd Porcout | Cumulative Poreant |  |  |  |  |  |  |
| tam <br> Mopeines <br> Tond | noid dieceve naper anoctos aneove move nen ancevo Nopronerive - c Symen | $\begin{gathered} 1 \\ 2 \\ 1 \\ 12 \\ 1 \\ 23 \\ 1 \\ 24 \end{gathered}$ | 42 <br> 03 <br> 202 <br> 300 <br> 42 <br> 060 <br> 42 <br> 1000 | 43 87 304 322 43 1000 | 43 130 435 957 1000 |  |  |  |  |  |  |





















A3.30.13: 1998/99 Semester 2 Exit Q13 (N=36)

























A3.30.17: SEI 1999/00 Semester 2 Entrance Q17 N=65

| Game Approach |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | $\begin{gathered} \text { Cumulative } \\ \text { Percent } \\ \hline \end{gathered}$ |
| Vald | Not Liked | 2 | 31 | 31 | 31 |
|  | Liked Somewhat | 7 | 108 | 108 | 138 |
|  | Luked | 23 | 354 | 354 | 492 |
|  | More Than Liked | 21 | 32.3 | 323 | 815 |
|  | Greatly Liked | 12 | 185 | 18.5 | 1000 |
|  | Total | 65 | 1000 | 1000 |  |


| 8imulated Environment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Porcent |
| Valid | Liked Somowhat | 6 | 02 | 92 | 92 |
|  | Liked | 26 | 40.0 | 400 | 492 |
|  | More Than Liked | 28 | 431 | 431 | 923 |
|  | Greatly Liked | 5 | 77 | 77 | 1000 |
|  | Total | 65 | 1000 | 1000 |  |


| Combination of Electronic Book, Computer Game \& Simulated Environmem |
| :--- |
|     Cumulative <br>  Frequency Percent Valid Porcent Percent <br> Vaild 1 15 15 15 <br>  Liked Somowhat 17 282 28.2 <br> More Than Liked 33 50.8 50.8 785 <br> Greatly Liked 14 21.5 215 1000 <br> Total 65 100.0 1000  |


| Opporturity V idea in Businoss |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Vaid Percent | Cumulative Percent |
| Vaid | No Confiderce | 4 | 6.2 | 63 | 63 |
|  | Litie Comfidence | 22 | 338 | 349 | 413 |
|  | Some Confidence | 23 | 35.4 | 36.5 | 77.8 |
|  | Confident | 14 | 215 | 22.2 | 1000 |
|  | Total | 63 | 969 | 100.0 |  |
| Miseing | Symam | 2 | 31 |  |  |
| Total |  | 65 | 1000 |  |  |


| Teenn Buldiving in Businets |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Vallid Percent | Curnutative Percent |
| Vaid | No Confidence | 3 | 46 | 4.8 | 4.8 |
|  | Luse Confictence | 10 | 154 | 15.9 | 20.6 |
|  | Some Confidence | 19 | 29.2 | 30.2 | 50.8 |
|  | Confidert | 27 | 415 | 42.9 | 93.7 |
|  | Very Conlidert | 4 | 6.2 | 63 | 1000 |
|  | Totel | 63 | 069 | 1000 |  |
| Mibing | Syctem | 2 | 31 |  |  |
| Total |  | 65 | 1000 |  |  |

















| A3.30.18: 1999/00 Semester 2 Controlled Investigation ( $\mathrm{N}=65$ ) (continued) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Having high quality hasges incroased my engagement with this computer-based"onecren maxt " version of this matarial |  |  |  |  |  |  |
|  |  | Frequency | Percent | Valid Percent | Cumulative Porcent |  |
| Valid | totaly dicagree | 1 | 1.5 | 77 | 77 |  |
|  | disagree momewhat | 1 | 1.5 | 77 | 154 |  |
|  | not sure | 5 | 77 | 385 | 538 |  |
|  | agree somowhmt | 5 | 7.7 | 385 | 92.3 |  |
|  | agree totally | 1 | 15 | 77 | 1000 |  |
|  | Total | 13 | 20.0 | 1000 |  |  |
| Miesing | System | 52 | 80.0 |  |  |  |
| Total |  | 65 | 1000 |  |  |  |
















## A 3.31: Statistically Significant Results by Questionnaire Item for SEI Case Study 1 Controlled Investigation

## SEI Full Version Exercise $\mathbf{v}$ Web-based Text Version of Exercise

| A 3.31: SEI Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item Questions Relating to Computer-Based Exercise / Scenario Material (N of Items = 64) | Z Score | Sig Level (2 tailed) |
| :---: | :---: | :---: |
| The computer-based "on-screen text" / "on-screen exercise" version of this material offered me a challenge | -4.820 | 0.000 |
| I got the chance, within the computer-based "on-screen text" / "on-screen exercise"version of this material, to apply my learning to solving problems or taking decisions | -5.195 | 0.000 |
| I found the tasks set in the computer-based "on-screen text" / "on-screen exercise" version of this material interesting | -4.766 | 0.000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material inspired me to think about the material I had previously covered | -4.484 | 0.000 |
| The computer-based feedback from the "on-screen text" / "on-screen exercise" version of this material helped me check that I was really learning | -4.753 | 0.000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to demonstrate my competency at the activity concerned | -4.810 | 0.000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material made me curious to see the outcomes from my decisions | -5.505 | 0.000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material, which allowed me to feel as though I was really there in the scenario | -4.900 | 0.000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to choose which element of this computer-based material I looked at next | -5.007 | 0.000 |
| I had to think carefully before deciding what to look at next in this computer-based "on-screen text"/ "on-screen exercise" version of this material | -2.993 | 0.003 |
| I could use this computer-based "on-screen text" / "on-screen exercise" version of this material to check how the experts would do things | -2.051 | 0.040 |
| I could control the pace at which I worked through this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.777 | 0.000 |
| I could choose my own pathway through this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.806 | 0.000 |
| There was an element of humour in this computer-based "on-screen text" / "on-screen exercise" version of this material | -2.906 | 0.004 |
| The humour element in this computer-based "on-screen text" / "on-screen exercise" version of this material increased my sense of engagement | -2.119 | 0.034 |
| The game element in this computer-based "on-screen text" / "on-screen exercise" version of this material increased my level of engagement | -3.868 | 0.000 |
| The context of this computer-based "on-screen text" / "on-screen exercise" version of this material was realistic in that it reflected real life situations | -3.377 | 0.001 |
| The context of this computer-based "on-screen text" / "on-screen exercise" version of this material was meaningful for me (I found I could relate to it) | -3.071 | 0.002 |
| I find this computer-based "on-screen text" / "on-screen exercise" version of this material makes the situations and examples used realistic | -3.650 | 0.000 |
| Text in this computer-based "on-screen text" / "on-screen exercise" version of this material was easy to read on screen | -3.913 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material made me want to keep on working beyond the time I had intended | -4.093 | 0.000 |
| Information was easy to find throughout this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.412 | 0.001 |
| The screen display for this computer-based "on-screen text" / "on-screen exercise" version of this material was not cluttered | -3.859 | 0.000 |
| I found the colours used in displaying this computer-based "on-screen text" / "on-screen exercise" version of this material were appropriate | -3.303 | 0.001 |
| The interface for this computer-based "on-screen text" / "on-screen exercise" version of this material was easy to use | -4.322 | 0.000 |


| A 3.31: SEI Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item Questions Relating to Computer-Based Exercise / Scenario Material (N of Items $=\mathbf{6 4}$ ) (continued) | Z Score | Sig Level (2 tailed) |
| :---: | :---: | :---: |
| I felt as though I was actively learning from this computer-based "on-screen text" / "on-screen exercise" version of this material | -5.107 | 0.000 |
| The interface helped me to spot my errors when using this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.485 | 0.000 |
| The interface helped me to reason about what caused my errors when using this computer-based "onscreen text" / "on-screen exercise" version of this material | -4.562 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material helped me to correct any errors I made | -4.816 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to make use of what I already knew | -4.505 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to learn by thinking and reasoning | -5.747 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material encouraged me to improvise when trying to solve problems or take decisions | -4396 | 0.000 |
| When using this computer-based "on-screen text" / "on-screen exercise" version of this material I had to identify problems then solve them | -3.835 | 0.000 |
| I had to sort out relevant from irrelevant when trying to solve problems or take decisions using this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.026 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to explore from a number of perspectives | -3.907 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material maintained the complexity of the real world | -3.376 | 0.001 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material encouraged me to reflect on a range of learning when attempting to solve problems | -3.894 | 0.000 |
| Assessment was integrated within this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.649 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material offered the opportunity for me to defend my views / opinions developed | -3.271 | 0.001 |
| My understanding of the issues has changed having worked through this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.352 | 0.000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material contained too much on-screen text | -4.167 | 0.000 |
| I find myself wanting to read this computer-based "on-screen text" / "on-screen exercise" version of this material from a print out, rather than on-screen | -3.424 | 0.001 |
| I would have been better off reading a book than using this computer-based "on-screen text" / "onscreen exercise" version of this material | -4.347 | 0.000 |
| I worked through all the elements of this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.359 | 0.001 |
| I was unsure what I should do when using the interactive elements of this computer-based "on-screen text" / "on-screen exercise" version of this material (ie the instructions were not clear) | -2.070 | 0.038 |
| The interactive elements in this computer-based "on-screen text" / "on-screen exercise" version of this material helped my understanding | -4.059 | 0.000 |
| The look of the screen displays in this computer-based "on-screen text" / "on-screen exercise" version of this material helped motivate me | -4.928 | 0.000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is better than other computer-based material I've used | -5.603 | 0.000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is as good as other computer-based material I've used | -4.511 | 0.000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is not as good as other computer-based material I've used | -3.364 | 0.001 |
| The on-screen feedback provided helps me check I'm learning from this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.827 | 0.000 |
| I found this computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to practice doing the things I needed to do | -4.497 | 0.000 |

\(\left.\begin{array}{|l|l|l|}\hline A 3.31: SEI Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item <br>

Questions Relating to Computer-Based Exercise / Scenario Material (N of Items = 64) (continued)\end{array}\right)\) Z Score | Sig Level |
| :--- |
| (2 tailed) | | I found this computer-based "on-screen text" / "on-screen exercise" version of this material engaging to <br> the point where I kept trying to solve the problems or make the decisions | -4.192 |
| :--- | :--- |
| I found the on-screen feedback in this computer-based "on-screen text" / "on-screen exercise" version of <br> this material made me actively think about my decisions | -5.146 |

## A 3.32: No Significant Difference Results by Questionnaire Item for SEI Case Study 1 Controlled Investigation

$\left.\begin{array}{|l|l|l|}\hline \text { A 3.32: SEI Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item } & \text { Z Score } & \begin{array}{l}\text { Sig } \\ \text { Level }\end{array} \\ \text { Questions Relating to Computer-Based Exercise / Scenario Material }\end{array}\right)$

## A 3.33 SEI 17: Q14 Learning Style Inventory Responses Semester 11999 to 2000

| A 3.33 SEI Entrance Q14 <br> Sem1 99 to 00 |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Number | vps 1 | aps1 | tps |
| 1 | 22 | 17 | 20 |
| 2 | 20 | 20 |  |
| 3 | 24 | 16 | 18 |
| 4 | 22 | 17 | 19 |
| 5 | 21 | 17 | 25 |
| 6 | 21 | 19 | 19 |
| 7 | 21 | 18 | 12 |
| 8 | 20 | 17 | 17 |
| 9 | 23 | 20 | 17 |
| 10 | 16 | 23 | 18 |
| 11 | 23 | 15 | 19 |
| 12 | 25 | 23 | 21 |
| 13 | 21 | 16 | 20 |
| 14 | 22 | 21 | 21 |
| 15 | 19 | 18 | 17 |
| 16 | 22 | 18 | 18 |
| 17 | 15 | 15 | 14 |
| 18 | 25 | 20 | 15 |
| 19 | 21 | 17 | 15 |
| 20 | 21 | 17 | 12 |
| 21 | 21 | 19 | 16 |
| 22 | 21 | 19 | 12 |
| 23 | 23 | 22 | 14 |
| 24 | 17 | 16 | 19 |
| 25 | 23 | 17 | 20 |
| 26 | 21 | 17 | 21 |
| 27 | 27 | 21 | 17 |
| 28 | 21 | 19 | 18 |
| 29 | 19 | 20 | 22 |
| 30 | 23 | 16 | 20 |
| 31 | 19 | 16 | 14 |
| 32 | 19 | 17 | 21 |
| 33 | 22 | 17 | 18 |
| 34 | 21 | 17 | 14 |
| 35 | 24 | 17 | 19 |
| 36 | 24 | 19 | 15 |
| 37 | 23 | 19 | 16 |
| 38 | 19 | 16 | 18 |
| 39 | 22 | 20 | 13 |
| 40 | 24 | 22 | 18 |
| 41 | 21 | 19 | 21 |
| 42 | 22 | 12 | 20 |
| 43 | 21 |  | 23 |
| 44 | 24 | 22 | 19 |
| 45 | 20 | 16 | 17 |
| 46 | 17 | 17 | 19 |
| 47 | 20 | 16 | 20 |
| 48 | 16 | 18 | 15 |
| 49 | 21 | 14 | 23 |
| 50 | 19 | 18 | 18 |


| A 3.33 SEI Entrance Q14 <br> Sem1 99 to 00 <br> (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Number | vps 1 | aps1 | tps |
| 51 | 21 | 15 | 15 |
| 52 | 18 | 19 | 19 |
| 53 | 21 | 15 | 17 |
| 54 | 18 | 18 |  |
| 55 | 21 | 14 | 19 |
| 56 | 24 | 21 | 13 |
| 57 | 22 | 15 | 17 |
| 58 | 23 | 17 | 16 |
| 59 | 23 | 20 | 22 |
| 60 | 24 | 16 | 20 |
| 61 | 17 | 15 | 18 |
| 62 | 22 | 20 | 13 |
| 63 | 23 | 21 | 22 |
| 64 | 21 | 18 | 17 |
| 65 | 20 | 20 | 13 |
| 66 | 22 | 15 | 23 |
| 67 |  | 20 | 21 |
| 68 | 17 | 15 | 15 |
| 69 | 22 | 18 | 17 |
| 70 | 19 | 17 |  |
| 71 | 22 | 20 | 16 |
| 72 | 19 | 21 | 17 |
| 73 | 24 | 19 | 18 |
| 74 | 24 | 20 | 15 |
| 75 | 23 | 14 | 13 |
| 76 | 24 | 19 | 18 |
| 77 | 23 | 17 | 19 |
| 78 | 23 | 17 | 19 |
| 79 | 19 | 17 | 15 |
| 80 | 19 | 15 | 20 |
| 81 | 17 | 20 | 16 |
| 82 | 19 | 16 | 17 |
| 83 | 21 | 21 | 15 |
| 84 | 20 | 17 | 18 |
| 85 | 20 | 19 | 14 |
|  |  |  |  |
| Total | 61 | 4 | 11 |

A 3.34: SEI Q17 Entrance Learning Style Inventory Responses Semester 21999 / 2000

| $\begin{array}{\|l\|} \hline \text { A 3.34 SEI EntranceQ } \\ \text { Sem2 } 99 \text { to } 00 \\ \hline \end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Number | vps 1 | aps1 | tps |
| 1 | 25 | 20 | 19 |
| 2 | 20 | 17 | 21 |
| 3 | 19 | 19 | 19 |
| 4 | 20 | 20 | 20 |
| 5 | 18 | 19 | 13 |
| 6 | 24 | 25 | 16 |
| 7 | 20 | 13 | 14 |
| 8 | 21 | 16 | 17 |
| 9 | 17 | 14 | 15 |
| 10 | 20 | 19 | 14 |
| 11 | 23 | 19 | 16 |
| 12 | 22 | 21 | 18 |
| 13 | 24 | 17 | 16 |
| 14 | 22 | 19 | 18 |
| 15 | 16 | 23 | 21 |
| 16 | 24 | 18 | 20 |
| 17 | 19 | 20 | 18 |
| 18 | 20 | 17 | 19 |
| 19 | 18 | 16 | 16 |
| 20 | 23 | 20 | 21 |
| 21 | 22 | 20 | 15 |
| 22 | 22 | 18 | 18 |
| 23 | 22 | 25 | 17 |
| 24 | 25 |  | 14 |
| 25 | 21 | 19 | 15 |
| 26 | 24 | 16 | 15 |
| 27 |  |  | 19 |
| 28 | 21 | 23 | 21 |
| 29 | 20 | 19 | 15 |
| 30 | 18 | 18 | 13 |
| 31 | 21 | 19 | 14 |
| 32 | 21 | 13 | 14 |
| 33 | 25 | 20 | 18 |
| 34 | 19 | 14 | 19 |
| 35 | 22 |  | 19 |
| 36 | 22 | 16 | 20 |
| 37 | 22 | 25 | 18 |
| 38 | 25 | 21 | 20 |
| 39 | 23 | 19 | 21 |
| 40 | 25 | 19 | 19 |
| 41 | 22 | 18 | 18 |
| 42 | 18 | 17 | 11 |
| 43 | 21 | 16 | 15 |
| 44 | 21 | 15 | 17 |
| 45 | 23 | 18 | 20 |
| 46 | 21 | 18 | 15 |
| 47 | 24 | 17 | 22 |
| 48 | 17 | 19 | 14 |
| 49 | 22 | 22 | 17 |
| 50 | 23 | 20 | 19 |


| A 3.34 SEI EntranceQ <br> Sem 29 to 00 <br> (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject Number | vps 1 | aps1 | tps |
| 51 | 22 | 20 | 18 |
| 52 | 18 | 18 |  |
| 53 | 23 | 18 | 16 |
| 54 | 20 | 18 | 15 |
| 55 | 26 | 13 | 21 |
| 56 | 24 | 17 | 20 |
| 57 | 18 | 22 | 20 |
| 58 | 26 | 17 | 17 |
| 59 | 20 | 19 | 18 |
| 60 | 18 | 15 | 18 |
| 61 | 24 | 19 | 20 |
| 62 | 20 | 20 | 19 |
| 63 | 16 | 15 | 12 |
| 64 | 22 | 20 | 21 |
| 65 | 23 | 16 | 15 |
|  |  |  |  |
| Total | 46 | 9 | 1 |

A 3.35 Interview Map SEI 1

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 1 | y | y |


A 3.35 Interview Map SEI 2

| A 3.35 Interview Map |  |  |
| :--- | :--- | :--- |
| Semester 2 1997/8 | Interview 1 | Interview 2 |
| A3.35 SEI 2 | y | n |


A 3.35 Interview Map SEI 6

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 6 | y | n |


A 3.35 Interview Map SEI 7

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 7 | y | n |


A 3.35 Interview Map SEI 8

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 8 | y | n |


|  |  |
| :---: | :---: |

A 3.35 Interview Map SEI 9

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 9 | y | n |


|  |
| :---: |

A 3.35 Interview Map SEI 10

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 10 | y | N |


A 3.35 Interview Map SEI 11
A 3.35 Interview Map SEI 11

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 11 | y | N |


A 3.35 Interview Map SEI 13

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 13 | y | N |


A 3.35 Interview Map SEI 15

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 15 | y | N |


A 3.35 Interview Map SEI 16

| Semester 2 1997/8 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 16 | y | N |


A 3.35 Interview Map SEI 17

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 17 | y | Y |

(
A 3.35 Interview Map SEI 19

A 3.35 Interview Map SEI 20

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 20 | y | Y |


A 3.35 Interview Map SEI 21

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 21 | y | N |


A 3.35 Interview Map SEI 24

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 24 | y | Y |


A 3.35 Interview Map SEI 25

A 3.35 Interview Map SEI 26

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 26 | y | N |


A 3.35 Interview Map SEI 27

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 27 | y | Y |


A 3.35 Interview Map SEI 28

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 28 | y | Y |


A 3.35 Interview Map SEI 30

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 30 | y | N |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |

A 3.35 Interview Map SEI 31

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 31 | y | N |

(
A 3.35 Interview Map SEI 32

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 32 | y | Y |


A 3.35 Interview Map SEI 33

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 33 | y | Y |


A 3.35 Interview Map SEI 34

| Semester 1 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 34 | y | Y |


A 3.35 Interview Map SEI 38

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 38 | y | Y |


|  |
| :---: |

A 3.35 Interview Map SEI 39

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 39 | y | N |


A 3.35 Interview Map SEI 40

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 40 | y | Y |


A 3.35 Interview Map SEI 41

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 41 | y | Y |


A 3.35 Interview Map SEI 42

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 42 | y | Y |

为
A 3.35 Interview Map SEI 43

A 3.35 Interview Map SEI 44
A 3.35 Interview Map SEI 44

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 44 | y | N |


A 3.35 Interview Map SEI 45

| Semester 2 1998/9 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 45 | y | Y |

(
A 3.35 Interview Map SEI 46

| Semester 11999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 46 | $\mathbf{y}$ | Y |


A 3.35 Interview Map SEI 48

| Semester 1 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 48 | y | N |


|  |  |  |
| :---: | :---: | :---: |

A 3.35 Interview Map SEI 49

| Semester 1 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 49 | y | N |


|  |
| :---: |

A 3.35 Interview Map SEI 51

| Semester 1 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 51 | y | N |


A 3.35 Interview Map SEI 52

A 3.35 Interview Map SEI 53
A 3.35 Interview Map SE1 53

| Semester 1 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 53 | y | N |


A 3.35 Interview Map SEI 54

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 54 | y | Y |

(
A 3.35 Interview Map SEI 55

A 3.35 Interview Map SEI 56

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 56 | y | Y |

为
A 3.35 Interview Map SEI 57

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 57 | y | N |


A 3.35 Interview Map SEI 58

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 58 | y | N |


|  |
| :---: |

A 3.35 Interview Map SEI 60

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 60 | y | N |


A 3.35 Interview Map SEI 61

| Semester 2 1999/00 | Interview 1 | Interview 2 |
| :--- | :--- | :--- |
| A3.35 SEI 61 | y | N |

## Appendix 4: Results by Batch Scottish Hotel School

A4.1: SHS Q2 Entrance Open Responses Semester 11999 to 2000

| A4.1 SHS Entrance Results Semester 11999 / 2000 ( $\mathrm{N}=81$ ) | Overall Total by Item | Total \% by Item |
| :---: | :---: | :---: |
|  | 47 | 58\% |
| relevance | 71 | 88\% |
| computer aids info retrieval | 62 | 77\% |
| computer aids learning | 59 | 73\% |
| confidence level increased | 16 | 20\% |
| could revisit info easily | 6 | 7\% |
| feedback explanation important | 28 | 35\% |
| multimedia important | 17 | 21\% |
| graphics valuable | 14 | 17\% |
| graphics aid learning | 2 | 2\% |
| give exemplars | 5 | 6\% |
| (exe) offers practice | 4 | 5\% |
| personal control important | 4 | 5\% |
| self management important | 7 | 9\% |
| novelty value adds interest | 20 | 25\% |
| interactivity important | 6 | 7\% |
| feedback on demand important | 8 | 10\% |
| text valuable | 4 | 5\% |
| exercises aided learning | 2 | 2\% |
| exercises add interest | 13 | 16\% |
| time flexibility | 14 | 17\% |
| pace flexibility | 20 | 25\% |
| (exe / sim...) helps check learning | 25 | 31\% |
| graphics add interest | 20 | 25\% |
| lack of location flexibility | 3 | 4\% |
| hard copy wanted | 54 | 67\% |
| comfortable with computers | 11 | 14\% |
| human contact important | 14 | 17\% |
| assessment motivates | 2 | 2\% |
| route flexibility important | 1 | 1\% |
| (Experienced with) Internet | 4 | 5\% |
| virtual reality desired | 53 | 65\% |
| ease of use important | 6 | 7\% |
| colour important | 1 | 1\% |
| access to home computer | 7 | 9\% |
| not better than book | 11 | 14\% |
| better than book | 6 | 7\% |
| computer adds interest | 2 | 2\% |
| computer adds enjoyment | 14 | 17\% |
| experienced using computers | 8 | 10\% |
| wout better than practical labs | 5 | 6\% |
| text alone is boring | 34 | 42\% |
| games | 8 | 10\% |
| variety in style of presentation | 7 | 9\% |
| variety important | 2 | 2\% |
| note-taking better on computer | 1 | 1\% |
| note-taking not better on computer | 3 | 4\% |
| fun/humour positive | 5 | 6\% |
| challenge | 4 | 5\% |
| practical focus motivates | 5 | 6\% |
| examples important - real life | 1 | 1\% |


| A4.1 SHS Entrance Results Semester 1 1999/2000 (N=81) (continued) | Overall <br> Total by <br> Item | Total \% <br> by Item |
| :--- | :--- | :--- |
| simple language helps | 6 | $7 \%$ |
| eye strain / fatigue | 12 | $15 \%$ |
| malfunctions have negative effect | 8 | $10 \%$ |
| too much text has negative effect | 20 | $25 \%$ |
| breaks in text important | 2 | $2 \%$ |
| interest engaged | 1 | $1 \%$ |
| being entertained important | 1 | $1 \%$ |
| experienced with email | 54 | $67 \%$ |
| social communication via email | 42 | $52 \%$ |
| electronic commerce - purchasing / business | 3 | $4 \%$ |
| experienced with net | 56 | $69 \%$ |
| simulated environment motivates | 3 | $4 \%$ |

## A4.2: Statistically Significant Results by Questionnaire Item for SHS Case Study 2 Controlled Investigation

| A4.2 SIIS Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item Questions Relating to Computer-Based Exercise / Scenario Material (N of Items = 64) | Z Score | Sig Level (2 tailed) |
| :---: | :---: | :---: |
| The computer-based "on-screen text" / "on-screen exercise" version of this material offered me a challenge | -2.622 | . 009 |
| I got the chance, within the computer-based "on-screen text" / "on-screen exercise"version of this material, to apply my learning to solving problems or taking decisions | -3.695 | . 000 |
| I found the tasks set in the computer-based "on-screen text" / "on-screen exercise" version of this material interesting | -5.905 | . 000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material inspired me to think about the material I had previously covered | -5.101 | . 000 |
| The computer-based feedback from the "on-screen text" / "on-screen exercise" version of this material helped me check that I was really learning | -5.007 | . 000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to demonstrate my competency at the activity concerned | -4.479 | . 000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material made me curious to see the outcomes from my decisions | -4.954 | . 000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material, which allowed me to feel as though I was really there in the scenario | -6.037 | . 000 |
| The computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to choose which element of this computer-based material I looked at next | -5.880 | . 000 |
| I could use this computer-based "on-screen text" / "on-screen exercise" version of this material to check how the experts would do things | -6.076 | . 000 |
| I could choose my own pathway through this computer-based "on-screen text" / "on-screen exercise" version of this material | -4.153 | . 000 |
| There was an element of humour in this computer-based "on-screen text" / "on-screen exercise" version of this material | -6.071 | . 000 |
| The humour element in this computer-based "on-screen text" / "on-screen exercise" version of this material increased my sense of engagement | -5.157 | . 000 |
| The game element in this computer-based "on-screen text" / "on-screen exercise" version of this material increased my level of engagement | -5.470 | . 000 |
| The context of this computer-based "on-screen text" / "on-screen exercise" version of this material was realistic in that it reflected real life situations | -5.294 | . 000 |
| The context of this computer-based "on-screen text" / "on-screen exercise" version of this material was meaningful for me (I found I could relate to it) | -5.772 | . 000 |
| I find this computer-based "on-screen text" / "on-screen exercise" version of this material makes the situations and examples used realistic | -5.960 | . 000 |


| A4.2 SHS Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item Questions Relating to Computer-Based Exercise / Scenario Material (N of Items = 64) (continued) | Z Score | Sig Level (2 tailed) |
| :---: | :---: | :---: |
| Text in this computer-based "on-screen text" / "on-screen exercise" version of this material was easy to read on screen | -3.130 | . 002 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material made me want to keep on working beyond the time I had intended | -5.348 | . 000 |
| Information was easy to find throughout this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.590 | 000 |
| The screen display for this computer-based "on-screen text" / "on-screen exercise" version of this material was not cluttered | -3.257 | . 001 |
| I found the colours used in displaying this computer-based "on-screen text" / "on-screen exercise" version of this material were appropriate | -5.363 | . 000 |
| The interface for this computer-based "on-screen text" / "on-screen exercise" version of this material was easy to use | -3.851 | . 000 |
| I felt as though I was actively learning from this computer-based "on-screen text" / "on-screen exercise" version of this material | -6.007 | . 000 |
| The interface helped me to spot my errors when using this computer-based "on-screen text" / "on-screen exercise" version of this material | -5.475 | . 000 |
| The interface helped me to reason about what caused my errors when using this computer-based "onscreen text" / "on-screen exercise" version of this material | -5.279 | 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material helped me to correct any errors I made | -5.576 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to make use of what $l$ already knew | -5.397 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to learn by thinking and reasoning | -5.474 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material encouraged me to improvise when trying to solve problems or take decisions | -4.433 | . 000 |
| When using this computer-based "on-screen text" / "on-screen exercise" version of this material I had to identify problems then solve them | -2.543 | . 011 |
| I had to sort out relevant from irrelevant when trying to solve problems or take decisions using this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.692 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to explore from a number of perspectives | -6.224 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material maintained the complexity of the real world | -5.281 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material encouraged me to reflect on a range of learning when attempting to solve problems | -5.716 | . 000 |
| Assessment was integrated within this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.885 | . 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material offered the opportunity for me to defend my views / opinions developed | -3.455 | . 001 |
| My understanding of the issues has changed having worked through this computer-based "on-screen text" / "on-screen exercise" version of this material | -5.422 | 000 |
| This computer-based "on-screen text" / "on-screen exercise" version of this material contained too much on-screen text | -4.668 | . 000 |
| I find myself wanting to read this computer-based "on-screen text" / "on-screen exercise" version of this material from a print out, rather than on-screen | -3.937 | . 000 |
| I would have been better off reading a book than using this computer-based "on-screen text" / "on-screen exercise" version of this material | -5.333 | . 000 |
| I worked through all the elements of this computer-based "on-screen text" / "on-screen exercise" version of this material | -2.453 | . 014 |
| I was unsure what I should do when using the interactive elements of this computer-based "on-screen text" / "on-screen exercise" version of this material (ie the instructions were not clear) | -2.595 | . 009 |


| A4.2 SHS Wilcoxon Signed Ranks Test Results Summary By Questionnaire Item Questions Relating to Computer-Based Exercise / Scenario Material (N of Items = 64) (continued) | 2 Score | Sig Level (2 tailed) |
| :---: | :---: | :---: |
| The interactive elements in this computer-based "on-screen text" / "on-screen exercise" version of this material helped my understanding | -5.035 | . 000 |
| The look of the screen displays in this computer-based "on-screen text" / "on-screen exercise" version of this material helped motivate me | -5.587 | . 000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is better than other computer-based material I've used | -5.582 | . 000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is as good as other computer-based material I've used | -4.209 | . 000 |
| The presentation of this computer-based "on-screen text" / "on-screen exercise" version of this material is not as good as other computer-based material I've used | -4.837 | . 000 |
| The on-screen feedback provided helps me check I'm learning from this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.328 | . 001 |
| I'm not sure whether I'm learning what I should from this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.638 | . 000 |
| I found this computer-based "on-screen text" / "on-screen exercise" version of this material allowed me to practice doing the things I needed to do | -6.011 | . 000 |
| I found this computer-based "on-screen text" / "on-screen exercise" version of this material engaging to the point where I kept trying to solve the problems or make the decisions | -5.637 | . 000 |
| I found the on-screen feedback in this computer-based "on-screen text" / "on-screen exercise" version of this material made me actively think about my decisions | -5.415 | . 000 |
| Having video clips increased my engagement with this computer-based "on-screen text" / "on-screen exercise" version of this material | -2.177 | . 029 |
| Having high quality images helped my understanding of this computer-based "on-screen text" / "on-screen exercise" version of this material | -3.404 | . 001 |
| Having high quality images increased my engagement with this computer-based "on-screen text" / "onscreen exercise" version of this material | -2.469 | . 014 |

## A4.3: No Significant Difference Results by Questionnaire Item for SHS Case Study 2 Controlled Investigation

| A43: No Significant Difference Results by Questionnaire Item for SHS Case Study 2 Controlled <br> Investigation | Z Score | Sig <br> Level <br> (2 tailed) |
| :--- | :--- | :--- |
| I had to think carefully before deciding what to look at next in this computer-based "on-screen text" / <br> "on-scren exercise" version of this material | -1.737 | .082 |
| I could control the pace at which I worked through this computer-based "on-screen text" / "on-screen <br> exercise" version of this material | -.953 | .340 |
| I did not get lost when navigating through this computer-based "on-screen text" / "on-screen exercise" <br> version of this materia) | -.887 | .375 |
| Whenever I got lost this computer-based "on-screen text" / "on-screen exercise" version of this material <br> made it easy for me to find where I was | -1.771 | .077 |
| My view of this computer-based "on-screen text" / "on-screen exercise" version of this material has <br> been influenced by other computer-based material I've used | -1.391 | .164 |
| Having voice over material helped my understanding of this computer-based "on-screen text" /"on- <br> screen execrise"version of this material | -.595 | .552 |
| Having voice over material increased my engagement with this computer-based "on-screen text" /"on- <br> screen exercise" version of this material | -1.094 | .274 |
| Hearing the voices of fhe characters in the scenario increased my engagement with this computer-based <br> lon-screen text" / "on-screen exercise" version of this material | -.722 | .470 |

## A4.4: SHS Q3 Midpoint Open Responses Semester 21999 to 2000

| A4.4 SHS Midpoint Results Semester 2 1999/2000 ( $\mathrm{N}=51$ ) | Total by Item | Total \% by Item |
| :---: | :---: | :---: |
| relevance | 48 | 94\% |
| computer aids info retrieval | 27 | 53\% |
| computer aids learning | 18 | 35\% |
| could revisit info easily | 8 | 16\% |
| feedback explanation important | 5 | 10\% |
| multimedia important | 37 | 73\% |
| graphics valuable | 8 | 16\% |
| graphics aid learning | 20 | 39\% |
| personal control | 4 | 8\% |
| self management important | 13 | 25\% |
| novelty value adds interest | 7 | 14\% |
| interactivity important | 14 | 27\% |
| feedback on demand important | 2 | 4\% |
| text valuable | 3 | 6\% |
| exercises aided learning | 3 | 6\% |
| exercises add interest | 1 | 2\% |
| time flexibility | 7 | 14\% |
| pace flexibility | 11 | 22\% |
| helps check learning | 3 | 6\% |
| graphics add interest | 6 | 12\% |
| lack of location flexibility | 20 | 39\% |
| hard copy wanted | 5 | 10\% |
| human contact important | 9 | 18\% |
| assessment motivates | 16 | 31\% |
| route flexibility important | 1 | 2\% |
| ease of use important | 44 | 86\% |
| colour important | 6 | 12\% |
| not better than book | 9 | 18\% |
| better than book | 35 | 69\% |
| computer adds interest | 19 | 37\% |
| would not want all classes / material on computer | 19 | 37\% |
| text alone is boring | 5 | 10\% |
| variety in style of presentation | 1 | 2\% |
| variety important | 8 | 16\% |
| fun/humour positive | 9 | 18\% |
| practical focus motivate | 2 | 4\% |
| examples important - real life | 20 | 39\% |
| simple language helps | 2 | 4\% |
| malfunctions have negative effect | 11 | 22\% |
| too much text has negative effect | 3 | 6\% |
| breaks in text important | 2 | 4\% |
| interest engaged | , | 2\% |
| content not satisfactory | I | 2\% |
| links confusing | 1 | 2\% |
| visual display aided learning | 32 | 63\% |
| visual display add interest | 9 | 18\% |
| video aided learning | 44 | 86\% |
| video added interest | 22 | 43\% |
| better than case studies | 17 | 33\% |
| not better than case studies | 12 | 24\% |
| prefer tutorial face to face | 13 | 25\% |
| prefer $\mathrm{q} \& \mathrm{a}$ face to face | 5 | 10\% |


| A4.4 SHS Midpoint Results Semester 2 1999 / 2000 <br> (N=51) (continued) | Total by <br> Item | Total \% <br> by Item |
| :--- | :--- | :--- |
| prefer academic learning face to face | 5 | $10 \%$ |
| prefer guest speakers | 3 | $6 \%$ |
| simulations aided learning | 34 | $67 \%$ |
| simulations added interest | 11 | $22 \%$ |
| too much information | 4 | $8 \%$ |
| not better than lecture | 5 | $10 \%$ |
| better than lecture | 31 | $61 \%$ |
| more graphics wanted | 1 | $2 \%$ |
| more exercises wanted | 2 | $4 \%$ |

## A4.5: SHS Q4 Exit Open Responses Semester 21999 to 2000 (Responses to Statements)

| A4.5 SIIS Exit Results Semester 2 1999 / 2000 (N=34) | Total by <br> Item | Total \% <br> by Item |
| :--- | :--- | :--- |
| relevance | 33 | $97 \%$ |
| computer aids info retrieval | 27 | $79 \%$ |
| computer aids learning | 2 | $6 \%$ |
| could revisit info easily | 26 | $76 \%$ |
| multimedia important | 32 | $94 \%$ |
| graphics valuable | 32 | $94 \%$ |
| graphics aid learning | 32 | $94 \%$ |
| offers practice | 29 | $85 \%$ |
| self management important | 25 | $74 \%$ |
| novelty value adds interest | 33 | $97 \%$ |
| interactivity important | 31 | $91 \%$ |
| feedback on demand important | 26 | $76 \%$ |
| time flexibility | 18 | $53 \%$ |
| pace flexibility | 19 | $56 \%$ |
| graphics add interest | 31 | $91 \%$ |
| lack of location flexibility | 31 | $91 \%$ |
| human contact important | 26 | $76 \%$ |
| assessment motivates | 30 | $88 \%$ |
| route flexibility important | 18 | $53 \%$ |
| ease of use important | 33 | $97 \%$ |
| colour important | 33 | $97 \%$ |
| better than book | 28 | $82 \%$ |
| computer adds interest | 18 | $53 \%$ |
| would not want all classes / material on computer | 6 | $18 \%$ |
| not better than practical labs | 1 | $3 \%$ |
| text alone is boring | 27 | $79 \%$ |
| variety important | 33 | $97 \%$ |
| fun / humour positive | 32 | $94 \%$ |
| challenge | 1 | $3 \%$ |
| practical focus motivates | 26 | $76 \%$ |
| examples important - real lif | 33 | $97 \%$ |
| malfunctions have negative effect | 12 | $35 \%$ |
| too much text has negative effect | 12 | $35 \%$ |
| interest engaged | 30 | $88 \%$ |
| content not satisfactory | 13 | $38 \%$ |
| visual display aided learning | 31 | $91 \%$ |
| video aided learning | 33 | $97 \%$ |
| video added interest | 31 | better than case studies |
| prefer tutorial face to face | $50 \%$ |  |
|  | $76 \%$ |  |
|  |  |  |


| A4.5 SHS Exit Results Semester 2 1999/2000 (N=34) | Total by <br> Item | Total \% <br> by Item |
| :--- | :--- | :--- |
| prefer q\&a face to face | 26 | $76 \%$ |
| aspects of the material became irritating | 11 | $32 \%$ |
| role play provoked thought | 27 | $79 \%$ |
| tutorial in computer use desired | 25 | $74 \%$ |
| printed user manual desired | 27 | $79 \%$ |
| qa workbook desired | 25 | $74 \%$ |
| too much information | 11 | $32 \%$ |
| better than lecture | 16 | $47 \%$ |

A4.6: SHS Open Responses by Batch Semester 1 \& 21999 / 2000

| A4.6 SHS Open Responses by Batch Semester 1 \& 2 $1999 / 2000$ | Entrance <br> Total by Item $(\mathrm{N}=81)$ | Entrance <br> Total by Item | Midpoint <br> Total by <br> Item <br> ( $\mathrm{N}=51$ ) | Midpoint Total by Item | Exit Total by Item $(\mathrm{N}=34)$ | Exit <br> Total <br> \% by <br> Item |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Relevance | 47 | 58\% | 48 | 94\% | 33 | 97\% |
| Computer aids info retrieval | 71 | 88\% | 27 | 53\% | 27 | 79\% |
| Computer aids learning | 62 | 77\% | 18 | 35\% | 2 | 6\% |
| confidence level increased | 59 | 73\% | 0 | 0\% | 0 | 0\% |
| could revisit info easily | 16 | 20\% | 8 | 16\% | 26 | 76\% |
| feedback explanation important | 6 | 7\% | 5 | 10\% | 0 | 0\% |
| multimedia important | 28 | 35\% | 37 | 73\% | 32 | 94\% |
| graphics valuable | 17 | 21\% | 8 | 16\% | 32 | 94\% |
| graphics aid learning | 14 | 17\% | 20 | 39\% | 32 | 94\% |
| give exemplars | 2 | 2\% | 0 | 0\% | 0 | 0\% |
| offers practice | 5 | 6\% | 0 | 0\% | 29 | 85\% |
| personal control | 4 | 5\% | 4 | 8\% | 0 | 0\% |
| self management important | 4 | 5\% | 13 | 25\% | 25 | 74\% |
| novelty value adds interest | 7 | 9\% | 7 | 14\% | 33 | 97\% |
| interactivity important | 20 | 25\% | 14 | 27\% | 31 | 91\% |
| feedback on demand important | 6 | 7\% | 2 | 4\% | 26 | 76\% |
| text valuable | 8 | 10\% | 3 | 6\% | 0 | 0\% |
| Exercises aided learning | 4 | 5\% | 3 | 6\% | 0 | 0\% |
| Exercises add interest | 2 | 2\% | 1 | 2\% | 0 | 0\% |
| time flexibility | 13 | 16\% | 7 | 14\% | 18 | 53\% |
| pace flexibility | 14 | 17\% | 11 | 22\% | 19 | 56\% |
| helps check learning | 20 | 25\% | 3 | 6\% | 0 | 0\% |
| graphics add interest | 25 | 31\% | 6 | 12\% | 31 | 91\% |
| lack of location flexibility | 20 | 25\% | 20 | 39\% | 31 | 91\% |
| hard copy wanted | 3 | 4\% | 5 | 10\% | 0 | 0\% |
| comfortable with computers | 54 | 67\% | 0 | 0\% | 0 | 0\% |
| human contact important | 11 | 14\% | 9 | 18\% | 26 | 76\% |
| assessment motivates | 14 | 17\% | 16 | 31\% | 30 | 88\% |
| route flexibility important | 2 | 2\% | 1 | 2\% | 18 | 53\% |
| (experienced with) Internet | 1 | 1\% | 0 | 0\% | 0 | 0\% |
| virtual reality desired | 4 | 5\% | 0 | 0\% | 0 | 0\% |
| ease of use important | 53 | 65\% | 44 | 86\% | 33 | 97\% |
| colour important | 6 | 7\% | 6 | 12\% | 33 | 97\% |
| access to home computer | 1 | 1\% | 0 | 0\% | 0 | 0\% |
| not better than book | 7 | 9\% | 9 | 18\% | 0 | 0\% |
| better than book | 11 | 14\% | 35 | 69\% | 28 | 82\% |
| Computer adds interest | 6 | 7\% | 19 | 37\% | 18 | 53\% |


| A4.6 SHS Open Responses by Batch Semester 1 \& 2 1999 / 2000 (continued) | Entrance <br> Total by Item $(\mathrm{N}=81)$ | Entrance <br> Total by Item | Midpoint <br> Total by Item $(\mathrm{N}=51)$ | Midpoint Total by Item | Exit <br> Total by Item $(\mathrm{N}=34)$ | Exit <br> Total \% by <br> Item |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Computer adds enjoyment | 2 | 2\% | 0 | 0\% | 0 | 0\% |
| experienced using computers | 14 | 17\% | 0 | 0\% | 0 | 0\% |
| would not want all classes / material on computer | 8 | 10\% | 19 | 37\% | 6 | 18\% |
| not better than practical labs | 5 | 6\% | 0 | 0\% | 1 | 3\% |
| text alone is boring | 34 | 42\% | 5 | 10\% | 27 | 79\% |
| games | 8 | 10\% | 0 | 0\% | 0 | 0\% |
| variety in style of presentation | 7 | 9\% | 1 | 2\% | 0 | 0\% |
| variety important | 2 | 2\% | 8 | 16\% | 33 | 97\% |
| note-taking better on computer | 1 | 1\% | 0 | 0\% | 0 | 0\% |
| note-taking not better on computer | 3 | 4\% | 0 | 0\% | 0 | 0\% |
| fun / humour positive | 5 | 6\% | 9 | 18\% | 32 | 94\% |
| Challenge | 4 | 5\% | 0 | 0\% | 1 | 3\% |
| practical focus motivates | 5 | 6\% | 2 | 4\% | 26 | 76\% |
| Examples important - real life | 1 | 1\% | 20 | 39\% | 33 | 97\% |
| simple language helps | 6 | 7\% | 2 | 4\% | 0 | 0\% |
| feedback explanation important | 0 | 0\% | 0 | 0\% | 0 | 0\% |
| eye strain / fatigue | 12 | 15\% | 0 | 0\% | 0 | 0\% |
| malfunctions have negative effect | 8 | 10\% | 11 | 22\% | 12 | 35\% |
| feel isolated | 0 | 0\% | 0 | 0\% | 0 | 0\% |
| too much text has negative effect | 20 | 25\% | 3 | 6\% | 12 | 35\% |
| breaks in text important | 2 | 2\% | 2 | 4\% | 0 | 0\% |
| interest engaged | 1 | 1\% | 1 | 2\% | 30 | 88\% |
| being entertained important | 1 | 1\% | 0 | 0\% | 0 | 0\% |
| experienced with email | 54 | 67\% | 0 | 0\% | 0 | 0\% |
| social communication via email | 42 | 52\% | 0 | 0\% | 0 | 0\% |
| Electronic commerce - purchasing / business | 3 | 4\% | 0 | 0\% | 0 | 0\% |
| experienced with net | 56 | 69\% | 0 | 0\% | 0 | 0\% |
| content not satisfactory |  |  | 1 | 2\% | 13 | 38\% |
| links confusing |  |  | 1 | 2\% | 0 | 0\% |
| visual display aided learning |  |  | 32 | 63\% | 31 | 91\% |
| visual display add interest |  |  | 9 | 18\% |  |  |
| video aided learning |  |  | 44 | 86\% | 33 | 97\% |
| video added interest |  |  | 22 | 43\% | 31 | 91\% |
| better than case studies |  |  | 17 | 33\% | 17 | 50\% |
| not better than case studies |  |  | 12 | 24\% |  | 0\% |
| prefer tutorial face to face |  |  | 13 | 25\% | 26 | 76\% |
| prefer q\&a face to face |  |  | 5 | 10\% | 26 | 76\% |
| prefer academic learning face to face |  |  | 5 | 10\% | 0 | 0\% |
| aspects of the material became irritating |  |  |  |  | 11 | 32\% |
| role play provoked thought |  |  |  |  | 27 | 79\% |
| tutorial in computer use desired |  |  |  |  | 25 | 74\% |
| printed user manual desired |  |  |  |  | 27 | 79\% |
| ga workbook desired |  |  |  |  | 25 | 74\% |
| more guidance required to check learning |  |  |  |  | 0 | 0\% |
| real, hands-on experience important |  |  |  |  | 0 | 0\% |
| simulations aided learning |  |  | 34 | 67\% | 0 | 0\% |
| simulations added interest |  |  | 11 | 22\% | 0 | 0\% |
| too much information |  |  | 4 | 8\% | 11 | 32\% |


| A4.6 SHS Open Responses by Batch Semester 1 \& 2 <br> $\mathbf{1 9 9 9 / 2 0 0 0}$ (continued) | Entrance <br> Total by <br> Item <br> $(\mathbf{N}=81)$ | Entrance <br> Total by <br> Item | Midpoint <br> Total by <br> Item <br> $(\mathbf{N}=51)$ | Midpoint <br> Total by <br> Item | Exit <br> Total by <br> Item <br> $(\mathbf{N}=34)$ | Exit <br> Total <br> \% by <br> Item |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| not better than lecture |  |  | 5 | $10 \%$ | $\mathbf{1 6}$ | $47 \%$ |
| Simulated environment motivates | 3 | $4 \%$ |  |  | 0 | $0 \%$ |
| more graphics wanted |  |  | 1 | $2 \%$ |  |  |
| more exercises wanted |  |  | 2 | $4 \%$ |  |  |

A4.7: SHS Q2 Entrance Learning Style Inventory Results Entrance Sem 199 to 00

| A4.7 SHS Entrance <br> Sem 199 to 00 | (Visual) | (Auditory) | (Tactile) |
| :---: | :---: | :---: | :---: |
| Subject | VPS 1 | APS 1 | TPS 1 |
| 1. | 29 | 31 | 35 |
| 2. | 27 | 33 | 19 |
| 3. | 33 | 27 | 23 |
| 4. | 33 | 31 | 27 |
| 5. | 37 | 29 | 21 |
| 6. | 37 | 33 | 35 |
| 7. | 27 | 33 | 27 |
| 8. | 31 | 35 | 33 |
| 9. | 35 | 33 | 25 |
| 10. | 35 | 27 | 35 |
| 11. | 33 | 31 | 23 |
| 12. | 33 | 33 | 21 |
| 13. | 33 | 23 | 23 |
| 14. | 33 | 31 | 31 |
| 15. | 31 | 29 | 27 |
| 16. | 35 | 33 | 27 |
| 17. | 31 | 37 | 23 |
| 18. | 31 | 25 | 29 |
| 19. | 29 | 29 | 25 |
| 20. | 37 | 29 | 23 |
| 21. | 33 | 29 | 27 |
| 22. | 39 | 35 | 27 |
| 23. | 31 | 27 | 27 |
| 24. | 35 | 27 | 33 |
| 25. | 39 | 35 | 25 |
| 26. | 31 | 39 | 33 |
| 27. | 35 | 27 | 25 |
| 28. | 31 | 25 | 29 |
| 29. | 37 | 31 | 17 |
| 30. | 35 | 24 | 20 |
| 31. | 27 | 27 | 31 |
| 32. | 33 | 35 | 33 |
| 33. | 25 | 25 | 29 |
| 34. | 27 | 29 | 29 |
| 35. | 25 | 29 | 21 |
| 36. | 35 | 27 | 23 |
| 37. | 29 | 33 | 23 |
| 38. | 27 | 29 | 27 |


| A4.7 SHS Entrance <br> Sem 199 to 00 (continued) | (Visual) | (Auditory) | (Tactile) |
| :---: | :---: | :---: | :---: |
| Subject | VPS 1 | APS 1 | TPS 1 |
| 39. | 37 | 33 | 25 |
| 40. | 25 | 25 | 15 |
| 41. | 33 | 21 | 35 |
| 42. | 35 | 39 | 35 |
| 43. | 37 | 21 | 28 |
| 44. | 33 | 29 | 31 |
| 45. | 27 | 23 | 27 |
| 46. | 37 | 23 | 27 |
| 47. | 39 | 27 | 21 |
| 48. | 23 | 29 | 23 |
| 49. | 29 | 29 | 29 |
| 50. | 31 | 37 | 27 |
| 51. | 35 | 31 | 35 |
| 52. | 39 | 23 | 21 |
| 53. | 39 | 27 | 29 |
| 54. | 31 | 29 | 23 |
| 55. | 27 | 23 | 29 |
| 56. | 37 | 28 | 37 |
| 57. | 33 | 29 | 23 |
| 58. | 23 | 29 | 31 |
| 59. | 31 | 27 | 15 |
| 60. | 25 | 29 | 37 |
| 61. | 35 | 31 | 27 |
| 62. | 41 | 25 | 31 |
| 63. | 29 | 27 | 23 |
| 64. | 31 | 17 | 29 |
| 65. | 33 | 27 | 21 |
|  |  |  |  |
| Total | 37 | 12 | 7 |
| Total \% | 57\% | 18\% | 11\% |

A4.8: SHS 10 Academic Staff Interview Responses Semester 21999 / 2000

| A4.8 Focus Questions To Academic Staff <br> (Semester 2 1999 / 2000) | Academic Staff Interview Responses Semester 2 1999/2000 |
| :---: | :---: |
| What were your initial impressions of this CD ROM material? | This was intended initially to be a small project to produce a CD for in-house use. It was 3 to 4 months into the project before others in the department knew of the development and initially others were not $100 \%$ interested. It took a few months to convince them of the value of this project. <br> There were some issues relating to the perception of the class and the CD project. There was some misunderstanding of the "laboratory" word as used in this context. <br> Some senior academics offered comments that the students did very well etc., but some misconceptions remained in-house regarding the food $\&$ beverage class. The majority of Hotel School lecturers don't understand the class fully and perceive it as a product knowledge class. <br> The value of this project was looked at from the perspective of bottom line profit. |
| What are your views about this material now? | The material is tailored to what the students are learning in lectures and labs. Therefore I had to make $\mathrm{x}, \mathrm{y}, \mathrm{z}$, load of coffees, many I'd never done before. The material was taken on without realising what the implications would be. |
| What are the most positive aspects of this material from your perspective? | The material affects guests' perception of the Scottish Hotel School. The Cd presents the culture. Visitors - shown project <br> When we employed chefs they were shown the CD at interview. One of the interviewees walked out saying "I should be on this course - not teaching it" <br> We couldn't have done what we have without the CD Rom, we can refer to issues - not taken personally. If get everyone thinking quality, we will not need to come out with comments about standards. <br> We foresee further changes in culture and we are now getting a tandoor, which will enable Asian restaurant training. |
| What are the most negative aspects of this material from your perspective? | It was necessary not to be fully up-front about the full potential, therefore it could be presented in easily fed chunks. <br> This meant having to slightly less open with staff. |
| Was there any outcome from this approach that you hadn't expected? | There is still a need to make clearer, the kind of things we are now putting into journal articles etc. We've now had to motor to publish. We hope to give a feedback session for staff. People are not fully aware of what's going on in this class eg it was recently referred to as a productknowledge class. |
| Would you like to change anything about this package? | na |
| Would you like to change anything about the way this material is used? | na |


| A4.8 Focus Questions To Academic Staff (Semester 2 1999 / 2000) (continued) | Academic Staff Interview Responses Semester 21999 / 2000 |
| :---: | :---: |
| How has the use of this material affected the staff involved? | Since Ross Priory (seminar for staff) there is much more "understanding" regarding the focus of the course. The perception within the University of training waiters, or being a cook school was addressed. <br> Our chefs were initially worried about being locked into the CD Rom, but this has now given them the blue light for getting out and about, and on the Internet, allowing them to widen their range. The chefs now do menus for functions. <br> We are visiting London Hotels and this research will filter into our teaching. Where the previous departmental perception of this class was superficial, this project has enabled a better understanding of the issue of food and beverage in relation to quality. After our session in July there will be a better understanding of the metathinking behind the CD. <br> This project could have affected staff negatively, as it increased their load subtly. Staff had to think how to answer questions on aspects arising from the material contained. This additional material was initially kept to less than 1 week notice. <br> The drip feed approach was adopted to motivate staff and students to come on board. If the all at once approach had been adopted they wouldn't have done so. <br> The project sometimes required 5 to 10 shots of each dish. We required one photo shoot every fortnight. This was in addition to doing our operational menus. <br> We consider that it still needs a good food and beverage tutor to make best use of CD when sold. <br> So far we've avoided the "Tutor Pack", as it would be book and tutors using the material may not think as we do here. <br> Student feedback is available to us through the co-ordinator for group (lab group). They have a fair level of power (co-ordinator's lunch) - access throughout, raise issues etc <br> Our demonstrations now increased. Those on the CD are no longer done, which has allowed others to be done. <br> There is not so much worry from students. <br> Attendant to the CD we offer input on visioneering and imagineering - emotional connectivity, ethical business strategies. <br> This class has changed completely since five years ago, as a result of dissatisfaction following travels for research. Why take down a craft route when this class is a preparation for management. It's about understanding what the craftspeople have to do. It takes staff three years to be prepared for what we're doing. They have to understand the students are management. Communication and live communication flow are important therefore we look at management in the widest sense including strategic issues and trends. |


| A4.8 Focus Questions To Academic Staff (Semester 2 1999 / 2000) (continued) | Academic Staff Interview Responses Semester 2 1999/2000 |
| :---: | :---: |
| How has the use of this material affected the staff involved? (continued) | The CD has led to a completely revised class. Staff have changed their approach (existing staff). We have some new staff, for whom the CD material is included in their approach from the outset. There has been a change from staff "in charge" to students "can challenge", therefore staff need to know what they're going to say much more (than before). We need to deal with ethics eg them (students) challenging definition of right / wrong and issues of religion or medical requirements (eg Jewish client / medical issues) The CD will allow us to develop ethical business approaches dimension to the class. |
| How has the use of this material affected the students involved? | We previously used American videos. These were expensive and we lost students. <br> The CD material is more acceptable because the people shown are known to them (the students). The material is not humorous but normal. One of the nicest comments we had was that the students realised that the people shown were not professional actors or over-sanitised. Everyone is represented in the material. It is a product (CD) that is there for them (students). <br> With the role-play videos the voice-over speech kicks in as soon as video stops. There are three ways of looking at this role-play material: Look and get what you can from the scenario shown, look in close-up at aspects of non-verbal behaviour demonstrated by serving staff and customer, look at what's going on in the background. The entire scenario has been planned to offer material on a range of levels. <br> Because the students are so successful at putting the CD material into their workload, they are more relaxed than ever. They have increased empowerment, can have their say, and have become more assertive. Our students have mixed cultural knowledge. <br> Quality auditing has improved, $4 / 5$ star led. Visionary and success strategies are now covered. There is improved reflectivity. Lectures were previously pure product, but are mow more as director of food and beverage, planning and strategic. Eventually much of the current lecture material will be Web based to read up prior to class. <br> We can now make lectures more interactive, leading to improved listening skills. Emotional Intelligence, alien to before, now matters. <br> We notice students have improved in using their initiative. <br> We have changed assessment and started using mind-mapping. <br> We notice improved verbal and non-verbal communication from students. <br> The CD has opened up new avenues of discussion. Staff can discuss role play issues with students. <br> The students have a better understanding of what they're doing operationally. They are more reflective and able, with improved confidence and coping strategies. <br> The class previously had a narrow / deep approach. It now allows more depth and a wider coverage. |


| A4.8 Focus Questions To <br> Academic Staff <br> (Semester 2 1999/2000) <br> (continued) | Academic Staff Interview Responses Semester 2 1999/2000 |
| :--- | :--- |
| How has the use of this material <br> affected the students involved? <br> (continued) | We're always finding more that it offers eg people with special needs (dyslexic) student came <br> top - used mind mapping. |
|  | Students may fight among themselves. They are now managing themselves more. The CD <br> allows us to get across what is acceptable, eg what they are physically doing, with support <br> available via the CD. In the past, when attempting problem solving, students would need to <br> speak to staff. Now they can sit with headphones and use the CD. This is particularly helpful <br> for those who feel shy etc. The students can see what they must achieve as they will replicate <br> from the CD Rom |

## A4.9: SHS Chef / Technician Staff Interview Responses Semester 2 1999/2000

$\left.\begin{array}{|l|l|}\hline \begin{array}{l}\text { A4.9 Focus Questions To Staff } \\ \text { (Semester 2 1999 / 2000) }\end{array} & \text { Summary of Responses / Feedback Sheet for Chef/ Technicians } \\ \hline \begin{array}{l}\text { What were your initial } \\ \text { impressions of this CD ROM } \\ \text { material? }\end{array} & \begin{array}{l}\text { Didn't really have initial thoughts, just accepted that we'd see when we started using it. It was } \\ \text { ideal to see the presentations of the dishes. }\end{array} \\ \hline \begin{array}{l}\text { What are your views about this } \\ \text { material now? }\end{array} & \begin{array}{l}\text { The CD is easier to use than was initially expected. We need to make sure there's a balance } \\ \text { between the students using the CD and using their own initiative. In previous years they had } \\ \text { to know all the dishes and their ingredients e.g. how a fish sauce is made. The emphasis of the } \\ \text { class has changed now. The emphasis is on getting the students more involved. The problem } \\ \text { is that they don't all get to see all the aspects e.g. of butchery, breadmaking. Having the CD is } \\ \text { better than not having it. It gives another source of reference without being a book. }\end{array} \\ \hline \begin{array}{l}\text { What are the most positive } \\ \text { aspects of this material from } \\ \text { your perspective? }\end{array} & \begin{array}{l}\text { It's a good learning tool - books are more boring for the students. It's more exciting than the } \\ \text { Metablock book. It's a visual thing. They can all see all the finished dishes. Students can all } \\ \text { see e.g. flambe - they can take additional time to look if they wish. Being able to hear the }\end{array} \\ \text { pronunciation of the names of the dishes etc is very useful, particularly for the foreign } \\ \text { postgraduate students. The postgraduates are often self funding, which motivates them to do } \\ \text { the research. The CD probably has more impact with them than the undergraduates. Getting } \\ \text { questions about the differences between the pictures on the CD and what we produce can } \\ \text { stimulate thought in the students. If we get questions that's good! The material is not too } \\ \text { academic - students can understand it! }\end{array}\right\}$

| A4.9 Focus Questions To Staff <br> (Semester $\mathbf{2 ~ 1 9 9 9 ~ / ~ 2 0 0 0 ) ~}$ <br> (continued) | Summary of Responses / Feedback Sheet for Chef/Technicians |
| :--- | :--- |
| Would you like to change <br> anything about this package? | The current version only gives the name of the dish. It would be better if it gave a description <br> (as in the Metablock) e.g. "a soup made of ..." We could have material about safe working <br> practices, dress and appearance, commodities - stuff used etc (similar to the videos for the <br> restaurant scenes) |
| Would you like to change <br> anything about the way this <br> material is used? | We could refer students to reference cookery books via the CD material. We should <br> emphasise the research aspect more. This could be references to required texts, or material <br> made available on screen - either would be acceptable. We could have specific questions <br> about the dishes e.g. name a component part of ..., list the sauces / dressings ... etc. Pose <br> questions but don't lead them to the answers. The dem of the flambe allows the students to <br> ask questions. We could use the session at the beginning of the class for questions. We could <br> have a questionnaire for the dish in advance. Answers to the questionnaire could be graded. |
| How has the use of this material <br> affected the staff involved? | In previous years the dem on flambe was given in the lecture theatre, now it's up to the <br> students to access the CD. |
| How has the use of this material <br> affected the students involved? | The material is not too academic - students can understand it! It helps the attention span. <br> Some of the students can be superficial in their approach to the material on the CD. It's more <br> exciting than the Metablock book. It's a visual thing. They can all see all the finished dishes. <br> Students can all see e.g. flambe - they can take additional time to look if they wish. Being <br> able to hear the pronunciation of the names of the dishes etc is very useful, particularly for the <br> foreign postgraduate students. |

A 4.10 Case 2: SHS Mediabase: SPSS Tables for 5 Point Scale Responses












| A 4.10.2 SHS 1999 / 00 Semester 1 Entrance Q N=81 (continued) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23. Foel very comfortable touching others, hugging, handshaking. |  |  |  |  |  | 24. Follow oral directions better than written ones. |  |  |  |  |  |
|  |  | Frequency | Percent | Valid Percent | $\begin{array}{\|c\|} \hline \text { Cumulatve } \\ \text { Percent } \end{array}$ |  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|  |  |  |  |  | 150 538 | Vallid | seldom | 19 | 235 | 235 | 235 |
|  | mute conidence | 31 37 | 38.3 45.7 | 388 48.3 | $\begin{array}{r}500 \\ \hline 100\end{array}$ |  | little confidence | 45 | 556 | 55.6 | 790 |
|  | Total | 80 | 98.8 | 1000 |  |  | often | 17 | 210 | 21.0 | 1000 |
| Meseng | Syatem | 1 81 | 12 1000 |  |  |  | Total | 81. | 1000 | 1000 |  |



























## Appendix 5: Results By Batch DMLE

## A.5.1: DMLE Open Responses Semester 11998 to 1999

| A.5.1 DMLE Open Responses Sem 198 to 99 ( $\mathrm{N}=7$ ) | Total | Total \% |
| :---: | :---: | :---: |
| relevance | 3 | 43\% |
| computer aids info retrieval | 1 | 14\% |
| feedback explanation important | 1 | 14\% |
| graphics aid learning | 1 | 14\% |
| offers practice | 1 | 14\% |
| self management important | 1 | 14\% |
| novelty value adds interest | 1 | 14\% |
| interactivity important | 3 | 43\% |
| feedback on demand important | 4 | 57\% |
| exercises aided learning | 4 | 57\% |
| pace flexibility | 1 | 14\% |
| hard copy wanted | 1 | 14\% |
| human contact important | 1 | 14\% |
| ease of use important | 4 | 57\% |
| fun / humour positive | 1 | 14\% |
| challenge | 2 | 29\% |
| eye strain / fatigue | 1 | 14\% |
| malfunctions have negative effect | 2 | 29\% |
| too much text has negative effect | 2 | 29\% |
| breaks in text important | 1 | 14\% |
| simulations added interest | 1 | 14\% |
| simulations aided learning | 1 | 14\% |
| video aided learning | 1 | 14\% |
| video did not add interest | 1 | 14\% |

## A.5.2: DMLE Open Responses Semester 11999 to 2000

| A.5.2 DMLE Open Responses Sem 1 1999 to 2000 (N=7) | Total | Total \% |
| :--- | ---: | ---: |
| relevance (rel) | 7 | $100 \%$ |
| computer aids info retrieval (cair) | 3 | $43 \%$ |
| computer aids learning (cal) | 4 | $57 \%$ |
| could revisit info easily (rie) | 2 | $29 \%$ |
| feedback explanation important (fe) | 6 | $86 \%$ |
| multimedia important (mm) | 5 | $71 \%$ |
| graphics aid learning (gal) | 4 | $57 \%$ |
| give exemplars (ge) | 2 | 299 |
| self management important (sm) | 1 | $29 \%$ |
| interactivity important (I) | 5 | $71 \%$ |
| feedback on demand important (fd) | 3 | $43 \%$ |
| text valuable (tv) | 2 | $43 \%$ |
| exercises aided learning (eal) | 1 | $14 \%$ |
| pace flexibility (pf) | 1 | $14 \%$ |
| exerciseshelp check learning (hcl) | 2 | $43 \%$ |
| comfortable with computers (cft $)$ | 6 | $86 \%$ |
| human contact important (hc) | 1 | $14 \%$ |
| assessment motivates (am) | 3 | $57 \%$ |
| time flexibility important (tf) | 2 | $43 \%$ |
| Internet (net) | 3 | $43 \%$ |
| ease of use important (eu) | 5 | $100 \%$ |
| colour important © | 2 | $29 \%$ |
| better than book (bbt) | 1 | $14 \%$ |
| computer adds interest (cai) | 2 | $29 \%$ |
| experienced using computers (euc) | 2 | $29 \%$ |


| A.5.2 DMLE Open Responses Sem 1 1999 to 2000 (N=7) (continued) | Total | Total $\%$ |
| :--- | ---: | ---: |
| text alone is boring (tab) | 1 | $14 \%$ |
| games (g) | 1 | $14 \%$ |
| variety in style of presentation (vsp) | 2 | $29 \%$ |
| fun / humour positive (fh) | 1 | $14 \%$ |
| variety important (v) | 1 | $14 \%$ |
| challenge (ch) | 4 | $57 \%$ |
| examples important - real life (eir) | 3 | $43 \%$ |
| simple language helps (slh) | 1 | $14 \%$ |
| malfunctions have negative effect (mne) | 1 | $14 \%$ |
| too much text has negative effect (tmtn) | 1 | $14 \%$ |
| content not satisfactory (cns) | 1 | $29 \%$ |
| simulations added interest (sai) | 4 | $57 \%$ |
| simulations aided learning (sal) | 5 | $71 \%$ |
| visual display aided learning (visal) | 1 | $14 \%$ |
| video aided learning (val) | 3 | $43 \%$ |
| video did not add interest (vidai -ve) | 4 | $86 \%$ |
| video added interest (vidai) | 2 | $29 \%$ |
| prefer tutorial face to face (ptff) | 3 | $43 \%$ |
| prefer academic learning face to face (palff) | 2 | $29 \%$ |
| provoke learner thought and require decisions (pltrd) | 1 | $14 \%$ |
| offer multiple levels of complexity (omlc) | 4 | $57 \%$ |
| offer multiple attempts (oma) | 1 | $14 \%$ |
| problem solving provoked thought (pspt) | 7 | $100 \%$ |
| multiple choice would help check learning (mch) | 3 | $43 \%$ |

## A.5.3: DMLE Open Responses Semester 12000 to 2001

| A.5.3 DMLE Open Responses Sem 12000 to 2001 (N=32) | Total | Total \% |
| :--- | ---: | ---: |
| relevance | 27 | $84 \%$ |
| computer aids info retrieval | 2 | $6 \%$ |
| computer aids learning | 11 | $34 \%$ |
| could revisit info easily | 1 | $3 \%$ |
| feedback explanation important | 11 | $34 \%$ |
| multimedia important | 1 | $3 \%$ |
| graphics aid learning | 2 | $6 \%$ |
| give exemplars | 1 | $3 \%$ |
| offers practice | 1 | $3 \%$ |
| self management important | 2 | $6 \%$ |
| novelty value adds interest | 2 | $6 \%$ |
| interactivity important | 9 | $28 \%$ |
| feedback on demand important | 7 | $22 \%$ |
| pace flexibility | 1 | $3 \%$ |
| exerciseshelp check learning | 1 | $3 \%$ |
| graphics add interest | 1 | $3 \%$ |
| lack of location flexibility | 6 | $19 \%$ |
| hard copy wanted | 1 | $3 \%$ |
| human contact important | 3 | $9 \%$ |
| assessment motivates | 6 | $19 \%$ |
| time flexibility important | 4 | $13 \%$ |
| ease of use important | 16 | $50 \%$ |
| colour important | 1 | $3 \%$ |
| better than book | 20 | $63 \%$ |
| computer adds interest | 14 | $44 \%$ |
| computer adds enjoyment | 4 | $13 \%$ |
| experienced using computers | 1 | $3 \%$ |
| would not want all classes / material on computer | 5 | $16 \%$ |


| A.5.3 DMLE Open Responses Sem 12000 to 2001 (N=32) (continued) | Total | Total \% |
| :---: | :---: | :---: |
| not better than practical labs | 22 | 69\% |
| text alone is boring | 2 | 6\% |
| games | 16 | 50\% |
| variety in style of presentation | 1 | 3\% |
| fun / humour positive | 6 | 19\% |
| variety important | 6 | 19\% |
| challenge | 16 | 50\% |
| examples important - real life | 2 | 6\% |
| simple language helps | 1 | 3\% |
| eye strain / fatigue | 2 | 6\% |
| malfunctions have negative effect | 1 | 3\% |
| too much text has negative effect | 11 | 34\% |
| engaged by computer-based material | 7 | 22\% |
| content not satisfactory | 1 | 3\% |
| not better than lecture | 1 | 3\% |
| better than case studies | 18 | 56\% |
| better than lecture | 1 | 3\% |
| simulations added interest | 2 | 6\% |
| simulations aided learning | 29 | 91\% |
| visual display added interest | 7 | 22\% |
| visual display aided learning | 12 | 38\% |
| video aided learning | 10 | 31\% |
| video did not add interest | 3 | 9\% |
| video added interest | 7 | 22\% |
| not better than case studies | 1 | 3\% |
| prefer tutorial face to face | 3 | 9\% |
| prefer academic learning face to face | 1 | 3\% |
| tutorial in computer use desired | 2 | 6\% |
| printed user manual desired | 1 | 3\% |
| problem solving provoked thought | 13 | 41\% |
| visual display aids learning | 1 | 3\% |

A.5.4: DMLE Learning Style Inventory Results Semester 11999 to 2000

| A.5.4 DMLE Sem 199 to 00 | (visual) | (auditory) | (tactile) |
| :--- | :--- | :--- | :--- |
| Subject | VPS 1 | APS 1 | TPS 1 |
| 1 | 33 | 27 | 22 |
| 2 | 25 | 27 | 14 |
| 3 | 29 | 29 | 16 |
| 4 | 37 | 33 | 18 |
| 5 | 37 | 27 | 15 |
| 6 | 35 | 20 | 22 |
| 7 | 39 | 29 | 18 |
|  |  |  |  |
| Total | 5 | 1 |  |
| Total \% | $71 \%$ | $14 \%$ |  |

A 5.5 Case 3: DMLE: SPSS Frequency Tables for 5 Point Scale Responses




## A.5.5.2 DMLE 1999 / 00 Semester 1 Single Questionnaire $N=7$









## Appendix 6: Results By Batch Case 4 HBS

## A.6: HBS Open Responses

| A.6: HBS Open Responses | Totals | Total \% |
| :--- | ---: | ---: |
| Semester 1 1999 to $\mathbf{2 0 0 0}$ (N = 17) |  |  |
| relevance |  |  |
| ease of use important | 12 | $71 \%$ |
| would not want all classes / material on computer | 6 | $35 \%$ |
| games | 5 | $29 \%$ |
| computer aids info retrieval | 3 | $18 \%$ |
| feedback explanation important | 1 | $6 \%$ |
| offers practice | 1 | $6 \%$ |
| interactivity important | 1 | $6 \%$ |
| feedback on demand important | 1 | $6 \%$ |
| time flexibility important | 1 | $6 \%$ |
| fun / humour positive | 1 | $6 \%$ |
| examples important $\boldsymbol{r e a l}$ life | 1 | $6 \%$ |
| content not satisfactory | 1 | $6 \%$ |
| simulations added interest | 1 | $6 \%$ |

## Appendix 7: Results By Batch Case 5 Woolwich MNE

A.7.1: Woolwich Learning Styles Semester 1 to 2 1999/2000

| A.7.1: Woolwich Learning | VPS 1 | APS 1 | TPS 1 |
| :--- | ---: | ---: | ---: |
| Styles Semester 1 to 2 1999 / |  |  |  |
| 2000 |  |  |  |
| Subject |  |  |  |
| 1 | 27 | 29 | 29 |
| 2 | 33 | 19 | 21 |
| 3 | 26 | 26 | 20 |
| 4 | 37 | 19 | 24 |
| 5 | 31 | 25 | 27 |
|  |  |  |  |
| Total | 3 |  |  |
| Total \% | $60 \%$ |  |  |

A.7.2: Woolwich ASSIST Approach to Learning Semester 1 to 21999 / 2000

| A.7.2: Woolwich ASSIST Semester 1 to 2 1999/2000 | Deep Approach | DA | Strategic Approach | Strategic Approach Adjusted | SA | Surface Apathetic Approach | SAA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (sm+ri+ue+ii) |  | $\begin{aligned} & \text { (os+tm+aad+ } \\ & \text { ach }+ \text { me }) \end{aligned}$ | $\begin{aligned} & (\text { os }+ \text { tm }+ \text { aad }+\mathrm{ac} \\ & \mathrm{h}+\mathrm{me}) \times 0.8 \end{aligned}$ |  | $\begin{aligned} & \text { (lp+um+sb } \\ & +\mathrm{ff}) \end{aligned}$ |  |
| Subject 1 | 57 |  | 93 | 74 | 1 | 37 |  |
| Subject 2 | 64 | 1 | 54 | 43 |  | 41 |  |
| Subject 3 | 45 |  | 56 | 45 |  | 52 | 1 |
| Subject 4 | 70 | 1 | 67 | 54 |  | 39 |  |
| Subject 5 | 53 | 1 | 52 | 42 |  | 46 |  |
|  | Total N | 3 |  | Total N | 1 | Total N | 1 |
|  |  |  |  |  |  |  |  |
|  | Total \% | 60\% |  | Total \% | 20\% | Total \% | 20\% |

A.7.3: Woolwich ASSIST Preferences for different types of course and teaching Semester 1 to 2 1999/2000

| A.7.3 Woolwich | Supporting <br> ASSIST |
| :--- | :--- | :--- |
| Semester 1 to 2 |  |
| Snderstanding |  |
| (related to deep |  |
| approach) |  |$\quad$|  | Transmitting <br> Information <br> (related to surface <br> approach) |  |
| :--- | ---: | :--- |
| Subject 1 | 9 |  |
| Subject 2 | 19 | 20 |
| Subject 3 | 0 | 16 |
| Subject 4 | 19 | 0 |
| Subject 5 | 19 | 16 |
| Total N | $\mathbf{3}$ |  |
|  |  | 14 |
| Total \% |  | 1 |

## A.7.4: Woolwich Preferred Computer Environment Semester 1 to 21999 / 2000

| A.7.4: Woolwich Preferred Computer Environment Semester 1 to 2 1999/2000 | Total N <br> at 4 to 5 Level | Total \% |
| :--- | :--- | :--- |
| Electronic Book | 0 | $0 \%$ |
| Game Approach | 2 | $40 \%$ |
| Simulated Environment | 3 | $60 \%$ |
| Combination of Electronic Book, Computer Game and Simulated Environment | 3 | $60 \%$ |

## A.7.5: Woolwich Open Responses First Questionnaire Semester 1 to 21999 / 2000 to Semester 21999 /2000

| A.7.5: Woolwich Open Responses First Questionnaire <br> Semester 1 to 2 1999 to Semester 2 1999 to 2000 |  |  |
| :--- | ---: | ---: |
| Televance | Total \% |  |
| feedback explanation important | 5 | $100 \%$ |
| graphics aid learning | 5 | $100 \%$ |
| offers practice | 2 | $40 \%$ |
| self management important | 4 | $80 \%$ |
| feedback on demand important | 1 | $20 \%$ |
| exercises aided learning | 5 | $100 \%$ |
| pace flexibility | 3 | $60 \%$ |
| hard copy wanted | 2 | $40 \%$ |
| human contact important | 1 | $20 \%$ |
| ease of use important | 1 | $20 \%$ |
| simple language helps | 1 | $20 \%$ |
| text valuable | 1 | $20 \%$ |
| too much text has negative effect | 3 | $60 \%$ |
| recall (text) alone boring | 1 | $20 \%$ |
| simulations aided learning | 1 | $20 \%$ |
| offered multiple attempts | 2 | $40 \%$ |
| problem solving provoked thought | 4 | $80 \%$ |
| make exercises more complex | 4 | $80 \%$ |
| more exercises wanted | 3 | $60 \%$ |
| demonstrations valuable | 3 | $60 \%$ |
| assessment motivates | 1 | $20 \%$ |
| prefer academic learning (lectures) face to face | 5 | $100 \%$ |
| visual display aids learning | 3 | $60 \%$ |
| examples important real life | 2 | $40 \%$ |
| give exemplars | 3 | $60 \%$ |
| not better than a book | 1 | $20 \%$ |
| too many windows | 2 | $40 \%$ |
|  | 1 | $20 \%$ |

## A.7.6: Woolwich Open Responses Second Questionnaire Semester 1 to 21999 / 2000 to Semester 21999 /2000

| A.7.6: Woolwich Open Responses Second Questionnaire <br> Semester 1 to 2 1999 to Semester 2 1999 to 2000 |  |  |
| :--- | ---: | ---: |
| relevance | Total | Total \% |
| feedback explanation important | 2 | $100 \%$ |
| graphics aid learning | 2 | $100 \%$ |
| offers practice | 2 | $100 \%$ |
| feedback on demand important | 2 | $100 \%$ |


| A.7.6: Woolwich Open Responses Second Questionnaire <br> Semester 1 to 2 1999 to Semester 2 1999 to 2000 <br> (continued) |  |  |
| :--- | ---: | ---: |
| exercises aided learning | Total | Total \% |
| pace flexibility | 1 | $50 \%$ |
| ease of use important | 1 | $50 \%$ |
| simple language helps | 1 | $50 \%$ |
| text valuable | 1 | $50 \%$ |
| too much text has negative effect | 2 | $100 \%$ |
| breaks in text important | 1 | $50 \%$ |
| simulations aided learning | 1 | $50 \%$ |
| offered multiple attempts | 2 | $100 \%$ |
| problem solving provoked thought | 2 | $100 \%$ |
| make exercises more complex | 2 | $100 \%$ |
| more exercises / simulations wanted | 1 | $50 \%$ |
| demonstrations valuable | 1 | $50 \%$ |
| assessment motivates | 1 | $50 \%$ |
| visual display aids learning | 2 | $100 \%$ |
| examples important real life | 1 | $50 \%$ |
| revisit information easily | 2 | $100 \%$ |
| variety important | 1 | $50 \%$ |
| personal control important | 1 | $50 \%$ |

## A.7.7: Woolwich Open Responses Third Questionnaire Semester 2 1999/2000

| A.7.7: Woolwich Open Responses Third <br> Questionnaire Semester 2 1999 to 2000 | Total | Total \% |
| :--- | ---: | ---: |
| computer aids info retrieval | 4 | $80 \%$ |
| feedback explanation important | 4 | $80 \%$ |
| graphics aid learning | 4 | $80 \%$ |
| offers practice | 4 | $80 \%$ |
| interactivity important | 1 | $20 \%$ |
| feedback on demand important | 3 | $60 \%$ |
| exercises aided learning | 4 | $80 \%$ |
| pace flexibility | 3 | $60 \%$ |
| hard copy wanted | 3 | $60 \%$ |
| ease of use important | 4 | $80 \%$ |
| fun / humour positive | 1 | $20 \%$ |
| simple language helps | 4 | $80 \%$ |
| text valuable | 4 | $80 \%$ |
| too much text has negative effect | 4 | $60 \%$ |
| simulations aided learning | 4 | $80 \%$ |
| offered multiple attempts | 4 | $80 \%$ |
| problem solving provoked thought | 2 | $40 \%$ |
| make exercises more complex | 4 | $80 \%$ |
| demonstrations valuable | 2 | $40 \%$ |
| assessment motivates | 4 | $80 \%$ |
| examples important real life | 4 | $80 \%$ |
| too many windows | 3 | $60 \%$ |
| revisit information easily | 1 | $20 \%$ |
| variety important | 1 | $20 \%$ |
| personal control important | 4 | $80 \%$ |
| not all classes on computer | 4 | $80 \%$ |
| (lack of location flexibility | 1 | $20 \%$ |
|  |  |  |

## Appendix 8: Questionnaires Used in Case 1 SEI "Introduction to Entrepreneurship"

(Note: Original layout sizes have been adjusted in order to reduce overall volume of the appendices required.)

## A8.1 Questionnaire 1 SEI Entrance Semester 21996 to 1997

Name
Date
If you have not yet studied this course material, you may think it inappropriate to say anything at all about your understanding of the topics below before working through the material. However completing this form will give baseline data for describing any changes in confidence levels which may be found following use of the multimedia materials.

Therefore please indicate by ticking in the relevant box, how confident you feel about your understanding of the concepts, or development of skills, listed below.

| Topic | Very <br> Confident | Confident | Some <br> Confidence | Little <br> Confidence | No <br> Confidence |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> required to run a business |  |  |  |  |  |
| Business Ideas and Opportunities |  |  |  |  |  |
| Team Building |  |  |  |  |  |
| Market Research |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Business Finance |  |  |  |  |  |
| Protecting Intellectual Property |  |  |  |  |  |
| Products \& Business Strategy |  |  |  |  |  |
| Business Funding |  |  |  |  |  |
| Idea Assessment |  |  |  |  |  |
| Business Survival Strategies |  |  |  |  |  |
| Comess |  |  |  |  |  |

Comments:

## A8.2 Questionnaire 2 SEI Exit Semester 21996 to 1997

## Name

Date
If you have not yet studied this course material, you may think it inappropriate to say anything at all about your understanding of the topics below before working through the material. However completing this form will give baseline data for describing any changes in confidence levels which may be found following use of the multimedia materials. If you have now studied some of the course material your input will enable a description to be generated regarding any changes in confidence levels at this stage.

Therefore please indicate by ticking in the relevant box, how confident you feel about your understanding of the concepts, or development of skills, listed below.

| Topic | Very <br> Confident | Confident | Some <br> Confidence | Little <br> Confidence | No <br> Confidence |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> required to run a business |  |  |  |  |  |
| Business Ideas and Opportunities |  |  |  |  |  |
| Team Building |  |  |  |  |  |
| Market Research |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Business Finance |  |  |  |  |  |
| Protecting Intellectual Property |  |  |  |  |  |
| Products \& Business Strategy |  |  |  |  |  |
| Business Funding |  |  |  |  |  |
| Idea Assessment |  |  |  |  |  |
| Business Survival Strategies |  |  |  |  |  |
| Comments: |  |  |  |  |  |

Comments:
$\qquad$ Date $\qquad$
Please give details of your learning activities for the units covered to date and any comments you may have on their effectiveness. Learning activities include anything which you feel has had an effect on your understanding of the subject. If you did any of the learning activities more than once please rate the effectiveness of each time separately.

## Effectiveness (1 not effective, $\mathbf{5}$ very effective)

| Induction Sessions |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Session 1 | Effectiveness | 1 | 2 | 3 | 4 | 5 |
| Session 2 | Effectiveness | 1 | 2 | 3 | 4 | 5 |


| Did you request Tutorial Support in the last week? | $\mathrm{Y} / \mathrm{N}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Effectiveness | 1 | 2 | 3 | 4 | 5 |

Did you make use of any of the following resources in your own time?

Self Study Sessions: Computer Lab. - Multimedia Units: $\qquad$
How long did you spend? $\qquad$ (Up to: $1 \mathrm{hr} / 2 \mathrm{hr} / 3 \mathrm{hr} / 4 \mathrm{hr} / 5 \mathrm{hr}$ )

Did you work alone? $\quad \mathrm{Y} / \mathrm{N} /$ Both

How many people did you work with? $\qquad$
Separate PCs / Same PC? $\qquad$
Effectiveness 1 3

4
5

A Reference Book How long did you spend? $\qquad$ Which book? $\qquad$
What material did you cover? (e.g. Marketing, Finance) $\qquad$

| Effectiveness | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Other Source (Please specify)
$\begin{array}{llllll}\text { Effectiveness } & 1 & 2 & 3 & 4\end{array}$
5

Did you do any of the following this week?

| Look over your personal notes |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How long did you spend? |  |  |  |  |  |  |
| What material did you cover? (e.g. Marketing, Finance) |  |  |  |  |  |  |
|  | Effectiveness | 1 | 2 | 3 | 4 | 5 |

## Speak to Tutor (outwith lecture / lab)

How long did you spend? $\qquad$
What about $\qquad$

| Effectiveness | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$$
\text { Effectiveness (1 not effective, } 5 \text { very effective) }
$$

## Talk to friends

Were you:
Giving help / Discussing / Getting help
How long did you spend? $\qquad$
What material did you cover? (e.g. Marketing, Finance) $\qquad$


Please rate the following elements of the multimedia module in terms of your learning experience:
Effectiveness (1 not effective, 5 very effective)


## A8.3 Questionnaire 3 SEI Entrance Semester 11997 to 1998

## Z1.104 Confidence Log (Entrance)

## Name <br> (PLEASE PRINT IN BLOCK CAPITALS)

## Date

$\qquad$

If you have not yet studied the material contained in this class, you may think it inappropriate to say anything at all about your understanding of the topics below before working through the material. However completing this form will give baseline data for describing any changes in confidence levels which may be found following use of the multimedia materials.

Therefore please indicate by ticking in the relevant box, how confident you feel about your understanding of the concepts, or development of skills, listed below.

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a businesss |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Intellectual Property: Patents, and Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies for Business |  |  |  |  |  |
| Addilal Comill |  |  |  |  |  |

## Additional Comments:

## Z1.104 Research Questionnaire (Entrance)

## Name

## Date

The information gained from this research will be used for PhD research purposes and will, where appropriate, be used to improve the class concerned for student users. Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How would you rate your current level of computer literacy? |  |
| What do you find most interesting about using computers? |  |
| What do you find least interesting about using computers? |  |
| If you had to describe a learning situation in which you were <br> highly motivated, what would it be? |  |
| If you had to describe a learning situation in which you were <br> not motivated to learn, what would it be? |  |
| What level of experience do you have currently in using e- <br> mail? |  |
| What level of experience do you have currently in using the <br> Internet? |  |
| Please list the computing facilities on campus which you <br> currently use. |  |


| Question | Response |
| :--- | :--- |
| Please list any computing facilities which you currently <br> access off campus. |  |
| What software do you regularly use now, and for what <br> purposes? |  |
| Any other comments? <br> (Please continue overleaf) |  |

Thank you for completing this questionnaire.

## A8.4 Questionnaire 4 SEI Exit Semester 11997 to 1998

## Z1.104 Confidence Log (Research: Exit)

Name
(PLEASE PRINT IN BLOCK CAPITALS)
Date $\qquad$
Please indicate your level of confidence, by ticking in the relevant box, for each of the concepts listed in the table below.

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Financial Issues |  |  |  |  |  |
| Patents, Strategy \& Tactics |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding Issues |  |  |  |  |  |
| Idea Assessment |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you found your confidence affected by undertaking this module, offering where possible an explanation of why this was so and how this made you feel.
$\square$
Given an ideal world, what would be your preferred way of learning using a computer as an aid?
$\square$
Thank you for completing this confidence log.

## Z1.104 / 106 Questionnaire (Research : Exit)

## Name <br> (PLEASE PRINT IN BLOCK CAPITALS)

Date $\qquad$

How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| Getting Into Business |  |  |  |  |
| The Business Plan |  |  |  |  |
| Financial Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Products, Strategy \& Tactics |  |  |  |  |
| Funding Issues |  |  |  |  |
| Idea Assessment |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness <br> Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Main Text Windows |  |  |
| Interactive Exercises |  |  |
| Notepad Exercises |  |  |
| Learning Summaries |  |  |
| Problem Solving Exercises |  |  |
| Business Plan Evaluation |  |  |

Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness <br> Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |
| Hypertext Links |  |  |
| History Window |  |  |
| Glossary Window |  |  |
| Main Map (showing overview) |  |  |
| Structure Map (showing contents) |  |  |
| Button Links |  |  |

[^3]The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of 1 (not effective) -
5 (highly effective) and offer a comment of explanation.

| Exercise Element | Effectiveness <br> Rating(1-5) | Comment: |
| :--- | :--- | :--- |
| Graphics Used |  |  |
| Colours Used |  |  |
| Scenarios Used |  |  |
| Text Used |  |  |
| Tasks Specified |  |  |
| Feedback Given |  |  |
| Relevance to Module |  |  |
| Difficulty of Exercises |  |  |

Suggestions for improvement of interactive exercises:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| If you had to choose an aspect of the Z1.104 / 106 class which motivated you, what would it be? |  |
| If you had to choose an aspect of the Z1.104 / 106 class which failed to motivate you, what would it be? |  |
| How would you rate your level of computer literacy at the end of this module? |  |
| What do you find most interesting about using computers and why? |  |
| What do you find least interesting about using computers and why? |  |
| What level of experience do you have currently in using e-mail? |  |
| What level of experience do you have currently in using the Internet? |  |
| Please list the computing facilities on campus which you currently use. |  |
| Please list any computing facilities which you currently access off campus. |  |
| What software do you regularly use now, and for what purposes? |  |
| If the Z1.104 / lo6 class were offered by a traditional class teaching method, or by the computer based <br> method, which would you recommend to others and why? |  |
| Would you still have taken this class if it had been offered by a non-computer based method. Why? / <br> Why not? |  |

Additional Comments:
Thank you for completing this questionnaire.

## A8.5 Questionnaire 5 SEI Entrance Semester 21997 to 1998

## Z1.104 / 106 Confidence Log (Research: Entrance)

Name
Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your level of confidence, by ticking in the relevant box, for each of the concepts listed in the table below.

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel.
$\square$
Given an ideal world, what would be your preferred way of learning using a computer as an aid?
$\square$
Thank you for completing this confidence log.

## Z1.104 / 106 Research Questionnaire (Entrance)

Name

## Date

## (PLEASE PRINT IN BLOCK CAPITALS)

The information gained from this research will be used for PhD research purposes and will, where appropriate, be used to improve the class concerned for student users. Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How would you rate your level of computer literacy at the start of this module? |  |
| What do you find most interesting about using computers? |  |
| What do you find least interesting about using computers? |  |
| If you had to describe a learning situation in which you were highly motivated, what would it be? |  |
| If you had to describe a learning situation in which you were not motivated to learn, what would it be? |  |
| What level of experience do you have currently in using e-mail? |  |
| What level of experience do you have currently in using the Internet? |  |
| Please list the computing facilities on campus which you currently use. |  |
| Please list any computing facilities which you currently access off campus. |  |
| What software do you regularly use now, and for what purposes? |  |
| Any other comments?(Please continue overleaf) |  |
| Thank you for completing this questionnaire. |  |

Thank you for completing this questionnaire.

## A8.6: SEI Initial Questions Bank for Interviews

What have you found most enjoyable about this class so far?
What have you found least enjoyable about this class so far?
What have you found most engaging about this class so far?
What did you find effective in helping you learn in this class?
In what ways did this class meet your expectations?
In what ways did this class fail to meet your expectations?
Within this module you have accessed text, hypertext, graphics and interactive exercises. How did these elements affect your learning?
What changes would you suggest to the existing material, if any?
Did you cover the material in sequence or by your own route? Why?
Which elements of the material affected your depth of thought and how so?
How important was the quality of the presentation of the material for you and why?
Which learning experiences do you consider worked well for you, in this class, and why were these effective for you? Which learning experiences do you consider did not work well for you, in this class, and why were these not effective for you?
How does this material compare with learning from traditional lectures? Why so?
Do you find the computer-based material more, or less motivating than lectures? Why so?
How does this material compare with reading a book?
Did you find some windows easier to read than others and, if so, why?

## A8.7 Questionnaire 6 SEI Midpoint Semester 21997 to 1998

## Z1.104 / 106 Confidence Log (Research: Mid-point)

## Name

$\qquad$ Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your level of confidence, by ticking in the relevant box, for each of the concepts listed in the table below.

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel.
$\square$
Given an ideal world, what would be your preferred way of learning using a computer as an aid?

Thank you for completing this confidence log.

## Z1.104 / 106 Questionnaire (Research : Mid Point)

## Name

(PLEASE PRINT IN BLOCK CAPITALS)
How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Main Text Windows |  |  |
| Interactive Exercises |  |  |
| Notepad Exercises |  |  |
| Learning Summaries |  |  |
| Problem Solving Exercises |  |  |
| Business Plan Evaluation |  |  |

## Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness <br> Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |
| Hypertext Links |  |  |
| History Window |  |  |
| Glossary Window |  |  |
| Main Map (showing overview) |  |  |
| Structure Map (showing contents) |  |  |
| Button Links |  |  |

## Suggestions for improvement of navigation elements:

The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of 1 (not effective) -
5 (highly effective) and offer a comment of explanation.

| Exercise Element | Effectiveness <br> Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Graphics Used |  |  |
| Colours Used |  |  |
| Scenarios Used |  |  |
| Text Used |  |  |
| Tasks Specified |  |  |
| Feedback Given |  |  |
| Relevance to Module |  |  |
| Difficulty of Exercises |  |  |

Suggestions for improvement of interactive exercises:

Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| If you had to choose an aspect of the Z1.104 / 106 class which motivated you, what <br> would it be? |  |
| If you had to choose an aspect of the Z1.104 / 106 class which failed to motivate you, <br> what would it be? |  |
| How would you rate your level of computer literacy at the mid point of this module? |  |
| What have you found most interesting about using computers for this module and why? |  |
| What have you found least interesting about using computers for this module and why? |  |
| What level of experience do you have currently in using e-mail? |  |
| What level of experience do you have currently in using the Internet? |  |
| Please list the computing facilities on campus which you currently use. |  |
| Please list any computing facilities which you currently access off campus. |  |
| What software do you regularly use now, and for what purposes? |  |
| If the Z1.104 / lo6 class were offered by a traditional class teaching method, or by the <br> computer based method, which would you recommend to others and why? |  |
| Would you still have taken this class if it had been offered by a non-computer based <br> method. Why? / Why not? |  |

Additional Comments:
Thank you for completing this questionnaire.

## A8.8 Questionnaire 7 SEI Exit Semester 21997 to 1998

## Z1.104 / 106 Confidence Log (Research: Exit)

Name
Date
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your level of confidence, by ticking in the relevant box, for each of the concepts listed in the table below.

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you found your confidence affected by undertaking this module, offering where possible an explanation of why this was so and how this made you feel.

Given an ideal world, what would be your preferred way of learning using a computer as an aid?

Thank you for completing this confidence log.

## Z1.104 / 106 Questionnaire (Research : Exit)

Name
Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics <br> (required to run a business) |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Main Text Windows |  |  |
| Interactive Exercises |  |  |
| Notepad Exercises |  |  |
| Learning Summaries |  |  |
| Problem Solving Exercises |  |  |
| Business Plan Evaluation |  |  |

Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | Effectiveness Rating(1-5) | Comment: |
| :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |
| Hypertext Links |  |  |
| History Window |  |  |
| Glossary Window |  |  |
| Main Map (showing overview) |  |  |
| Structure Map (showing contents) |  |  |
| Button Links |  |  |

Suggestions for improvement of navigation elements:

The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of 1 (not effective) -
5 (highly effective) and offer a comment of explanation.

| Exercise Element | Effectiveness Rating (1-5) | Comment: |
| :--- | :--- | :--- |
| Graphics Used |  |  |
| Colours Used |  |  |
| Scenarios Used |  |  |
| Text Used |  |  |
| Tasks Specified |  |  |
| Feedback Given |  |  |
| Relevance to Module |  |  |
| Difficulty of Exercises |  |  |

Suggestions for improvement of interactive exercises:
Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| If you had to choose an aspect of the Z1.104 / 106 class which motivated you, what <br> would it be? |  |
| If you had to choose an aspect of the Z1.104 / 106 class which failed to motivate you, <br> what would it be? |  |
| How would you rate your level of computer literacy at the end of this module? |  |
| What do you find most interesting about using computers and why? |  |
| What do you find least interesting about using computers and why? |  |
| What level of experience do you have currently in using e-mail? |  |
| What level of experience do you have currently in using the Internet? |  |
| Please list the computing facilities on campus which you currently use. |  |
| Please list any computing facilities which you currently access off campus. |  |
| What software do you regularly use now, and for what purposes? |  |
| If the Z1.104 / lo6 class were offered by a traditional class teaching method, or by <br> the computer based method, which would you recommend to others and why? |  |
| Would you still have taken this class if it had been offered by a non-computer based <br> method. Why? / Why not? |  |

Additional Comments:
Thank you for completing this questionnaire.

## A8.9 Questionnaire 8 SEI Entrance Semester 11998 to 1999

## Z1.104 / 106 (Research: Entrance)

Name $\qquad$ Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you are currently less than confident
b) in areas where you are currently confident
c) in areas where you are currently very confident

Given an ideal world, what would be your preferred way of learning using a computer as an aid?
$\square$
Please indicate your order of preference (1: least preferred to 4 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about the prospect of using a computer for learning this <br> module? Please explain why this is so. |  |
| What do you find most interesting about using computers? Please explain why this is so. |  |
| What do you find least interesting about using computers? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would be highly <br> motivated, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would not be <br> motivated to learn, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments?(Please continue overleaf) |  |

Thank you for completing this questionnaire.

## A8.10 Questionnaire 9 SEI Midpoint Semester 11998 to 1999

## Z1.104 / 106 (Research: Mid-point)

## Name Date <br> (PLEASE PRINT IN BLOCK CAPITALS)

$\qquad$
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

Please indicate your order of preference (1: least preferred to 5 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Problem Solving Exercises |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

## Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| Navigation Feet (green / red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |

Suggestions for improvement of navigation elements:
The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

Suggestions for improvement of interactive exercises:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel now about using a computer for completing this <br> module? Please explain why this is so. |  |
| What do you find most interesting about using a computer for this module? <br> Please explain why this is so. |  |
| What do you find least interesting about using a computer for this module? <br> Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would <br> be highly motivated now, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would <br> not be motivated to learn now, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? (Please continue overleaf if necessary) |  |

Thank you for completing this questionnaire.

## A8.11 Questionnaire 10 SEI Exit Semester 11998 to 1999

## Z1.104 / 106 (Research: Exit)

Name
Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

## What changes would bring this module closer to your ideal for learning?

Please indicate your order of preference (1: least preferred to 5 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Problem Solving Exercises |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

Suggestions for improvement of module elements:
The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |

## Suggestions for improvement of navigation elements:

The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

Suggestions for improvement of interactive exercises:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel now about using a computer for completing this module? <br> Please explain why this is so. |  |
| What do you find most interesting about using a computer for this module? <br> Please explain why this is so. |  |
| What do you find least interesting about using a computer for this module? Please <br> explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would be <br> highly motivated now, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would not be <br> motivated to learn now, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? |  |

Thank you for completing this questionnaire.

## A8.12 Questionnaire 11 SEI Entrance Semester 21998 to 1999

## Z1.104 / 106 (Research: Entrance)

## Name

$\qquad$ Date $\qquad$
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you are currently less than confident
b) in areas where you are currently confident
c) in areas where you are currently very confident

Given an ideal world, what would be your preferred way of learning using a computer as an aid?

Please indicate your order of preference (1: least preferred to 4 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about the prospect of using a computer for learning this <br> module? Please explain why this is so. |  |
| What do you find most interesting about using computers? Please explain why this is so. |  |
| What do you find least interesting about using computers? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would be highly <br> motivated, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would not be <br> motivated to learn, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? (Please continue overleaf) |  |

Thank you for completing this questionnaire.

## A8.13 Questionnaire 12 SEI Midpoint Semester 21998 to 1999

## Z1.104 / 106 (Research: Mid-point)

## Name <br> Date <br> (PLEASE PRINT IN BLOCK CAPITALS) <br> Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

[^4]Please indicate your order of preference (1: least preferred to 5 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Problem Solving Exercises |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

## Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green/red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |

[^5]The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of 1 (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

## Suggestions for improvement of interactive exercises:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel now about using a computer for completing this module? <br> Please explain why this is so. |  |
| What do you find most interesting about using a computer for this module? <br> Please explain why this is so. |  |
| What do you find least interesting about using a computer for this module? <br> Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would be highly <br> motivated now, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would not be <br> motivated to learn now, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? Please continue overleaf if necessary) |  |

Thank you for completing this questionnaire.

## A8.14 Questionnaire 13 SEI Exit Semester 21998 to 1999

## Z1.104 / 106 (Research: Exit)

Name
Date
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

What changes would bring this module closer to your ideal for learning?
Please indicate your order of preference (1: least preferred to 5 most preferred) for the following options relating to computer based learning environments:

| Electronic Book (text shown on screen) |  |
| :--- | :--- |
| Game approach where points are scored for correct answers |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |

How would you rate the level of the content for each of the concepts covered in the module?
Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |


| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of $\mathbf{1}$ (not effective) $\mathbf{- 5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Problem Solving Exercises |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

## Suggestions for improvement of module elements:

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green / red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |

Suggestions for improvement of navigation elements:
The module makes use of a range of self contained exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

Suggestions for improvement of interactive exercises:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel now about using a computer for completing this <br> module? Please explain why this is so. |  |
| What do you find most interesting about using a computer for this module? <br> Please explain why this is so. |  |
| What do you find least interesting about using a computer for this module? <br> Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would <br> be highly motivated now, what would it be? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would <br> not be motivated to learn now, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? |  |

Thank you for completing this questionnaire.

## A8.15 Questionnaire 14 SEI Entrance Semester 11999 to 2000

## Z1.104 / 106 (Research: Entrance)

## Name <br> Date <br> $\qquad$ <br> (PLEASE PRINT IN BLOCK CAPITALS) <br> Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by undertaking this module, offering where possible an explanation of why this will be so and how this will make you feel:

[^6]Given an ideal world, what would be your preferred way of learning using a computer as an aid?

Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning enviromments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Electronic Book (text shown on screen) |  |  |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |  |
| Simulated Environment (e.g Office Scene with sources of information and Tasks to be undertaken ) |  |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |  |

## Learning Style Inventory <br> (Adapted from Internet material by Jerry Cerny)

Note: The following evaluation is a short, quick way of assessing your learning style, answers are neither right or wrong. Please answer each question as honestly as you can.

## Please tick the appropriate box after each statement:

| Often | Seldom | Some <br> Times | Often |
| :--- | :--- | :--- | :--- |
| 1. Can remember more about a subject through the lecture method with information, explanations and <br> discussion. |  |  |  |
| 2. Prefer information to be written on the chalkboard, with the use of visual aids and assigned readings. |  |  |  |
| 3. Like to write things own or to take notes for visual review. |  |  |  |
| 4. Prefer to use posters, models, or actual l ractice \& some activities in class. |  |  |  |
| 5. Require explanations of diagrams, graphs, or visual directions. |  |  |  |
| 6. Enjoy working with my hands or making things. |  |  |  |
| 7. Am skillful with \& enjoy developing \& making graphs \& charts. |  |  |  |
| 8. Can tell if sounds match when presented with pairs of sounds. |  |  |  |
| 9. Remember best by writing things down several times. |  |  |  |
| 10. Can understand and follow directions on maps. |  |  |  |
| 11. Do better at academic subjects by listening to lectures \& tapes. |  |  |  |
| 12. Play with coins or kess in pockets. |  |  |  |
| 13. Learn to spell better by repeating the words out loud than by writing the word on papers. |  |  |  |
| 14. Can better understand a news article by reading about it in the paper than by listening to the radio. |  |  |  |
| 15. Chew gum, smoke, or snack during studies. |  |  |  |
| 16. Feel the best way to remember is to pitcure it in your head. |  |  |  |
| 17. Learn spelling by "finger spelling" words. (i.e. drawing letters in the air) |  |  |  |
| 18. Would rather listen to a good lecture or speech than read about the same material in a textbook. |  |  |  |
| 19. Am good at working and solvingjigsaw puzzles and mazes. |  |  |  |
| 20. Grip objects in hands during leamning period. |  |  |  |
| 21. Prefer listening to the news on the radio rather than reading about it in the newspaper. |  |  |  |
| 22. Obtain information on an interesting subject by reading relevant materials. |  |  |  |
| 23. Feel very comfortable touching others, hugging, handshaking. |  |  |  |
| 24. Follow oral directions better than writen ones. |  |  |  |

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Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about the prospect of using a computer for learning <br> this module? Please explain why this is so. |  |
| What do you find most interesting about using computers? Please explain why this <br> is so. |  |
| What do you find least interesting about using computers? Please explain why this <br> is so. |  |
| If you had to describe a computer based learning situation in which you would be <br> highly motivated, what would it be? ? Please explain why this is so. |  |
| I you had to describe a computer based learning situation in which you would not <br> be motivated to learn, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do oy currently use the Internet? |  |
| Any or what purposes? |  |

Thank you for completing this questionnaire.

## A8.16 Questionnaire 15 SEI Midpoint Semester 11999 to 2000

## Z1.104 / 106 (Research: Mid-point)

## Name <br> Date <br> $\qquad$ <br> (PLEASE PRINT IN BLOCK CAPITALS) <br> Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words, how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this has been so and how this has made you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

## What could be changed about this computer-based material to bring it closer to your preferred way of learning using a computer as an aid?

Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |  |

## In your opinion, which of the above environments most appropriately describes this computer-based module?

How would you rate the level of the content for each of the concepts you have covered so far in the module?
Please tick the appropriate box for each and give a comment of explanation

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these, you have used so far, in terms of their effectiveness for your learning on a scale of 1 (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Visual Elements (look) of Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Visual Elements (look) of Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Café Poirot Exercise |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

Suggestions for improvement of module elements:
The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green /red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |

Suggestions for improvement of navigation elements:

Please state the names of other multi-media materials you have used (if applicable)
Please state how often you have made use of email to contact the class tutor for this module
The module makes use of a range of self-contained, interactive exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

## Suggestions for improvement of interactive exercises:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |  |
| The interactive exercises helped me to understand the material |  |  |  |  |  |  |
| The interactive exercises were not essential so I focused on other material |  |  |  |  |  |  |
| I found the visual elements (look) of the windows motivating |  |  |  |  |  |  |
| The learning summaries increased my depth of thought |  |  |  |  |  |  |
| The notepad exercises increased my depth of thought |  |  |  |  |  |  |
| I skimmed the material, rather than read it all, in order to save time |  |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |  |

## Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | Comment |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've used | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment |
| This material is more motivating than some lectures I've experienced |  |  |  |  |  |  |
| This material is more motivating than most lectures I've experienced |  |  |  |  |  |  |
| This material is more motivating than the best lectures I've experienced |  |  |  |  |  |  |
| The time flexibility is more important to me than the quality of the presentation |  |  |  |  |  |  |
| The presentation of this multi-media material is as good as others I've experienced |  |  |  |  |  |  |
| This material contained too much text |  |  |  |  |  |  |
| I find myself wanting to read this material from a print out rather than on screen |  |  |  |  |  |  |
| I'm not sure whether I'm learning what I should from this computer based material |  |  |  |  |  |  |
| The on-screen feedback given for the interactive exercises helps me check I'm learning |  |  |  |  |  |  |
| I would find multiple choice tests helpful to check my learning |  |  |  |  |  |  |
| I would find more tutor input helpful |  |  |  |  |  |  |
| I feel quite isolated when working with this computer based material |  |  |  |  |  |  |
| I find email communication useful for maintaining contact with the class tutor |  |  |  |  |  |  |
| I would prefer to have more face to face contact with the class tutor |  |  |  |  |  |  |

## Please complete the following section for the units you have just completed:

| Unit Number: | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Units Completed (Please tick to show units covered) |  |  |  |  |  |  |  |  |  |  |  |  |
| Time Spent Per Unit (Please State to nearest 15mins) |  |  |  |  |  |  |  |  |  |  |  |  |
| Date Unit Completed (Please State to nearest week) |  |  |  |  |  |  |  |  |  |  |  |  |

## Please complete the following section in your own words, for the units you have just completed:

The focus of the following questions is your learning and what helps you learn. This includes your motivation and achievement of learning outcomes.

## Name two learning experiences you consider worked well for you, as you worked through this unit, and explain why the

 experience was effective for you:1a) Experience that worked well:
lb) Reason this worked for me:
2a) Experience that worked well
2b) Reason this worked for me:
Name two learning experiences you consider did not work well for you, as you worked through this unit, and explain why the experience was not effective for you:
1a) Experience that did not work well:
lb) Reason this did not work for me:
2a) Experience that did not work well:
2b) Reason this did not work for me:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel now about using a computer for completing this module? <br> Please explain why this is so. |  |
| What have you found this material has allowed you to gain practice (repeated performance) <br> in doing, or discover how to do? In what way might this have been improved? |  |
| What have you found in this material that has simulated (mimicked) a real situation for you? <br> In what way might this have been improved? |  |
| What have you found in this material that has engaged you in finding solutions to issues, or <br> problems? In what way might this have been improved? |  |
| What have you found in this material that has really made you actively think? In what way <br> might this have been improved? |  |
| How frequently and for what purposes do you currently use email? |  |
| How frequently and for what purposes do you currently use the Internet? |  |
| Any other comments? (Please continue overleaf if necessary) |  |

## Approaches and Study Skills Inventory

This part of the questionnaire has been taken from the ASSIST material developed by Professor N. Entwistle of Edinburgh University. It has been designed to allow you to describe, in a systematic way, how you go about learning and studying. The technique involves asking you a substantial number of questions, which overlap to some extent, to provide good overall coverage of different ways of studying. Most of the items are based on comments made by other students. Please respond truthfully, so that your answers will accurately describe your actual ways of studying, and work your way through the questionnaire quite quickly.

## A. What is learning?

When you think about the term 'LEARNING', what does it mean to you?
Consider each of these statements carefully, and rate them in terms of how close they are to your own way of thinking about it
Please tick the appropriate box after each statement:

| Often | Very <br> different | Quite <br> different | Not so <br> close | Rather <br> close | Very <br> close |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. Making sure you remember things well. |  |  |  |  |  |
| b. Developing as a person. |  |  |  |  |  |
| c. Building up knowledge by acquiring facts and information |  |  |  |  |  |
| d. Being able to use the information you've acquired. |  |  |  |  |  |
| e. Understanding new material for yourself. |  |  |  |  |  |
| f. Seeing things in a different and more meaningful way. |  |  |  |  |  |

## B. Approaches to studying

The next part of this questionnaire asks you to indicate your relative agreement or disagreement with comments about studying again made by other students. Please work through the comments, giving your immediate response. In deciding your answers, think in terms of this particular class. It is also very important that you answer all the questions: check you have.
Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat |
| :--- | :--- | :--- | :--- | :--- |
| I. I manage to find conditions for studying which allow me to <br> get on with my work easily |  |  |  |  |
| 2. When working on an assignment, I'm keeping in mind how <br> best to impress the marker |  |  |  |  |
| 3. Often I find myself wondering whether the work I am <br> doing here is really worthwhile |  |  |  |  |
| 4. I usually set out to understand for myself the meaning of <br> what we have to learn |  |  |  |  |
| 5. I organise my study time carefully to make the best use of <br> it |  |  |  |  |
| 6. I find I have to concentrate on just memorising a good deal <br> of what I have to learn |  |  |  |  |
| 7. I go over the work I've done carefully to check the <br> reasoning and that it makes sense |  |  |  |  |
| 8. Often I feel I'm drowning in the sheer amount of material <br> we're having to cope with |  |  |  |  |
| 9. I look at the evidence carefully and try to reach my own <br> conclusion about what I'm studying |  |  |  |  |
| 10. It's important for me to feel that I'm doing as well as <br> I really can on the courses here |  |  |  |  |
| 11. I try to relate ideas I come across to those in other topics <br> or other courses whenever possible |  |  |  |  |
| 12. I tend to read very little beyond what is actually required <br> to pass |  |  |  |  |
| 13. Regularly I find myself thinking about ideas from lectures <br> when I'm doing other things |  |  |  |  |
| 14. I think I'm quite systematic and organised when it comes <br> to revising for exams |  |  |  |  |
| 15. I look carefully at tutors' comments on course work to see <br> how to get higher marks next time |  |  |  |  |


|  | Disagree | Disagree <br> Somewhat | Unsure | Agree Somewhat | Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16. There's not much of the work here that I find interesting or relevant |  |  |  |  |  |
| 17. When I read an article or book, I try to find out for myself exactly what the author means |  |  |  |  |  |
| 18. I'm pretty good at getting down to work whenever I need to |  |  |  |  |  |
| 19. Much of what I'm studying makes little sense: it's like unrelated bits and pieces |  |  |  |  |  |
| 20. I think about what I want to get out of this course to keep my studying well focused |  |  |  |  |  |
| 21. When I'm working on a new topic, I try to see in my own mind how all the ideas fit together |  |  |  |  |  |
| 22 I often worty about whether I'll ever be able to cope with the work properly |  |  |  |  |  |
| 23. Often I find myself questioning things I hear in lectures or read in books |  |  |  |  |  |
| 24. I feel that I'm getting on well, and this helps me put more effort into the work |  |  |  |  |  |
| 25. I concentrate on learning just those bits of information I have to know to pass |  |  |  |  |  |
| 26. I find that studying academic topics can be quite exciting at times |  |  |  |  |  |
| 27. I'm good at following up some of the reading suggested by lecturers or tutors |  |  |  |  |  |
| 28. I keep in mind who is going to mark an assignment and what they're likely to be looking for |  |  |  |  |  |
| 29. When I look back, I sometimes wonder why I ever decided to come here |  |  |  |  |  |
| 30. When I am reading, I stop from time to time to reflect on what I am trying to learn from it |  |  |  |  |  |
| 31. I work steadily through the term or semester, rather than leave it all until the last minute |  |  |  |  |  |
| 32. I'm not really sure what's important in lectures so I try to get down all I can |  |  |  |  |  |
| 33. Ideas in course books or articles often set me off on long chains of thought of my own |  |  |  |  |  |
| 34. Before starting work on an assignment or exam question, I think first how best to tackle it. |  |  |  |  |  |
| 35. I often seem to panic if I get behind with my work |  |  |  |  |  |
| 36. When I read, I examine the details carefully to see how they fit in with what's being said |  |  |  |  |  |
| 37. I put a lot of effort into studying because I'm determined to do well |  |  |  |  |  |
| 38. I gear my studying closely to just what seems to be required for assignments and exams |  |  |  |  |  |
| 39. Some of the ideas I come across on the course I find really gripping |  |  |  |  |  |
| 40. I usually plan out my week's work in advance, either on paper or in my head |  |  |  |  |  |
| 41. I keep an eye open for what lecturers seem to think is important and concentrate on that |  |  |  |  |  |
| 42. I'm not really interested in this course, but I have to take it for other reasons |  |  |  |  |  |
| 43. Before tackling a problem or assignment, I first try to work out what lies behind it |  |  |  |  |  |


|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat |
| :--- | :--- | :--- | :--- | :--- |
| A4gree |  |  |  |  |
| 45. I generally make good use of my time during the day <br> to remember trouble in making sense of the things I have |  |  |  |  |
| 46. I like to play around with ideas of my own even if they <br> don't get me very far |  |  |  |  |
| 47. When I finish a piece of work, I check it through to see if <br> it really meets the requirements |  |  |  |  |
| 48. Often I lie awake worrying about work I think I won't be <br> able to do |  |  |  |  |
| 49. It's important for me to be able to follow the argument, or <br> to see the reason behind things |  |  |  |  |
| 50. I don't find it at all difficult to motivate myself |  |  |  |  |
| 51. I like to be told precisely what to do in essays or <br> other assignments |  |  |  |  |
| 52. I sometimes get 'hooked' on academic topics and feel I <br> would like to keep on studying them |  |  |  |  |

## C. Preferences for different types of course and teaching

Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate bou atter each statement:

|  | Definitely <br> Dislike | Dislike to <br> Some <br> Extent | Unsure | Like to <br> Some <br> Extent | Definitely <br> Like |
| :--- | :--- | :--- | :--- | :--- | :--- |
| lecturers who tell us exactly what to put down in our notes |  |  |  |  |  |
| b. lecturers who encourage us to think for ourselves and <br> show us how they themselves think |  |  |  |  |  |
| c. exams which allow me to show that I've thought about the <br> course material for myself. |  |  |  |  |  |
| d. exams or tests which need only the material provided <br> in our lecture notes. |  |  |  |  |  |
| e. courses in which it's made very clear just which books <br> we have to read. |  |  |  |  |  |
| f. courses where we're encouraged to read around the subject <br> a lot for ourselves |  |  |  |  |  |
| g. books which challenge you and provide explanations <br> which go beyond the lectures |  |  |  |  |  |
| h. books which give you definite facts and information <br> which can easily be learned |  |  |  |  |  |

Finally, how well do you think you have been doing in your assessed work overall, so far?
Please rate yourself objectively, based on the grades you have been obtaining

| Rather Badly |  | Not so Well |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |

Thank you for completing this questionnaire.

## A8.17 Questionnaire 16 SEI Exit Semester 11999 to 2000

## Z1.104 / 106 (Research: Exit Questionnaire)

Name
Date
(PLEASE PRINT IN BLOCK CAPITALS)
Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please state in your own words, how you have found your confidence to be affected by undertaking this module, offering where possible an explanation of why this has been so and how this has made you feel:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

What could be changed about this computer-based material to bring it closer to your preferred way of learning using a computer as an aid?

Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be <br> undertaken.) |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |

[^7]How would you rate the level of the content for each of the concepts you have covered so far in the module? Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Business Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these, you have used so far, in terms of their effectiveness for your learning on a scale of 1 (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Visual Elements (look) of Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Visual Elements (look) of Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Cafe Poirot Exercise |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

Suggestions for improvement of module elements:
The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green / red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |

Suggestions for improvement of navigation elements:

[^8]The module makes use of a range of self-contained, interactive exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

## Suggestions for improvement of interactive exercises:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |  |
| The interactive exercises helped me to understand the material |  |  |  |  |  |  |
| The interactive exercises were not essential so I focused on other material |  |  |  |  |  |  |
| I found the visual elements (look) of the windows motivating |  |  |  |  |  |  |
| The learning summaries increased my depth of thought |  |  |  |  |  |  |
| The notepad exercises increased my depth of thought |  |  |  |  |  |  |
| I skimmed the material, rather than read it all, in order to save time |  |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |  |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| My view of this material has been influenced by other multi-media material I've used |  |  |  |  |  |  |
| This material is more motivating than some lectures I've experienced |  |  |  |  |  |  |
| This material is more motivating than most lectures l've experienced |  |  |  |  |  |  |
| This material is more motivating than the best lectures l've experienced |  |  |  |  |  |  |
| The time flexibility is more important to me than the quality of the presentation |  |  |  |  |  |  |
| The presentation of this multi-media material is as good as others I've experienced |  |  |  |  |  |  |
| This material contained too much text |  |  |  |  |  |  |
| I find myself wanting to read this material from a print out rather than on screen |  |  |  |  |  |  |
| I'm not sure whether I'm learning what I should from this computer based material |  |  |  |  |  |  |
| The on-screen feedback given for the interactive exercises helps me check I'm learning |  |  |  |  |  |  |
| I would find multiple choice tests helpful to check my learning |  |  |  |  |  |  |
| I would find more tutor input helpful |  |  |  |  |  |  |
| I feel quite isolated when working with this computer based material |  |  |  |  |  |  |
| I find email communication useful for maintaining contact with the class tutor |  |  |  |  |  |  |
| I would prefer to have more face to face contact with the class tutor |  |  |  |  |  |  |

## Please complete the following section for the units you have just completed:

| Unit Number: | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Units Completed (Please tick to Show units covered) |  |  |  |  |  |  |  |  |  |  |  |  |
| Time Spent Per Unit (Please State to nearest 15mins) |  |  |  |  |  |  |  |  |  |  |  |  |
| Date Unit Completed (Please State to nearest week) |  |  |  |  |  |  |  |  |  |  |  |  |

[^9]The focus of the following questions is your learning and what helps you learn. This includes your motivation and achievement of learning outcomes.

## Name two learning experiences you consider worked well for you, as you worked through this unit, and explain why the experience was effective for you:

1a) Experience that worked well:
1b) Reason this worked for me:
2a) Experience that worked well
2b) Reason this worked for me:
Name two learning experiences you consider did not work well for you, as you worked through this unit, and explain why the experience was not effective for you:
1a) Experience that did not work well:
lb) Reason this did not work for me:
2a) Experience that did not work well:
2b) Reason this did not work for me:

## Please answer the following questions as accurately as possible:

| Question | Response |
| :---: | :---: |
| Which part of this computer-based class did you find most motivating? Please explain why this was the case. |  |
| Which part of this computer-based class did you find least motivating? Please explain why this was the case. |  |
| What would you consider to be the most important thing you have learned in this class? Please explain why this was the case. |  |
| What would make the material in this class more interesting for you? Please explain why this would be the case. |  |
| What was the main value of this class for you? Please explain why this was the case. |  |
| To what extent do you consider it likely, that you will make use of your learning from this class beyond your university course? Please explain how you expect this will be of use. |  |
| What does this material allow you to practice doing or discover how to do? (e.g. tasks to complete, items to manipulate / new procedures, working practices) |  |
| How much freedom do you have as to the number of times you try the same task and how does this affect your learning? (e.g. maximum number of attempts, unlimited) |  |
| What level of feedback does this package offer on your attempts at the tasks involved, and how do you obtain this feedback? (e.g. told right / wrong, explanation of possible answers) |  |
| How long do you have to wait for feedback on your attempts at the tasks involved and how does this affect your learning? (e.g. immediate, after three attempts) |  |
| How could these practice sessions, your attempts at the tasks, be improved for you, and how would this improvement affect your learning? (e.g. allowed more / fewer attempts, offered more / less help before / during attempt) |  |
| How could the feedback on your practice sessions, your attempts at the tasks, be improved for you, and how would this improvement affect your learning? (e.g. more detail of why particular responses are better than others) |  |
| What does the simulation element of the package offer for your learning that other forms of presentation would not? (e.g. alternative courses of action and possible reaction, effects of particular stresses on materials) |  |
| How might the simulation element of the package be improved for you, and how would this improvement affect your learning? (e.g. additional material included to allow other conditions to be simulated, different way of showing material - sound / video) |  |
| How might the feedback for the simulation element of the package be improved for you, and how would this improvement affect your learning? (e.g. more visual change on screen as controls operated, on screen demonstration of outcomes showing "correct" and "incorrect" to highlight differences) |  |
| How might the simulation material be made closer to reality and how would the change affect your learning? (e.g. use realistic images, make three dimensional, include sound, have real cases - facts and figures) |  |
| In what ways does the package engage you in finding solutions to issues or problems? (e.g. requires design decisions to be made and shows effect on production and profit) |  |


| Question | Response |
| :---: | :---: |
| What did attempting to solve the problems presented in the package help you learn? (e.g. discovered that some things affected others that previously I hadn't connected) |  |
| How might the problem-solving element of the package be improved for you, and how would this improvement affect your learning? (e.g. provide an example of a similar problem and its solution before setting actual problem) |  |
| What feedback does the package offer in the problem-solving element and how does this feedback affect your learning? (e.g. comparison offered between answer given and "correct" solution) |  |
| How might this problem-solving feedback be improved for you, and how would the improvement affect your learning? (e.g. show range of possible solutions and compare with answer given to show where answer could be improved) |  |
| How might the problem-solving element be made more interesting for you? (e.g. offer range of subject matter and range of problem complexity - user to choose) |  |
| What made you actively think most in this material? (e.g. reading text from screen and reflecting on meaning, finding ways of solving problems set) |  |
| Which part of this package got you most fully engaged, to the level where you felt you were really concentrating? (e.g. trying to understand authors viewpoint in text, watching video clip, manipulating simulation) |  |
| Which part of the package entertained you most and made you feel that you were enjoying using the material? (e.g. getting feedback on answers and trying again, selecting which material to look at for information when trying to solve problems set) |  |
| What parts of the package helped you to better understand material you already knew? (e.g. text giving outline of material, video showing material in real situation) |  |
| What helped you most to increase your understanding, of the material which was new to you in the package? (e.g. text explaining material, voice over describing material, video of material, multiple choice tests) |  |
| What could be offered in the package to help further improve your understanding of the subject area? (e.g. additional text / spoken comment/ video clips / multiple choice tests on material, |  |
| What aspects of computer-based materials do you find particularly valuable for learning, as compared to other forms of learning materials? |  |
| What impresses you most about the computer-based material compared to other learning materials? |  |
| What gives you a positive frame of mind when you are using the computer-based material? |  |
| What irritates you when using computer-based material? |  |
| What is the best computer based material you have used and what made it so good? |  |
| What is the worst computer based material you've used and what made it so bad? |  |
| What helps you to be sure you are actually learning from computer based material? |  |
| What types of assessment / test would you find helpful in letting you know how well you understood the computer-based material? |  |
| What forms of learning material would you prefer to be offered in a face to face session, rather than computer based? Why so? |  |
| What have you found in this material that has engaged you in finding solutions to issues, or problems? In what way might this have been improved? |  |
| What have you found in this material that has really made you actively think? In what way might this have been improved? |  |
| What have you found this material has allowed you to gain practice (repeated performance) in doing, or discover how to do? In what way might this have been improved? |  |
| What have you found in this material that has simulated (mimicked) a real situation for you? In what way might this have been improved? |  |
| Any other comments? (Please continue overleaf if necessary) |  |

[^10]
## A8.18 Questionnaire 17 SEI Entrance Semester 21999 to 2000

## Z1. 104 / 106 (Research: Entrance)

Name
(PLEASE PRINT IN BLOCK CAPITALS)
Date

Learning Style Inventory (Adapted from Internet material by Jerry Cerny)
Note: The following evaluation is a short, quick way of assessing your learning style, answers are neither right or wrong. Please answer each question as honestly as you can.

Please tick the appropriate box after each statement:

|  | Seldo m | Some Times | Often |
| :---: | :---: | :---: | :---: |
| 1. Can remember more about a subject through the lecture method with information, explanations and discussion. |  |  |  |
| 2. Prefer information to be written on the chalkboard, with the use of visual aids and assigned readings. |  |  |  |
| 3. Like to write things down or to take notes for visual review. |  |  |  |
| 4. Prefer to use posters, models, or actual practice \& some activities in class. |  |  |  |
| 5. Require explanations of diagrams, graphs, or visual directions. |  |  |  |
| 6. Enjoy working with my hands or making things. |  |  |  |
| 7. Am skillful with \& enjoy developing \& making graphs \& charts. |  |  |  |
| 8. Can tell if sounds match when presented with pairs of sounds. |  |  |  |
| 9. Remember best by writing things down several times. |  |  |  |
| 10. Can understand and follow directions on maps. |  |  |  |
| 11. Do better at academic subjects by listening to lectures \& tapes. |  |  |  |
| 12. Play with coins or keys in pockets. |  |  |  |
| 13. Learn to spell better by repeating the words out loud than by writing the word on papers. |  |  |  |
| 14. Can better understand a news article by reading about it in the paper than by listening to the radio. |  |  |  |
| 15. Chew gum, smoke, or snack during studies. |  |  |  |
| 16. Feel the best way to remember is to picture it in your head. |  |  |  |
| 17. Learn spelling by "finger spelling" words. (i.e. drawing letters in the air) |  |  |  |
| 18. Would rather listen to a good lecture or speech than read about the same material in a textbook. |  |  |  |
| 19. Am good at working and solving jigsaw puzzles and mazes. |  |  |  |
| 20. Grip objects in hands during learning period. |  |  |  |
| 21. Prefer listening to the news on the radio rather than reading about it in the newspaper. |  |  |  |
| 22. Obtain information on an interesting subject by reading relevant materials. |  |  |  |
| 23. Feel very comfortable touching others, hugging, handshaking. |  |  |  |
| 24. Follow oral directions better than written ones. |  |  |  |

Inter-Universities North (c) 1998 Created by Dee Dee from NorCom Communications
Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) | $\mathbf{5}$ |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |

Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about the prospect of using a computer for learning this module? <br> Please explain why this is so. |  |
| What do you find most interesting about using computers? Please explain why this is so. |  |
| What do you find least interesting about using computers? Please explain why this is so. |  |
| Any other comments? (Please continue overleaf) |  |

Thank you for completing this questionnaire.

## A8.19 Controlled Investigation Instructions for SEI Case Study 1 Semester 21999 to 2000

## Strathclyde Entrepreneurship Initiative

Questionnaire Version A Instructions

Go to the Computer-Based Material
Go to Unit One
Go to the Structure Map
Go to "Interview With An Entrepreneur"
Click the "Entrepreneur Interview" button
Follow the on-screen instructions for the exercise
Complete the first section (ie pages 1-3) of your questionnaire by ticking the appropriate boxes
Quit MENTOR and return to Windows
Go to the Web Browser Icon and open the application (i.e. Internet Explorer)
Access:
http://www.mansci.strath.ac.uk/interview.html
Read the material on the webpage and consider the questions posed to the entrepreneurs
Rank the entrepreneurs ( 1 to 3 one being highest) according to the scores you gave their answers.
Complete the second section (ie pages 4-6) of your questionnaire by ticking the appropriate boxes
Quit all applications and return to Windows

## Many thanks for assisting with this research

## Strathclyde Entrepreneurship Initiative

## Questionnaire Version B

## Instructions

Go to the Web Browser Icon and open the application (i.e. Internet Explorer)
Access:
http://www.mansci.strath.ac.uk/interview.html
Read the material on the webpage and consider the questions posed to the entrepreneurs
Rank the entrepreneurs ( 1 to 3 one being highest) according to the scores you gave their answers.
Complete the first section (ie pages 1-3) of your questionnaire by ticking the appropriate boxes
Quit all applications and return to Windows
Go to the Computer-Based Material
Go to Unit One
Go to the Structure Map
Go to "Interview With An Entrepreneur"
Click the "Entrepreneur Interview" button
Follow the on-screen instructions for the exercise
Complete the second section (ie pages 4-6) of your questionnaire by ticking the appropriate boxes
Quit MENTOR and return to Windows
Many thanks for assisting with this research

## A8.20 Controlled Investigation Web Display for SEI Case Study 1 Semester 21999 to 2000

## Entrepreneur Interview

Evaluate responses given by three entrepreneurs in an interview. They each provide an answer to 5 questions posed. Read the questions and their response. Then use your judgement to award points for their answers.
Award points on a scale of 1 to 5 ( 5 being the highest) for the entrepreneur's answers to the questions. When you have completed your scoring you can check how your evaluation compares with the suggested ranking.

## Profiles of the Entrepreneurs

Catherine Jones
"I find most things take care of themselves. There is no point in worrying about what might be. It's better to deal directly with what is. If you're meant to succeed you will. I've taken this approach so far and it hasn't let me down yet."
Emily Thomson
"I try to look ahead in a way which allows me to predict likely events and legislate to cover such eventualities. I did a course on scenario planning and I try to use the technique when generating my strategic direction for the business."

## George Brown

"I started this business on the basis of my own judgement and I run it on the same basis. We generally wait to see what the best deal is in any given month and we run with that. We can usually sway our customers in the direction we want them to go."

## Questions and Answers

Question 1 "How did you get started in business?"
Catherine Jones
"Well, there were all sorts of financial incentives available. It meant that I got money every month no matter what the business
was doing at the time."
Emily Thomson
"I found myself in a situation where I was living on edge in a large organisation and wondering when the next "Right Sizing"
would "Empower" me to be leisure enhanced. Sorry about the sarcasm, basically I was constantly under threat of redundancy.
When I thought about things I decided that I wanted control of my situation, so I looked for advice, took it and started my
business."
George Brown
"My father has been in this business for years. I got started as part of the family and worked at all aspects of the business. I'm
now a director as is my father. He still has a say in the way things are run."

## Question 2 "What made you choose this type of business?"

Catherine Jones
"I'm very good at spotting money making opportunities. Everybody wants gnomes these days, so I decided I'd make them and sell them."

## Emily Thomson

"My background was in engineering and I had many contacts within the industry. The additional courses I had undertaken with a view to internal promotion also lent themselves to the consultancy business. It made sense to build upon the strengths I had and to set up in a business that was knowledge and skill intensive but did not demand huge investment of capital."

## George Brown

"It was the business my father had experience of. I have made my mark by introducing a new range of goods, which my father would not have taken on by himself."

## Question 3 "Why did you locate in this area?'

Catherine Jones
"This shop was available and it only takes me ten minutes to walk here in the morning. I know lots of the local people and they know which lane my shop's in so I don't need to advertise."

## Emily Thomson

"It made sense for me to work from home, so I located where I lived. All I needed was a telephone link and my desktop computer. I can communicate with clients easily by phone, fax and email. I can gather information from and advertise my services on the Internet. All of these things are available without the need to spend money on an office. I can just as easily visit any clients from here and I've re-designed part of the house so that clients who call perceive the environment to be suitably business like."
George Brown
"We have always been in this area. It is where we are known and we live locally. Customers travel to get to us because we can offer the best deals."

## Question 4 "What were you looking for in your business partners and were these partners easy to find?" Catherine Jones <br> "Finding a partner was no problem. I was spoilt for choice. All my mates were asking to be considered, but I had to consider what was best for the business. I figured Big Al was the best bet because he had the kind of approach that made sure nobody tried to bring back faulty goods, if you know what I mean. As I see it, once they've paid for the goods that's the end of it." Emily Thomson <br> "I knew that I had the engineering expertise and that I was capable of quickly analysing complex material and coming up with original solutions. I am also good at motivating teams. I suppose that means I'm a combination of Specialist, Shaper, Plant and Monitor Evaluator in the Belbin view of things. I figured I needed a salesperson who was diplomatic, loyal and a good organiser who could meet deadlines. Fortunately such an individual had recently been made redundant from the organisation I worked for at the time and she was more than happy to be part of my venture." <br> George Brown <br> "We don't have partners outwith the family. It is very difficult to find people you can really trust in business. Although my dad and I don't take the same approach, at least we know we can trust each other. We do take on staff at a low level but we don't give them access to all our details."

[^11]
## Evaluation

## Catherine Jones 3rd

"This entrepreneur had an idea and considered it to be an opportunity. The answers given suggest a lack of real motivation or thought. The choice of location put personal convenience before business need and no thought was given to planning in the business sense. There is no indication of market segmentation or response to market need or demand. The approach to customers suggested here is likely to ensure that repeat custom is unlikely and any reputation is likely to be bad. A total disregard for market research and marketing generally is reflected in the answers given."

## Emily Thomson 1st

"This entrepreneur has clearly been highly motivated by personal circumstances. She has considered the available options and taken a positive approach and a calculated risk. The business has been built upon knowledge and expertise gained within a specialist area and consideration has been given to professional advice. The market sector has been clearly identified and existing networks were in place which could be used to advantage. A prudent approach had been taken to the start-up stage keeping overheads at a minimum. The initially problematic situation of redundancy and potential redundancy had been exploited positively as an opportunity."

## George Brown 2nd

"This entrepreneur really didn't start the business, rather he developed the business from an existing situation. He has shown some initiative by increasing the range of goods offered for sale. The ability to beat competitors on price is central to this business and the approach is not as positive as it might be. There is a clear suggestion of poor communication and lack of strategic planning."

## A8.21 Controlled Investigation Questionnaire A SEI \& SHS Semester 21999 to 2000

 Name:Date: A
(na:not applicable, 1: totally disagree, 5: totally agree)

| Questions Relating to Computer-Based Exercise / Scenario Material | na | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. The computer-based "on-screen exercise" version of this material offered me a challenge |  |  |  |  |  |  |
| 2. I got the chance, within the computer-based "on-screen exercise" version of this material, to apply my learning to solving problems or taking decisions |  |  |  |  |  |  |
| 3. If found the tasks set in the computer-based "on-screen exercise" version of this material interesting |  |  |  |  |  |  |
| 4. The computer-based "on-screen exercise" version of this material inspired me to think about the material I had previously covered |  |  |  |  |  |  |
| 5. The computer-based feedback from the "on-screen exercise" version of this material helped me check that I was really learning |  |  |  |  |  |  |
| 6. The computer-based "on-screen exercise" version of this material allowed me to demonstrate my competency at the activity concerned |  |  |  |  |  |  |
| 7. The computer-based "on-screen exercise" version of this material made me curious to see the outcomes from my decisions |  |  |  |  |  |  |
| 8. The computer-based "on-screen exercise" version of this material, which allowed me to feel as though I was really there in the scenario |  |  |  |  |  |  |
| 9. The computer-based "on-screen exercise" version of this material allowed me to choose which element of this computer-based material I looked at next |  |  |  |  |  |  |
| 10. I had to think carefully before deciding what to look at next in this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 11. I could use this computer-based "on-screen exercise" version of this material to check how the experts would do things |  |  |  |  |  |  |
| 12. I could control the pace at which I worked through this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 13. I could choose my own pathway through this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 14. There was an element of humour in this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 15. The humour element in this computer-based "on-screen exercise" version of this material increased my sense of engagement |  |  |  |  |  |  |
| 16. The game element in this computer-based "on-screen exercise" version of this material increased my level of engagement |  |  |  |  |  |  |
| 17. The context of this computer-based "on-screen exercise" version of this material was realistic in that it reflected real life situations |  |  |  |  |  |  |

## Questions Relating to Computer-Based Exercise / Scenario Material

18. The context of this computer-based "on-screen exercise" version of this material was meaningful for me (I found I could relate to it)
19. I find this computer-based "on-screen exercise" version of this material makes the situations and examples used realistic
20. I did not get lost when navigating through this computer-based "on-screen exercise" version of this material
21. Whenever I got lost this computer-based "on-screen exercise" version of this material made it easy for me to find where I was
22. Text in this computer-based "on-screen exercise" version of this material was easy to read on screen
23. This computer-based "on-screen exercise" version of this material made me want to keep on working beyond the time I had intended
24. Information was easy to find throughout this computer-based "on-screen exercise" version of this material
25. The screen display for this computer-based "on-screen exercise" version of this material was not cluttered
26. I found the colours used in displaying this computer-based "on-screen exercise" version of this material were appropriate
27. The interface for this computer-based "on-screen exercise" version of this material was easy to use
28. I felt as though I was actively learning from this computer-based "on-screen exercise" version of this material
29. The interface helped me to spot my errors when using this computer-based "on-screen exercise" version of this material
30. The interface helped me to reason about what caused my errors when using this computer-based "on-screen exercise" version of this material
31. This computer-based "on-screen exercise" version of this material helped me to correct any errors I made
32. This computer-based "on-screen exercise" version of this material allowed me to make use of what I already knew
33. This computer-based "on-screen exercise" version of this material allowed me to learn by thinking and reasoning
34. This computer-based "on-screen exercise" version of this material encouraged me to improvise when trying to solve problems or take decisions
35. When using this computer-based "on-screen exercise" version of this material I had to identify problems then solve them
36. I had to sort out relevant from irrelevant when trying to solve problems or take decisions using this computer-based "on-screen exercise" version of this material
37. This computer-based "on-screen exercise" version of this material allowed me to explore from a number of perspectives
38. This computer-based "on-screen exercise" version of this material maintained the complexity of the real world
39. This computer-based "on-screen exercise" version of this material encouraged me to reflect on a range of learning when attempting to solve problems
40. Assessment was integrated within this computer-based "on-screen exercise" version of this material
41. This computer-based "on-screen exercise" version of this material offered the opportunity for me to defend my views / opinions developed
42. My understanding of the issues has changed having worked through this computer-"on-screen exercise" version of this material
43. This computer-based "on-screen exercise" version of this material contained too much on-screen text
44. I find myself wanting to read this computer-based "on-screen exercise" version of this material from a print out, rather than on-screen
45. I would have been better off reading a book than using this computer-based "on-screen exercise" version of this material

| Questions Relating to Computer-Based Exercise / Scenario Material | na | 1 | 2 | 3 | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46. I worked through all the elements of this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 47. I was unsure what I should do when using the interactive elements of this computer-based "onscreen exercise" version of this material (ie the instructions were not clear) |  |  |  |  |  |  |
| 48. The interactive elements in this computer-based "on-screen exercise" version of this material helped my understanding |  |  |  |  |  |  |
| 49. My view of this computer-based "on-screen exercise" version of this material has been influenced by other computer-based material l've used |  |  |  |  |  |  |
| 50. The look of the screen displays in this computer-based "on-screen exercise" version of this material helped motivate me |  |  |  |  |  |  |
| 51. The presentation of this computer-based "on-screen exercise" version of this material is better than other computer-based material l've used |  |  |  |  |  |  |
| 52. The presentation of this computer-based "on-screen exercise" version of this material is as good as other computer-based material l've used |  |  |  |  |  |  |
| 53. The presentation of this computer-based "on-screen exercise" version of this material is not as good as other computer-based material I've used |  |  |  |  |  |  |
| 54. The on-screen feedback provided helps me check I'm learning from this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 55. I'm not sure whether I'm learning what I should from this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 56. I found this computer-based "on-screen exercise" version of this material allowed me to practice doing the things I needed to do |  |  |  |  |  |  |
| 57. I found this computer-based "on-screen exercise" version of this material engaging to the point where I kept trying to solve the problems or make the decisions |  |  |  |  |  |  |
| 58. I found the on-screen feedback in this computer-based "on-screen exercise" version of this material made me actively think about my decisions |  |  |  |  |  |  |
| 59. Having video clips increased my engagement with this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 60. Having voice over material helped my understanding of this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 61. Having voice over material increased my engagement with this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 62. Hearing the voices of the characters in the scenario increased my engagement with this computerbased "on-screen exercise" version of this material |  |  |  |  |  |  |
| 63. Having high quality images helped my understanding of this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |
| 64. Having high quality images increased my engagement with this computer-based "on-screen exercise" version of this material |  |  |  |  |  |  |

Additional Comments relating to the "on-screen exercise" version of this material:

Please turn to the next page and complete the questionnaire overleaf for the second mode of on-screen presentation provided.

## Questions Relating to Computer-Based Text / Scenario Material

1. The computer-based "on-screen text" version of this material offered me a challenge
2. I got the chance, within the computer-based "on-screen text " version of this material, to apply my learning to solving problems or taking decisions
3. I found the tasks set in the computer-based "on-screen text " version of this material interesting
4. The computer-based "on-screen text " version of this material inspired me to think about the material I had previously covered
5. The computer-based feedback from the "on-screen text " version of this material helped me check that I was really learning
6. The computer-based "on-screen text " version of this material allowed me to demonstrate my competency at the activity concerned
7. The computer-based "on-screen text " version of this material made me curious to see the outcomes from my decisions
8. The computer-based "on-screen text " version of this material, which allowed me to feel as though I was really there in the scenario
9. The computer-based "on-screen text " version of this material allowed me to choose which element of this computer-based material I looked at next
10. I had to think carefully before deciding what to look at next in this computer-based "on-screen text " version of this material
11. I could use this computer-based "on-screen text " version of this material to check how the experts would do things
12. I could control the pace at which I worked through this computer-based "on-screen text " version of this material
13. I could choose my own pathway through this computer-based "on-screen text " version of this material
14. There was an element of humour in this computer-based "on-screen text " version of this material
15. The humour element in this computer-based "on-screen text " version of this material increased my sense of engagement
16. The game element in this computer-based "on-screen text " version of this material increased my level of engagement
17. The context of this computer-based "on-screen text " version of this material was realistic in that it reflected real life situations
18. The context of this computer-based "on-screen text " version of this material was meaningful for me (I found I could relate to it)
19. I find this computer-based "on-screen text " version of this material makes the situations and examples used realistic
20. I did not get lost when navigating through this computer-based "on-screen text " version of this material
21. Whenever I got lost this computer-based "on-screen text " version of this material made it easy for me to find where 1 was
22. Text in this computer-based "on-screen text " version of this material was easy to read on screen
23. This computer-based "on-screen text " version of this material made me want to keep on working beyond the time I had intended
24. Information was easy to find throughout this computer-based "on-screen text " version of this material
25. The screen display for this computer-based "on-screen text " version of this material was not cluttered
26. I found the colours used in displaying this computer-based "on-screen text " version of this material were appropriate
27. The interface for this computer-based "on-screen text " version of this material was easy to use

| Questions Relating to Computer-Based Text / Scenario Material | na | 1 | 2 | 3 | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28. I felt as though I was actively learning from this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 29. The interface helped me to spot my errors when using this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 30. The interface helped me to reason about what caused my errors when using this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 31. This computer-based "on-screen text " version of this material helped me to correct any errors I made |  |  |  |  |  |  |
| 32. This computer-based "on-screen text " version of this material allowed me to make use of what I already knew |  |  |  |  |  |  |
| 33. This computer-based "on-screen text " version of this material allowed me to learn by thinking and reasoning |  |  |  |  |  |  |
| 34. This computer-based "on-screen text " version of this material encouraged me to improvise when trying to solve problems or take decisions |  |  |  |  |  |  |
| 35. When using this computer-based "on-screen text " version of this material I had to identify problems then solve them |  |  |  |  |  |  |
| 36. I had to sort out relevant from irrelevant when trying to solve problems or take decisions using this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 37. This computer-based "on-screen text " version of this material allowed me to explore from a number of perspectives |  |  |  |  |  |  |
| 38. This computer-based "on-screen text " version of this material maintained the complexity of the real world |  |  |  |  |  |  |
| 39. This computer-based "on-screen text " version of this material encouraged me to reflect on a range of learning when attempting to solve problems |  |  |  |  |  |  |
| 40. Assessment was integrated within this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 41. This computer-based "on-screen text " version of this material offered the opportunity for me to defend my views / opinions developed |  |  |  |  |  |  |
| 42. My understanding of the issues has changed having worked through this computer-"on-screen text " version of this material |  |  |  |  |  |  |
| 43. This computer-based "on-screen text " version of this material contained too much on-screen text |  |  |  |  |  |  |
| 44. I find myself wanting to read this computer-based "on-screen text " version of this material from a print out, rather than on-screen |  |  |  |  |  |  |
| 45. I would have been better off reading a book than using this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 46. I worked through all the elements of this computer-based "on-screen text " version of this material |  |  |  |  |  |  |
| 47. I was unsure what I should do when using the interactive elements of this computer-based "onscreen text " version of this material (ie the instructions were not clear) |  |  |  |  |  |  |
| 48. The interactive elements in this computer-based "on-screen text " version of this material helped my understanding |  |  |  |  |  |  |
| 49. My view of this computer-based "on-screen text " version of this material has been influenced by other computer-based material I've used |  |  |  |  |  |  |
| 50. The look of the screen displays in this computer-based "on-screen text " version of this material helped motivate me |  |  |  |  |  |  |
| 51. The presentation of this computer-based "on-screen text " version of this material is better than other computer-based material I've used |  |  |  |  |  |  |
| 52. The presentation of this computer-based "on-screen text " version of this material is as good as other computer-based material I've used |  |  |  |  |  |  |
| 53. The presentation of this computer-based "on-screen text " version of this material is not as good as other computer-based material l've used |  |  |  |  |  |  |
| 54. The on-screen feedback provided helps me check I'm learning from this computer-based "on-screen text " version of this material |  |  |  |  |  |  |


$\left.$| Questions Relating to Computer-Based Text / Scenario Material | na | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | $\mathbf{5} \right\rvert\,$

Additional Comments relating to the "on-screen text" version of this material:

Your Overall Conclusion: Please state which of these modes of presentation you preferred and offer a brief explanation of why so

## A8.22 Questionnaire 18 SEI Midpoint Semester 21999 to 2000

## Research: Z1.106 Mid-Point Questionnaire

## Background Information and Guidelines:

This questionnaire has been compiled specifically for research purposes. The focus of this research is on the use of interactive technology within learning contexts and the extent to which the use of such technology is found helpful, or not, by the learners or users.

Please try to complete all sections and take the time to add comments of your own, in relation to your learning, as these are particularly relevant for this research

## Personal Details:

(PLEASE PRINT IN BLOCK CAPITALS)

| Name: |  |
| :--- | :--- |
| Course: |  |
| Year of Study: |  |
| Student Number: |  |
| Term Time Tel. No.: |  |
| Email: |  |

Please answer the following questions as accurately as possible:

| Question | Answer |
| :--- | :--- |
| What impressed you most about this computer-based material? |  |
| Which element of this computer-based material got you most fully engaged? (to the level <br> where you felt you were really concentrating) |  |
| What have you found least engaging about this computer-based material? (where your <br> attention wandered) |  |
| What did you find irritating or confusing in this computer-based material? |  |
| Which elements of the computer-based material affected your depth of thought and how <br> so? (i.e. made you think most) |  |
| How could we make it easier for you to learn from this computer-based material? |  |
| How could we ensure you learn what you should from this computer-based material? |  |
| How did the interactive simulation parts of this computer-based material affect your <br> learning? |  |
| How did the visual / screen display, in this material, affect your learning? |  |
| How did the lack of video clips, in this computer-based material affect your learning? |  |
| Do you find the computer-based material more, or less, helpful for your learning than <br> (traditional) lectures? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than <br> (class based) case-studies? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than <br> (academic) books? Why so? |  |
| What forms of learning material would you prefer to be offered in a face to face session, <br> rather than computer-based? Why so? |  |

## Approaches and Study Skills Inventory

This part of the questionnaire has been taken from the ASSIST material developed by Professor N. Entwistle of Edinburgh University. It has been designed to allow you to describe, in a systematic way, how you go about learning and studying. The technique involves asking you a substantial number of questions, which overlap to some extent, to provide good overall coverage of different ways of studying. Most of the items are based on comments made by other students. Please respond truthfully, so that your answers will accurately describe your actual ways of studying, and work your way through the questionnaire quite quickly.

## A. What is learning?

When you think about the term 'LEARNING ', what does it mean to you?
Consider each of these statements carefully, and rate them in terms of how close they are to your own way of thinking about it
Please tick the appropriate box after each statement:

| Often | Very <br> different | Quite <br> different | Not so <br> close | Rather <br> close | Very <br> close |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. Making sure you remember things well. |  |  |  |  |  |
| b. Developing as a person. |  |  |  |  |  |
| c. Building up knowledge by acquiring facts and information |  |  |  |  |  |
| d. Being able to use the information you've acquired. |  |  |  |  |  |
| e. Understanding new material for yourself. |  |  |  |  |  |
| f. Seeing things in a different and more meaningful way. |  |  |  |  |  |

## B. Approaches to studying

The next part of this questionnaire asks you to indicate your relative agreement or disagreement with comments about studying again made by other students. Please work through the comments, giving your immediate response. In deciding your answers, think in terms of this particular class. It is also very important that you answer all the questions: check you have.

Try nol to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat | Agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. I manage to find conditions for studying which allow me to <br> get on with my work easily |  |  |  |  |  |
| 2. When working on an assignment. I'm keeping in mind <br> how best to impress the marker |  |  |  |  |  |
| 3. Often I find myself wondering whether the work <br> I am doing here is really worthwhile |  |  |  |  |  |
| 4. I usually set out to understand for myself the meaning <br> of what we have to learn |  |  |  |  |  |
| 5. I organise my study time carefully to make the best use of it |  |  |  |  |  |
| 6. I find I have to concentrate on just memorising a good deal <br> of what I have to learn |  |  |  |  |  |
| 7. I go over the work I've done carefully to check the reasoning <br> and that it makes sense |  |  |  |  |  |
| 8. Often I feel I'm drowning in the sheer amount of material <br> we're having to cope with |  |  |  |  |  |
| 9. I look at the evidence carefully and try to reach my own <br> conclusion about what I'm studying |  |  |  |  |  |


|  | Disagree | Disagree Somewhat | Unsure | Agree <br> Somewhat | Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10. It's important for me to feel that I'm doing as well as I really can on the courses here |  |  |  |  |  |
| 11. I try to relate ideas I come across to those in other topics or other courses whenever possible |  |  |  |  |  |
| 12. I tend to read very little beyond what is actually required to pass |  |  |  |  |  |
| 13. Regularly I find myself thinking about ideas from lectures when I'm doing other things |  |  |  |  |  |
| 14. I think I'm quite systematic and organised when it comes to revising for exams |  |  |  |  |  |
| 15. I look carefully at tutors' comments on course work to see how to get higher marks next time |  |  |  |  |  |
| 16. There's not much of the work here that I find interesting or relevant |  |  |  |  |  |
| 17. When I read an article or book. I try to find out for myself exactly what the author means |  |  |  |  |  |
| 18. I'm pretty good at getting down to work whenever I need to |  |  |  |  |  |
| 19. Much of what I'm studying makes little sense: it's like unrelated bits and pieces |  |  |  |  |  |
| 20. I think about what I want to get out of this course to keep my studying well focused |  |  |  |  |  |
| 21. When I'm working on a new topic, I try to see in my own mind how all the ideas fit together |  |  |  |  |  |
| 22 I often worry about whether l'll ever be able to cope with the work properly |  |  |  |  |  |
| 23. Often I find myself questioning things I hear in lectures or read in books |  |  |  |  |  |
| 24. I feel that I'm getting on well, and this helps me put more effort into the work |  |  |  |  |  |
| 25. I concentrate on learning just those bits of information I have to know to pass |  |  |  |  |  |
| 26. I find that studying academic topics can be quite exciting at times |  |  |  |  |  |
| 27. I'm good at following up some of the reading suggested by lecturers or tutors |  |  |  |  |  |
| 28. I keep in mind who is going to mark an assignment and what they're likely to be looking for |  |  |  |  |  |
| 29. When I look back. I sometimes wonder why I ever decided to come here |  |  |  |  |  |
| 30. When I am reading, I stop from time to time to reflect on what I am trying to learn from it |  |  |  |  |  |
| 31. I work steadily through the term or semester, rather than leave it all until the last minute |  |  |  |  |  |
| 32. I'm not really sure what's important in lectures so I try to get down all I can |  |  |  |  |  |
| 33. Ideas in course books or articles often set me off on long chains of thought of my own |  |  |  |  |  |
| 34. Before starting work on an assignment or exam question, I think first how best to tackle it. |  |  |  |  |  |
| 35. I often seem to panic if 1 get behind with my work |  |  |  |  |  |
| 36. When I read, I examine the details carefully to see how they fit in with what's being said |  |  |  |  |  |


|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat |
| :--- | :--- | :--- | :--- | :--- |
| 37. I put a lot of effort into studying because I'm determined to <br> do well |  |  |  |  |
| 38. I gear my studying closely to just what seems to be <br> required for assignments and exams |  |  |  |  |
| 39. Some of the ideas I come across on the course I find really <br> gripping |  |  |  |  |
| 40. I usually plan out my week's work in advance, either on <br> paper or in my head |  |  |  |  |
| 41. I keep an eye open for uhat lecturers seem to think is <br> important and concentrate on that |  |  |  |  |
| 42. I'm not really interested in this course, but I have to take it <br> for other reasons |  |  |  |  |
| 43. Before tackling a problem or assignment, I first try to work <br> out what lies behind it |  |  |  |  |
| 44. I generally make good use of my time during the day |  |  |  |  |
| 45. I often have trouble in making sense of the things I have <br> to remember |  |  |  |  |
| 46. I like to play around with ideas of my own even if they <br> don't get me very far |  |  |  |  |
| 47. When I finish a piece of work, I check it through to see if <br> it really meets the requirements |  |  |  |  |
| 48. Often I lie awake worrying about work I think I won't be <br> able to do |  |  |  |  |
| 49. It's important for me to be able to follow the argument, or <br> to see the reason behind things |  |  |  |  |
| 50. I don't find it at all difficult to motivate myself |  |  |  |  |
| 51. I like to be told precisely what to do in essays or <br> other assignments |  |  |  |  |
| 52. I sometimes get 'hooked' on academic topics and feel I <br> would like to keep on studying them |  |  |  |  |

## D. Preferences for different types of course and teaching

Try not to use unsure, unless you really have to. or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

|  | Definitely <br> Dislike | Dislike to <br> Some Extent | Unsure | Like to Some <br> Extent | Definitely <br> Like |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. lecturers who tell us exactly what to put down in our notes |  |  |  |  |  |
| b lecturers who encourace us to think for ourselves and show <br> us how they themselves think |  |  |  |  |  |
| c. exams which allow me to show that I've thought about the <br> course material for myself. |  |  |  |  |  |
| dexams <br> our lecture notes which need only the material provided in |  |  |  |  |  |
| e. eourses in which it's made very clear just which books we <br> have to read. |  |  |  |  |  |
| f. courses where we're encouraged to read around the subject <br> a lot for ourselves |  |  |  |  |  |
| g.b books which challenge you and provide explanations <br> which go beyond the lectures |  |  |  |  |  |
| h. books which give you definite facts and information which <br> can easily be leamed |  |  |  |  |  |

Finally, how well do you think you have been doing in your assessed work overall, so far?
Please rate yourself objectively. based on the grades you have been obtaining

| Rather Badly |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |

## Thank you for completing this questionnaire.

## A8.23 Questionnaire 19 SEI Exit Semester 21999 to 2000

## Z1.106 (Research: Exit Questionnaire)

## Name <br> (PLEASE PRINT IN BLOCK CAPITALS)

## Date

$\qquad$

Table 1 Feedback on Midpoint Questionnaire Responses
This table summarises some possible interpretations of the feedback obtained in the midpoint questionnaires.
Please offer your comments to either confirm that this is a true statement of your viewpoint, or to adjust the statement in order that it become a true statement of your viewpoint.

| Feedback on Questionnaire | Your Comment on This <br> Feedback? |
| :--- | :--- |
| The use of this computer-based material requires more self-discipline from learners than <br> other, more traditional. classes. The material must therefore be made as interesting as <br> possible to maintain motivation. |  |
| Personal control over time and pace of leaming is helpful. The current level of flexibility <br> is limited to specific labs however and it would be of considerable help to learners if the <br> material was accessible from other locations, including their own home. |  |
| Repetition of material causes irritaton for learners and should be avoided where possible. <br> The links which lead to the same windows, should show the user that they have already <br> looked at the window. |  |
| It is boring and sore on the eyes to read large amounts of text on-screen. Text should be <br> kept to a minimum and it should be made possible for users to print text screens if they <br> wish. |  |
| The interactive exercises make the material more interesting and increase learner <br> engagement. The material should have more interactive exercises added. |  |
| The interactive exercises allou revision and self-testing. The feedback in the exercises <br> should be available after three tries and the user should always be clearly informed which <br> parts of the exercise were successfull. completed. |  |
| The use of colour and humorous images helps break up the text material and adds a fun <br> element, which is entertaining, and increases the interest and enjoyment level for the user. |  |
| The use of video material is not "expected" as a requirement in university classes. <br> However its use in this computer material would further increase interest and enjoyment <br> levels, and enhance understanding. |  |
| The material should be made as relevant as possible for the learner by using real life <br> examples. |  |


| Feedback on Questionnaire | Your Comment on This <br> Feedback? |
| :--- | :--- |
| The material should set problem solving tasks for learners to explore. This helps learners <br> think through the material and clarify what is important. |  |
| To ensure learners accually learm what they should from the computer-based material <br> requires assessed assignments. These may be computer-based multiple choice tests and / <br> or written assignments. |  |
| Opportunity for discussion is important and interaction with others is necesssary for <br> understanding of this materia. This should take the form of group-based learning. |  |
| The computer-based material should make use of text, video, talking head lectures and <br> computer-linked discussions, as these things are helpful for learners. |  |
| The computer-based material is not enough and lectures, tutorials, books, video and real <br> people talking are required also. |  |

Please indicate your current level of confidence, by ticking in the relevant box, for each of the concepts listed in the Confidence Log below:

| Topic | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |  |
| Getting Into Business |  |  |  |  |  |
| Team Building in Business |  |  |  |  |  |
| Market Research \& Sources |  |  |  |  |  |
| The Business Plan |  |  |  |  |  |
| Finance Issues |  |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |  |
| Strategic Marketing |  |  |  |  |  |
| Funding |  |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |  |
| Survival Strategies |  |  |  |  |  |

Please indicate your preference (l: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |  |

## In your opinion, which of the above environments most appropriately describes this computer-based module?

How would you rate the level of the content for each of the concepts you have covered so far in the module? Please tick the appropriate box for each and give a comment of explanation.

| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Skills \& Entrepreneurial Characteristics |  |  |  |  |
| Opportunity v Idea in Business |  |  |  |  |
| Getting Into Business |  |  |  |  |
| Team Building in Business |  |  |  |  |
| Market Research \& Sources |  |  |  |  |
| The Businesp Plan |  |  |  |  |
| Finance Issues |  |  |  |  |
| Patents, Licences \& Legal Issues |  |  |  |  |


| Topic | Too Basic | Appropriate | Too Detailed | Comment: |
| :--- | :--- | :--- | :--- | :--- |
| Strategic Marketing |  |  |  |  |
| Funding |  |  |  |  |
| The Investor's Viewpoint |  |  |  |  |
| Survival Strategies |  |  |  |  |

The module makes use of a range of elements. Please rate each of these, you have used so far, in terms of their effectiveness for your learning on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Main Text Windows |  |  |  |  |  |  |
| Visual Elements (look) of Windows |  |  |  |  |  |  |
| Interactive Exercises |  |  |  |  |  |  |
| Visual Elements (look) of Interactive Exercises |  |  |  |  |  |  |
| Notepad Exercises |  |  |  |  |  |  |
| Learning Summaries |  |  |  |  |  |  |
| Café Poirot Exercise |  |  |  |  |  |  |
| Business Plan Evaluation |  |  |  |  |  |  |

The module makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Navigation Feet (green / red) |  |  |  |  |  |  |
| Hypertext Links |  |  |  |  |  |  |
| Button Links |  |  |  |  |  |  |
| History Window |  |  |  |  |  |  |
| Glossary Window |  |  |  |  |  |  |
| Main Map (showing overview) |  |  |  |  |  |  |
| Structure Map (showing contents) |  |  |  |  |  |  |

The module makes use of a range of self-contained, interactive exercises. Please rate the following elements of these, in terms of their effectiveness for your use of the exercises, on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance to Module |  |  |  |  |  |  |
| Difficulty of Exercises |  |  |  |  |  |  |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | $\mathbf{4}$ | 5 | Comment |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |  |
| The interactive exercises helped me to understand the material |  |  |  |  |  |  |
| The interactive exercises were not essential so I focused on other material |  |  |  |  |  |  |
| I found the visual elements (look) of the windows motivating |  |  |  |  |  |  |
| The learning summaries increased my depth of thought |  |  |  |  |  |  |
| The notepad exercises increased my depth of thought |  |  |  |  |  |  |
| I skimmed the material, rather than read it all, in order to save time |  |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |  |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | $\mathbf{2}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've used |  |  | Comment |  |  |  |
| This material was more motivating than some lectures I've experienced |  |  |  |  |  |  |
| This material was more motivating than most lectures I've experienced |  |  |  |  |  |  |
| This material was more motivating than the best lectures I've experienced |  |  |  |  |  |  |
| The time flexibility was more important to me than the quality of the presentation |  |  |  |  |  |  |
| The presentation of this multi-media material is was good as others I've experienced |  |  |  |  |  |  |
| This material contained too much text |  |  |  |  |  |  |
| I found myself wanting to read this material from a print out rather than on screen |  |  |  |  |  |  |
| I was not sure whether I was learning uhat I should from this computer based material |  |  |  |  |  |  |
| The on-screen feedback given for the interactive exercises helped me check my learning |  |  |  |  |  |  |
| I would have found multiple choice tests helpful to check my learning |  |  |  |  |  |  |
| I would have found more tutor input helpful |  |  |  |  |  |  |
| I felt quite isolated when working with this computer based material |  |  |  |  |  |  |
| I found email communication useful for maintaining contact with the class tutor |  |  |  |  |  |  |
| I would prefer to have more face to face contact with the class tutor |  |  |  |  |  |  |

Thank you for completing this questionnaire.

## Appendix 9: Questionnaires Used in Case 2 SHS Mediabase

## A9.1 Questionnaire 1 SHS (Pilot Study) Exit Semester 21998 to 1999

## Research Questionnaire

## Background Information and Guidelines:

This questionnaire has been compiled specifically for research purposes. The focus of this research is on the use of interactive technology within learning contexts and the extent to which the use of such technology is found helpful, or not, by the learners or users.

Please try to complete all sections and take the time to add comments of your own, in relation to your learning, as these are particularly relevant for this research

## Personal Details:

(PLEASE PRINT IN BLOCK CAPITALS)

| Name: |  |
| :--- | :--- |
| Course: |  |
| Year of Study: |  |
| Student Number: |  |
| Term TTime Tel. No.: |  |
| Email: |  |

Please complete the following sections for the blocks you have covered:

| Which blocks have you completed? (please state) |
| :--- |
| How long did you spend using the computer to complete these blocks? (please state total to nearest 10 mins ) |

Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| VR Scene of Restaurant \& Bar | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Introduction Section | 1 | 2 | 3 | 4 | 5 |
| Stated Purpose | 1 | 2 | 3 | 4 | 5 |
| Stated Objectives | 1 | 2 | 3 | 4 | 5 |
| Getting Started Section | 1 | 2 | 3 | 4 | 5 |
| Restaurant Seating Plan | 1 | 2 | 3 | 4 | 5 |
| Directory of Tea, Coffee \& Light Beverages | 1 | 2 | 3 | 4 | 5 |
| Wine List | 1 | 2 | 3 | 4 | 5 |

## Please comment on the value of the following for your learning:

| VR Scene of Restaurant \& Bar |  |
| :--- | :--- |
| Introduction Section |  |
| Stated Purpose |  |
| Stated Obiectives |  |
| Getting Started Section |  |
| Restaurant Seating Plan |  |
| Directory of Tea. Coffee \& Light Beverages |  |
| Wine List |  |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I worked through all elements of the material | 1 | 2 | 3 | 4 | 5 |
| The interactive table setting exercise helped me to learn the setting layout | 1 | 2 | 3 | 4 | 5 |
| The interactive table setting exercise gave enough feedback | 1 | 2 | 3 | 4 | 5 |
| The interactive exercise was not essential so I focused on other material | 1 | 2 | 3 | 4 | 5 |
| I found the visual elements (look) of the windows motivating | 1 | 2 | 3 | 4 | 5 |
| The video clips of Cailein Gillespie increased my depth of thought | 1 | 2 | 3 | 4 | 5 |
| The Mathew Algie video clips of increased my depth of thought | 1 | 2 | 3 | 4 | 5 |
| The interactive maps increased my depth of thought | 1 | 2 | 3 | 4 | 5 |
| I was unsure what to do with the interactive maps | 1 | 2 | 3 | 4 | 5 |
| I skimmed the material, rather than look at it all, in order to save time | 1 | 2 | 3 | 4 | 5 |
| I revisited material when I found other things related to it | 1 | 2 | 3 | 4 | 5 |

## Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced by other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| This material is more motivating than some lectures I've experienced | 1 | 2 | 3 | 4 | 5 |
| This material is more motivating than most lectures I've experienced | 1 | 2 | 3 | 4 | 5 |
| This material is more motivating than the best lectures I've experienced | 1 | 2 | 3 | 4 | 5 |
| The time flexibility is more important to me than the quality of the presentation | 1 | 2 | 3 | 4 | 5 |
| The presentation of this multi-media material is not as good as others I've experienced | 1 | 2 | 3 | 4 | 5 |
| The presentation of this multi-media material is as good as others I've experienced | 1 | 2 | 3 | 4 | 5 |
| The presentation of this multi-media material is better than others I've experienced | 1 | 2 | 3 | 4 | 5 |
| This material contained too much text | 1 | 2 | 3 | 4 | 5 |
| This material contained too little text | 1 | 2 | 3 | 4 | 5 |
| I find myself wanting to read this material from the Metablock rather than on screen | 1 | 2 | 3 | 4 | 5 |
| I'm not sure whether I'm learning what I should from this computer based material | 1 | 2 | 3 | 4 | 5 |
| The on-screen feedback given for the interactive exercise helped me check my learning | 1 | 2 | 3 | 4 | 5 |
| I would find multiple choice tests helpful to check my learning | 1 | 2 | 3 | 4 | 5 |
| I would find more tutor input helpful | 1 | 2 | 3 | 4 | 5 |
| I feel quite isolated when working with this computer based material | 1 | 2 | 3 | 4 | 5 |
| I find email communication useful for maintaining contact with the class tutor | 1 | 2 | 3 | 4 | 5 |
| I would prefer to have more face to face contact with the class tutor | 1 | 2 | 3 | 4 | 5 |

[^12]The focus of the following questions is your learning and what helps you learn. This includes your motivation and achievement of learning outcomes

## Name one learning experience you consider worked particularly well for you, as you worked through this material, and explain why the experience was effective for you:

Experience that worked well:
Reason this worked for me:

[^13]Please rate each of the following computer based learning environments: (1: not motivating to 5 highly motivating)

| Electronic Book (text shown on screen) | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Game approach (where points are scored for correct answers) | 1 | 2 | 3 | 4 | 5 |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) | 1 | 2 | 3 | 4 | 5 |
| Combination of Electronic Book, Computer Game and Simulated Environment | 1 | 2 | 3 | 4 | 5 |

Please explain why you have the preference stated above:

The material makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of 1 (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element |  |  |  |  |  | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pull Down Menus | 1 | 2 | 3 | 4 | 5 |  |
| Clickable Screen Areas | 1 | 2 | 3 | 4 | 5 |  |
| Hand Tool in Navigable Map | 1 | 2 | 3 | 4 | 5 |  |
| Arrow Pointer in VR Restaurant \& Bar | 1 | 2 | 3 | 4 | 5 |  |
| Click to view Wines / Beverages Settings and packaging / labels | 1 | 2 | 3 | 4 | 5 |  |
| Click to view dishes Settings | 1 | 2 | 3 | 4 | 5 |  |

Suggestions for improvement of navigation elements:

The material makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of $\mathbf{1}$ (not effective) - $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element |  |  |  |  |  | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Introduction Section Voice Over | 1 | 2 | 3 | 4 | 5 |  |
| Restaurant Table Plan | 1 | 2 | 3 | 4 | 5 |  |
| Restaurant Table Layout | 1 | 2 | 3 | 4 | 5 |  |
| Function Space Management System | 1 | 2 | 3 | 4 | 5 |  |
| Interactive Table Setting Exercise | 1 | 2 | 3 | 4 | 5 |  |
| Expert Video Clip (Cailein Gillespie) | 1 | 2 | 3 | 4 | 5 |  |
| Production Video Clip (Mathew Algie) | 1 | 2 | 3 | 4 | 5 |  |
| Production Video Clip (Red Wine) | 1 | 2 | 3 | 4 | 5 |  |
| Production Video Clip (White Wine) | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Serving Setting for Tea / Packaging / Label | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Serving Setting for Coffee / Packaging/Label | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Serving Setting for Red Wine / Packaging/Label | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Serving Setting for White Wine / Packaging/Label | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Navigable Map for Red Wine | 1 | 2 | 3 | 4 | 5 |  |
| Screen Display of Navigable Map for White Wine | 1 | 2 | 3 | 4 | 5 |  |
| Screen Text/Voice Over of Pronunciation | 1 | 2 | 3 | 4 | 5 |  |
| Metablock materials | 1 | 2 | 3 | 4 | 5 |  |

Please state in your own words how you have found your confidence to be affected by undertaking this course, offering where possible an explanation of why so:
a) in areas where you were initially less than confident
b) in areas where you were initially confident
c) in areas where you were initially very confident

## What changes would bring this course closer to your ideal for learning?

Please answer the following questions as accurately as possible:

| Quention | Response |
| :---: | :---: |
| Hou comfortable do you feel now about using a computer for learning this material? Please explain why this is so |  |
| What do you find most interesting about using a computer for this course? Please explain uhy this is so |  |
| What do you find least interexting ahout using a computer for this course? Please explain uthy this is so |  |
| If you had to descrite a computce based kaming situation in which you would be highly motivated now, what uould it te? Pleasce explain why this is so. |  |
| If you had to descrite a computce hased learning situation in which you would not be motivated to learn now. what wnuld it te' Please explain why this is so. |  |
| How frequentl do sou currentl use cmal' For what purposes? |  |
| How frequenti, do (ou currenti use the Internet? For what purposes? |  |
| Any other comments: |  |

Thank you for completing ithis questionnaire

## A9.2 Questionnairc 2 SHS Entrance Semester 11999 to 2000

## Rescarch: Scottish Motel School Entrance Questionnaire

## Backgrownd Information and Guidelines:

This quesionnaire has bren compiled specificall: for research purposes. The focus of this research is on the use of interaciuve lechnologi) whin learming crmievts and the extent to which the use of such technology is found helpful, or not. by the learners or users

Please in to complete all sritions and take the fime to add comments of your own, in relation to your learning, as these are parlicularil merevani for this research

## Personal Detaile:

(PLEASE: PRIAT N BIOCNCAPITILS)

| Name. |  |
| :--- | :--- |
| Course |  |
| Year of Study |  |
| Student Number |  |
| Term Time Ial No |  |
| Emat!. |  |

[^14]|  |  |  | Level | of | Confidence |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Topic <br> Nock | No <br> Confidence | Little <br> Confidence | Some <br> Confidence | Confident | Very <br> Confident |
| Preparation techniques and general pre- <br> production daily operational mise en place. | 1 |  |  |  |  |  |
| Food and Beverage Management: Image <br> creation and income generation. | 1 |  |  |  |  |  |
| Personal Hygiene for operations within the <br> hospitality industry. | 1 |  |  |  |  |  |
| Management of food hygiene and safety for <br> the hospitality industry | 1 1/2 |  |  |  |  |  |
| Basic Cooking Methods | 2 |  |  |  |  |  |
| Synthesis of past and present in the <br> production of stocks, sauces, roux, and <br> marinades | 2 |  |  |  |  |  |
| Soups. The history, classification, <br> embellishment and function. | 2 |  |  |  |  |  |
| Social History of The Menu |  |  |  |  |  |  |


|  |  |  | Level | of | Confidence |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Topic | Block No. | No <br> Confidence | Little Confidence | Some Confidence | Confident | Very Confident |
| The management of food and beverage functions. | 7 |  |  |  |  |  |
| The principal food commodities utilised by the hospitality industry | 7 |  |  |  |  |  |
| Marketing, promotions, selling, customer care and public relations for the hospitality industry | 8 |  |  |  |  |  |
| Classification, nature and production of cheese. Cheese tasting. | 8 |  |  |  |  |  |
| Range nature and uses of fruits vegetables and potatoes. | 8 |  |  |  |  |  |
| Savouries, sandwiches. zakouska. canapes and caviar | 8 |  |  |  |  |  |
| Nutritional analyses. | 9 |  |  |  |  |  |
| Techniques of contemporary cooking. | 9 |  |  |  |  |  |
| Patisserie. | 9 |  |  |  |  |  |
| Deserts; puddings; gateaux: coupes, and cremes. | 9 |  |  |  |  |  |
| Ice-creams; granitas; spooms; and bombes. | 9 |  |  |  |  |  |
| Gastronomy. | 10 |  |  |  |  |  |
| Advanced service techniques. | 10 |  |  |  |  |  |
| Food premises. | 10 |  |  |  |  |  |
| Equipment design, construction and selection. | 11 |  |  |  |  |  |
| Cleaning and disinfection of premises. | 11 |  |  |  |  |  |
| Quality assurance. | 11 |  |  |  |  |  |
| Monitoring and control of food standards and operations. | 11 |  |  |  |  |  |
| Advanced customer care and communication skills. | 12 |  |  |  |  |  |
| Marketing and Public Relations. | 12 |  |  |  |  |  |

Please state in your own words how you expect your confidence to be affected by using this CD ROM material, offering where possible an explanation of why this will be so and how this will make you feel:
a) in areas where you are currently less than confident
b) in areas where you are currently confident
c) in areas where you are currently very confident

Given an ideal world, what would be your preferred way of learning using a computer as an aid?

Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based
learning environments: learning environments:

| Type of Computer-Based Environment | 1 | 2 | 3 | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) | 5 |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |
| Combination of Electronic Book. Computer Game and Simulated Environment |  |  |  |  |

## Learning Style Inventory

(Adapted from Internet material by Jerry Cerny)
Note: The following evaluation is a short, quick way of assessing your learning style, answers are neither right or wrong.
Please answer each question as honestly as you can.
Please tick the appropriate box after each statement:

|  | Seldom | Some Times | Often |
| :---: | :---: | :---: | :---: |
| 1. Can remember more about a subject through the lecture method with information, explanations and did |  |  |  |
| 2. Prefer information to be written on the chalk board, with the use of visual aids and assigned readings. |  |  |  |
| 3. Like to write things down or to take notes for visual review. |  |  |  |
| 4. Prefer to use posters, models, or actual practice \& some activities in class. |  |  |  |
| 5. Require explanations of diagrams. graphs, or visual directions. |  |  |  |
| 6. Enjoy working with my hands or making things. |  |  |  |
| 7. Am skillful with \& enjoy developing \& making graphs \& charts. |  |  |  |
| 8. Can tell if sounds match when presented with pairs of sounds. |  |  |  |
| 9. Remember best by writing things doun several times. |  |  |  |
| 10. Can understand and follow directions on maps. |  |  |  |
| 11. Do better at academic subjects by listening to lectures \& tapes. |  |  |  |
| 12. Play with coins or keys in pockets. |  |  |  |
| 13. Learn to spell better by repeating the words out loud than by writing the word on papers. |  |  |  |
| 14. Can better understand a news article by reading about it in the paper than by listening to the radio. |  |  |  |
| 15. Chew gum, smoke, or snack during studies. |  |  |  |
| 16. Feel the best way to remember is to picture it in your head. |  |  |  |
| 17. Learn spelling by "finger spelling" words. (i.e. drawing letters in the air) |  |  |  |
| 18. Would rather listen to a good lecture or speech than read about the same material in a textbook. |  |  |  |
| 19. Am good at working and solving jigsaw puzzles and mazes. |  |  |  |
| 20. Grip objects in hands during learning period. |  |  |  |
| 21. Prefer listening to the news on the radio rather than reading about it in the newspaper. |  |  |  |
| 22. Obtain information on an interesting subject by reading relevant materials. |  |  |  |
| 23. Feel very comfortable touching others, hugging, handshaking. |  |  |  |
| 24. Follow oral directions better than written ones. |  |  |  |

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## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about the prospect of using a computer for learning this material? <br> Please explain why this is so. |  |
| What do you find most interesting about using computers? Please explain why this is so. |  |
| What do you find least interesting about using computers? Please explain why this is so. |  |
| If you had to describe a computer based learning situation in which you would be highly motivated, <br> what would it be? Please explain why this is so. |  |
| If you had to describe a computcr based learning situation in which you would not be motivated to <br> learn, what would it be? Please explain why this is so. |  |
| How frequently do you currently use e-mail? For what purposes? |  |
| How frequently do you currently use the Internet? For what purposes? |  |
| Any other comments? (Please continue overleaf) |  |

Thank you for completing this questionnaire.

## A9.3: Controlled Investigation Material for SHS Case Study 2

(Note Questionnaire as shown in A8.20)

## Scottish Hotel School

Questionnaire Version A Instructions

```
Go to the Mediabase Material
Go to Marketing and Public Relations
Go to Role Playing Scenes
Go to Single Tourist
Go to Responding to Client Concerns
Go to Good Waiter example
View the Video Clip and consider the questions posed at the end of this clip
Complete the first section (ie pages 1-3) of your questionnaire by ticking the appropriate boxes
Go to the Web Browser and access:
http://www.mansci.strath.ac.uk/diner.html
Read the material on the webpage and consider the questions posed at the end of the page
Complete the second section (ie pages 4-6) of your questionnaire by ticking the appropriate boxes
```


## Many thanks for assisting with this research

## Scottish Hotel School

## Questionnaire Version B Instructions

Go to the Web Browser and access:
http://www.mansci.strath.ac.uk/diner.html
Read the material on the webpage and consider the questions posed at the end of the page
Complete the first section (ie pages 1-3) of your questionnaire by ticking the appropriate boxes
Go to the Mediabase Material
Go to Marketing and Public Relations
Go to Role Playing Scenes
Go to Single Tourist
Go to Responding to Client Concerns
Go to Good Waiter example
View the Video Clip and consider the questions posed at the end of this clip
Complete the second section (ie pages 4-6) of your questionnaire by ticking the appropriate boxes
Many thanks for assisting with this research

## Hotel School

## Restaurant Scenario - Text Version

The scene is the Scottish Hotel School Restaurant.
You observe the following interaction between the waiter and a diner who is dining alone.
Good waiter - Single tourist - Responding to Client Concerns
Waiter hands the tourist the menu

```
Tourist: "I'm a coeliac, which of these dishes would be suitable for me?"
Waiter understands
Waiter: "Yes, there are a range of dishes that would be suitable:
To start with we have:
- Corn on the cob served with reduced calorie spread, onion powder and fresh parsley
or if you would prefer,
- Pink grapefruit segments topped with pink grapefruit water ice and served with a dash of Swedish Absolut Vodka
For your main course you could choose:
- Grilled scallops served with a blue caraway and saffron sauce
and to finish today we have:
- Fresh fruit salad scented with star anise and rose water"
```


## Narrator:

The waiter adopts a genuinely positive and friendly manner. He makes suggestions which are not hesitant and this builds customer confidence.
How would you have responded?
Would you know what to offer guests with a range of dietary regimes - ethical, personal, religious or medical?
Do you know where to obtain further knowledge on this subject?

## A9.4 Questionnaire 4 SHS Midpoint Semester 21999 to 2000

## Research: Scottish Hotel School Mid-Point Questionnaire

## Background Information and Guidelines:

This questionnaire has been compiled specifically for research purposes. The focus of this research is on the use of interactive technology within learning contexts and the extent to which the use of such technology is found helpful, or not, by the learners or users.

Please try to complete all sections and take the time to add comments of your own. in relation to your learning. as these are particularly relevant for this research

## Personal Details:

(PLEASE PRINT IN BLOCK CAPITALS)

| Name: |  |
| :--- | :--- |
| Course: |  |
| Year of Study: |  |
| Student Number: |  |
| Term Time Tel. No.: |  |
| Email: |  |

Please answer the following questions as accurately as possible:

| Question | Answer |
| :--- | :--- |
| What impressed you most about this computer-based material? |  |
| Which element of this computer-based material got you most fully engaged? (to the <br> level where you felt you were really concentrating) |  |
| What have you found least engaging about this computer-based material? (where <br> your attention wandered) |  |
| What did you find irritating or confusing in this computer-based material? |  |
| Which elements of the computer-based material affected your depth of thought and <br> how so? (i.e. made you think most) |  |
| How could we make it easier for you to learn from this computer-based material? |  |
| How could we ensure you learn what you should from this computer-based material? |  |
| How did the interactive simulation parts of this computer-based material affect your <br> learning? |  |
| How did the visual / screen display, in this material, affect your learning? |  |
| How did the use of video clips, in this computer-based material affect your learning? |  |
| Do you find the computer-based material more, or less, helpful for your learming than <br> (traditional) lectures? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than <br> (class based case-studies? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your leamning than <br> (academic) books? Why so? |  |
| What forms of leamning material would you prefer to be offered in a face to face <br> session, rather than computer-based? Why so? |  |

## Approaches and Study Skills Inventory

This part of the questionnaire has been taken from the ASSIST material developed by Professor N. Entwistle of Edinburgh University. It has been designed to allow you to describe, in a systematic way, how you go about learning and studying. The technique involves asking you a substantial number of questions, which overlap to some extent. to provide good overall coverage of different ways of studying. Most of the items are based on comments made by other students. Please respond truthfully, so that your answers will accurately describe your actual ways of studying, and work your way through the questionnaire quite quickly.
A. What is learning?

When you think about the term 'LEARNING', what does it mean to you?
Consider each of these statements carefully, and rate them in terms of how close they are to your own way of thinking about "t
Please tick the appropriate box after each statement:

| Often | Very <br> different | Quite <br> different | Not so <br> close | Rather <br> close | Very <br> close |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. Making sure you remember things well. |  |  |  |  |  |
| b. Developing as a person. |  |  |  |  |  |
| c. Building up knowledge by acquiring facts and information |  |  |  |  |  |
| d. Being able to use the information you've acquired. |  |  |  |  |  |
| e. Understanding new material for yourself. |  |  |  |  |  |
| f. Seeing things in a different and more meaningful way. |  |  |  |  |  |

## B. Approaches to studying

The next part of this questionnaire asks you to indicate your relative agreement or disagreement with comments about studying again made by other students. Please work through the comments, giving your immediate response. In deciding your answers, think in terms of this particular class. It is also very important that you answer all the questions: check you have.

Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

| Often | Disagree | Disagree <br> Somew hat | Unsure | Agree <br> Somewhat | Agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. I manage to find conditions for studying which allow me to <br> get on with my work easily |  |  |  |  |  |
| 2. When working on an assignment, I'm keeping in mind <br> how best to impress the marker |  |  |  |  |  |
| 3. Often I find myself wondering whether the work <br> I am doing here is really worthwhile |  |  |  |  |  |
| 4. I usually set out to understand for myself the meaning <br> of what we have to learn |  |  |  |  |  |
| 5. I organise my study time carefully to make the best use of it |  |  |  |  |  |
| 6. I find I have to concentrate on just memorising a good deal <br> of what I have to learn |  |  |  |  |  |
| 7. I go over the work I've done carefully to check the reasoning <br> and that it makes sense |  |  |  |  |  |
| 8. Often I feel I'm drowning in the sheer amount of material <br> we're having to cope with |  |  |  |  |  |
| 9. I look at the evidence carefully and try to reach my own <br> conclusion about what I'm studying |  |  |  |  |  |
| 10. It's important for me to feel that I'm doing as well as <br> I really can on the courses here |  |  |  |  |  |
| 11. I try to relate ideas I come across to those in other topics <br> or other courses whenever possible |  |  |  |  |  |
| 12. I tend to read very little beyond what is actually required <br> to pass |  |  |  |  |  |
| 13. Regularly I find myself thinking about ideas from lectures <br> when I'm doing other things |  |  |  |  |  |
| 14. I think I'm quite systematic and organised when it comes <br> to revising for exams |  |  |  |  |  |
| 15. I look carefully at tutors' comments on course work to see <br> how to get higher marks next time |  |  |  |  |  |
| 16. There's not much of the work here that I find interesting <br> or relevant |  |  |  |  |  |
| 17. When I read an article or book, I try to find out for myself <br> exactly what the author means |  |  |  |  |  |
| 18. I'm pretty good at getting down to work whenever I need to |  |  |  |  |  |
| 19. Much of what I'm studying makes little sense: it's like unrelated <br> bits and pieces |  |  |  |  |  |
| 20. I think about what I want to get out of this course to keep my <br> studying well focused |  |  |  |  |  |
| 21. When I'm working on a new topic, I try to see in my own mind <br> how all the ideas fit together |  |  |  |  |  |
| 22 I often worry about whether I'll ever be able to cope with the <br> work properly |  |  |  |  |  |
| 23. Often I find myself questioning things I hear in lectures or <br> read in books |  |  |  |  |  |


| Often | Disagree | Disagree <br> Somewhat | Unsure | Agree Somewhat | Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 24. I feel that I'm getting on well, and this helps me put more effort into the work |  |  |  |  |  |
| 25. I concentrate on learning just those bits of information I have to know to pass |  |  |  |  |  |
| 26. I find that studying academic topics can be quite exciting at times |  |  |  |  |  |
| 27. I'm good at following up some of the reading suggested by lecturers or tutors |  |  |  |  |  |
| 28. I keep in mind who is going to mark an assignment and what they're likely to be looking for |  |  |  |  |  |
| 29. When I look back, I sometimes wonder why I ever decided to come here |  |  |  |  |  |
| 30. When I am reading, I stop from time to time to reflect on what I am trying to learn from it |  |  |  |  |  |
| 31. I work steadily through the term or semester, rather than leave it all until the last minute |  |  |  |  |  |
| 32. I'm not really sure what's important in lectures so I try to get down all I can |  |  |  |  |  |
| 33. Ideas in course books or articles often set me off on long chains of thought of my own |  |  |  |  |  |
| 34. Before starting work on an assignment or exam question, I think first how best to tackle it. |  |  |  |  |  |
| 35. I often seem to panic if I get behind with my work |  |  |  |  |  |
| 36. When I read, I examine the details carefully to see how they fit in with what's being said |  |  |  |  |  |
| 37. I put a lot of effort into studying because I'm determined to do well |  |  |  |  |  |
| 38. I gear my studying closely to just what seems to be required for assignments and exams |  |  |  |  |  |
| 39. Some of the ideas I come across on the course I find really gripping |  |  |  |  |  |
| 40. I usually plan out my week's work in advance, either on paper or in my head |  |  |  |  |  |
| 41. I keep an eye open for what lecturers seem to think is important and concentrate on that |  |  |  |  |  |
| 42. I'm not really interested in this course, but I have to take it for other reasons |  |  |  |  |  |
| 43. Before tackling a problem or assignment, I first try to work out what lies behind it |  |  |  |  |  |
| 44. I generally make good use of my time during the day |  |  |  |  |  |
| 45. I often have trouble in making sense of the things I have to remember |  |  |  |  |  |
| 46. I like to play around with ideas of my own even if they don't get me very far |  |  |  |  |  |
| 47. When I finish a piece of work, I check it through to see if it really meets the requirements |  |  |  |  |  |
| 48. Often I lie awake worrying about work I think I won't be able to do |  |  |  |  |  |
| 49. It's important for me to be able to follow the argument, or to see the reason behind things |  |  |  |  |  |
| 50. I don't find it at all difficult to motivate myself |  |  |  |  |  |
| 51. I like to be told precisely what to do in essays or other assignments |  |  |  |  |  |
| 52. I sometimes get 'hooked' on academic topics and feel I would like to keep on studying them |  |  |  |  |  |

## E. Preferences for different types of course and teaching

Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

| Often | Definitely <br> Dislike | Dislike to <br> Some <br> Extent | Unsure <br> Like to <br> Some <br> Extent | Definitely <br> Like |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. lecturers who tell us exactly what to put down in our notes |  |  |  |  |  |
| b. lecturers who encourage us to think for ourselves and <br> show us how they themselves think |  |  |  |  |  |
| c. exams which allow me to show that I've thought about the <br> course material for myself. |  |  |  |  |  |
| d. exams or tests which need only the material provided <br> in our lecture notes. |  |  |  |  |  |
| e. courses in which it's made very clear just which books <br> we have to read. |  |  |  |  |  |
| f. courses where we're encouraged to read around the subject <br> a lot for ourselves |  |  |  |  |  |
| g. books which challenge you and provide explanations <br> whichgo beyond the lectures |  |  |  |  |  |
| h. books which give you definite facts and information <br> which can easily be learned |  |  |  |  |  |

Finally, how well do you think you have been doing in your assessed work overall, so far?
Please rate yourself objectively, based on the grades you have been obtaining

| Rather Badly 1 | 2 | $\begin{gathered} \text { Not so Well } \\ 3 \end{gathered}$ | 4 | $\begin{gathered} \text { About average } \\ 5 \end{gathered}$ | 6 | Quite Well 7 | 8 | Very well 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Thank you for completing this questionnaire.

## A9.5 Questionnaire 5 SHS Exit Semester 21999 to 2000

## Research: Scottish Hotel School Exit Questionnaire

| Name: |  |
| :--- | :--- |
| Course: |  |
| Year of Study: |  |

## Table 1 Feedback on Midpoint Questionnaire Responses

This table summarises some possible interpretations of the feedback obtained in the midpoint questionnaires. Please offer your comments to either confirm that this is a true statement of your viewpoint, or to adjust the statement in order that it become a true statement of your viewpoint.

| Feedback on Questionnaire | Your Comment on This Feedback? |
| :---: | :---: |
| This computer-based material made good use of colourful graphics and audio/video. This provided the image of the food/beverage and gave the correct pronunciation of the names concerned. The material was easy to use and covered a wide range of content in a variety of ways. The video material was particularly impressive in that it allowed procedures (eg flambe) to be witnessed easily. |  |
| The material was different to that used in my other classes, gave me access to pronunciation I required competence in, allowed me to see images of dishes I had to produce in labs, allowed me to rehearse setting a table and to observe body language and reactions I might be faced with in the restaurant scenarios. These aspects got me engaged to the level where I was really concentrating. |  |
| The tea/coffee directory contained too much detail, some of which did not seem directly relevant to me. Some material was stating the obvious. The characters in the videos were too sterile, straight laced. There was too much text in some of the material. These aspects caused boredom to develop and reduced the level of concentration, or engagement achieved. |  |
| It is possible to get lost in the material, or have to work through several areas before getting to the topic of interest. The text is sometimes too small and the material is not always of direct use. In some of the exercise it is not possible to get the response completely correct. There is no variety in the voices used in the audio material. These things are irritating. |  |
| My work is assessed in certain areas and I would like to get a good grade. This made me think more deeply in these areas. The role play section was closest to real life, which also made me think more deeply. |  |
| Some changes could be made which would make it easier for me to learn from this material. Handouts explaining how it should be used, help with improving computer skills, a workbook with questions relating to the computer-based material, and making it available in other labs, including access after 5 pm would help. It would be really good to have access from home. |  |
| It is the individual's own responsibility to ensure they are learning what they should from the computer-based material. It would help if assessed tasks were set which we were required to pass by learning the material. It would be better if only the required material was included and no distracting material was available. |  |
| The interactive material was interesting and fun to use. It held my attention for longer than just having text to read. The restaurant scenarios included amusing material, which I could easily relate to my own experience. These allowed me to actually see the situation and they got me more involved. |  |
| The colourful screen displays were attractive and helped me concentrate. Being able to see the food presentation and people actually performing tasks allowed a visual link between theory and practice. The screen displays made the material come to life and that held my concentration. It was fun, easy, and nice to see familiar faces. This was encouraging and made it easier to absorb the information. |  |


| Feedback on Questionnaire | Your Comment on This Feedback? |
| :--- | :--- |
| The video clips made the material more interesting, which helped my attention and <br> concentration, and made it easier to learn. It was good to be able to see how things <br> were done rather than having to visualise in my mind. The video clips were directly <br> relevant, which made it easy to relate them to the real situation. The more light- <br> hearted clips made it easier to learn and remember. |  |
| The CD material was more helpful than traditional lectures as I could work at my <br> own pace, in my own time, and do the things I chose to do. This made it more <br> interesting. And I could repeat it as much as I wished. It is more interactive, which <br> makes me feel more involved and the pictures make it more interesting. |  |
| The computer-based material was more helpful than class based case studies as it was <br> more interesting, we can consult it as often as we like, there are fewer distractions, <br> you get the chance to see things in action, images speak louder than words. |  |
| The computer-based material was more helpful than just reading a book because you <br> can see pictures and interact with the material, so you concentrate more. It is more <br> interesting as it makes you feel you are doing something different, fun and nice to |  |
| look at. The layout, images and videos improve attention and it's easier to |  |
| understand., more fun, tends to stimulate me to learn more than a book. It is more up |  |
| to date, contains relevant material, and finding information is easier. |  |$\quad$.

Please rate each of the following computer based learning environments: (1: not motivating to 5 highly motivating)

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |
| Game approach (where points are scored for correct answers) |  |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |  |

In your opinion, which of the above environments most
appropriately describes this computer-based material?

## Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your experience of this computer-based material, in terms of the following statements:

|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |
| The interactive table setting exercise helped me to learn the setting layout |  |  |  |  |  |
| The interactive table setting exercise gave enough feedback |  |  |  |  |  |
| The interactive table setting exercise was not essential so I focused on other material |  |  |  |  |  |
| I found the visual elements (look) of the screen display motivating |  |  |  |  |  |
| The video clips of Cailein Gillespie were central to the material |  |  |  |  |  |
| The video clips of Cailein Gillespie increased my depth of thought |  |  |  |  |  |
| The Mathew Algie video clips were central to the material |  |  |  |  |  |
| The Mathew Algie video clips of increased my depth of thought |  |  |  |  |  |
| The interactive maps increased my depth of thought |  |  |  |  |  |
| I was unsure what to do with the interactive maps |  |  |  |  |  |
| I skimmed the material, rather than look at it all, in order to save time |  |  |  |  |  |
| I skimmed the non-central material, rather than look at it all, in order to save time |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |


|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've used |  |  |  |  |  |
| This material was more motivating than some lectures I've experienced |  |  |  |  |  |
| This material was more motivating than most lectures I've experienced |  |  |  |  |  |
| This material was more motivating than the best lectures I've experienced |  |  |  |  |  |
| The time flexibility was more important to me than the quality of the presentation |  |  |  |  |  |
| The presentation of this multi-media material was not as good as others I've experienced |  |  |  |  |  |
| The presentation of this multi-media material was as good as others I've experienced |  |  |  |  |  |
| The presentation of this multi-media material was better than others I've experienced |  |  |  |  |  |
| This material contained too much text |  |  |  |  |  |
| I found myself wanting to read this material from the Metablock-Book rather than on screen |  |  |  |  |  |
| I was not sure whether I was learning what I should have from this computer based material |  |  |  |  |  |
| The on-screen feedback given for the interactive exercises helped me check my learning |  |  |  |  |  |
| I found the multiple choice tests helpful to check my learning |  |  |  |  |  |
| I felt quite isolated when working with this computer based material |  |  |  |  |  |
| I would have preferred to have more face to face contact with the class tutor |  |  |  |  |  |

The material makes use of a range of elements. Please rate each of these in terms of their effectiveness for your learning on a scale of $\mathbf{1}$ (not effective)- $\mathbf{5}$ (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Introduction Section Voice Over |  |  |  |  |  |  |
| Getting Started Section |  |  |  |  |  |  |
| VR Scene of Restaurant \& Bar |  |  |  |  |  |  |
| Restaurant Seating Plan |  |  |  |  |  |  |
| Restaurant Table Plan |  |  |  |  |  |  |
| Function Space Management System |  |  |  |  |  |  |
| Interactive Table Setting Exercise |  |  |  |  |  |  |
| Directory of Tea, Coffee \& Light Beverages |  |  |  |  |  |  |
| Wine List |  |  |  |  |  |  |
| Expert Video Clip (Cailein Gillespie) |  |  |  |  |  |  |
| Production Video Clip (Mathew Algie) |  |  |  |  |  |  |
| Production Video Clip (Wine) |  |  |  |  |  |  |
| Screen Display of Serving Setting for Tea / Coffee - Packaging /Label |  |  |  |  |  |  |
| Screen Display of Serving Setting for Wine - Packaging /Label |  |  |  |  |  |  |
| Screen Display of Navigable Map for Wine |  |  |  |  |  |  |
| Screen Text / Voice Over of Pronunciation |  |  |  |  |  |  |
| Metablock-Book materials |  |  |  |  |  |  |

The material makes use of a range of navigation elements. Please rate each of these in terms of their effectiveness for your use of the module on a scale of $\mathbf{1}$ (not effective) - 5 (highly effective) and offer a comment of explanation.

| Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pull Down Menus |  |  |  |  |  |  |
| Clickable Screen Areas |  |  |  |  |  |  |
| Hand Tool in Navigable Map |  |  |  |  |  |  |
| Arrow Pointer in VR Restaurant \& Bar |  |  |  |  |  |  |
| Click to view Wines / Beverages Settings and packaging / labels |  |  |  |  |  |  |
| Click to view dishes Settings |  |  |  |  |  |  |

Thank you for assisting with this research.

## A9.6 Interview Questions (Staff) SHS Exit Semester 21999 to 2000

| Focus Questions To Staff (May 2000) |
| :--- |
| What were your initial impressions of this CD ROM material? |
| What are your views about this material now? |
| What are the most positive aspects of this material from your perspective? |
| What are the most negative aspects of this material from your perspective? |
| Was there any outcome from this approach that you hadn't expected? |
| Would you like to change anything about this package? |
| Would you like to change anything about the way this material is used? |
| How has the use of this material affected the staff involved? |
| How has the use of this material affected the students involved? |

## Appendix 10: Questionnaires Used in Case 3 SEI DMLE

## A.10.1 Questionnaire 1 SEI DMLE Semester 11998 to 1999

## Research Questionnaire

## Background Information and Guidelines:

This questionnaire has been compiled specifically for research purposes.
The focus of this research is on the use of interactive technology within learning contexts and the extent to which the use of such technology is found helpful, or not, by the learners or users.

Please take the time to add comments of your own, in relation to your learning, as these are particularly relevant for this research

## Personal Details:

(PLEASE PRINT IN BLOCK CAPITALS)

| Name: |  |
| :--- | :--- |
| Core Faculty: |  |
| Student Number: |  |
| Term Time Tel. No.: |  |
| Email: |  |

Thank you for assisting with this research.

## Please return this questionnaire to:

Billy Cooper,
Strathclyde Entrepreneurship Initiative,
Level 14, Livingstone Tower,
University of Strathclyde,
Glasgow GI IXH.
Tel: 01415484598
Fax: 01415527602
Email: billy.costrath.ac.uk
Using a scale of 1 (not effective) to 5 (highly effective) please rate the following:

| Text Elements of Program | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Simulation Elements of Program | 1 | 2 | 3 | 4 | 5 |
| Feedback Given in Simulations | 1 | 2 | 3 | 4 | 5 |
| Sound Element of Simulations | 1 | 2 | 3 | 4 | 5 |
| Picture Element of Video Clips | 1 | 2 | 3 | 4 | 5 |
| Sound Elements of Video Clips | 1 | 2 | 3 | 4 | 5 |
| Visual Elements (look) of Program | 1 | 2 | 3 | 4 | 5 |

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

| I would have been better reading a book | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I worked through all elements of the material | 1 | 2 | 3 | 4 | 5 |
| The text helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| The simulations helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| The video clips helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| The sound element helped me to understand the material | 1 | 2 | 3 | 4 | 5 |
| The text elements were not essential so I focused on other material | 1 | 2 | 3 | 4 | 5 |


| The simulations were not essential so I focused on other material | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| The video clips were not essential so I focused on other material | 1 | 2 | 3 | 4 | 5 |
| The feedback elements were not essential so I focused on other material | 1 | 2 | 3 | 4 | 5 |
| I found the visual elements (looh) of the windows motivating | 1 | 2 | 3 | 4 | 5 |
| The learning summaries increased mi depth of thought | 1 | 2 | 3 | 4 | 5 |
| The notepad exercisen increased m! depth of thought | 1 | 2 | 3 | 4 | 5 |
| I skimmed the material. rather inan cover it all, in order to save time | 1 | 2 | 3 | 4 | 5 |
| I revisited material when I found nther things related to it | 1 | 2 | 3 | 4 | 5 |

## Using a scale of 1 (lotally disarree) to $\$$ (agree totally) please rate your experience in terms of the following statements:

| My view of this material has been influenced bs other multi-media material I've used | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| This material is more motlvating than some lectures l've experienced | 1 | 2 | 3 | 4 | 5 |
| This material is more motis ating than most lectures l've experienced | 1 | 2 | 3 | 4 | 5 |
| This material is more motivating than the best lectures l've experienced | 1 | 2 | 3 | 4 | 5 |
| The content is more important to me than the qualit of the presentation | 1 | 2 | 3 | 4 | 5 |
| The presentation of this multi-media materal is as good as others I've experienced | 1 | 2 | 3 | 4 | 5 |
| This material contanned too much text | 1 | 2 | 3 | 4 | 5 |
| 1 find myself wanting to read the tevt material from a print out rather than on screen | 1 | 2 | 3 | 4 | 5 |
| I'm not sure whether I'm leaming what I should from this computer based material | 1 | 2 | 3 | 4 | 5 |
| The on-screen feedbach ginen helps me check l'm leaming | 1 | 2 | 3 | 4 | 5 |
| I would find multiple choice tests helpful to cheek my learning | 1 | 2 | 3 | 4 | 5 |
| 1 would find more tutor input helpful | 1 | 2 | 3 | 4 | 5 |
| I would prefer working alone with this computer hased material | 1 | 2 | 3 | 4 | 5 |
| 1 prefer team working $w$ ith this computer based material | 1 | 2 | 3 | 4 | 5 |
| I would prefer to have more tutor input | 1 | 2 | 3 | 4 | 5 |

## Please state the names of other multi-media materials you have used (if applicable)

 Please state how often you have made use of multi-media materials
## Please complete the following section in your own words:

The focus of the following questions is your learning and what helps you learn. This includes your motivation and achievement of learning outcomes

Name three learning experiences you consider worked well for you, as you worked through this program, and explain why the experience $n$ as effective for you:
1a) Experience that worked well
1b) Reason this worked for me
2a) Experience that worked well
2b) Reason this worhed for me
3a) Experience that worked well
3b) Reason this worked for me
The focus of the following questions is your learning and what does not help you learn. This includes affecting your motivation and achievement of learning outcomes

## Name three learning experiences you consider did not work well for you, as you worked through this program, and explain why the experience was not effective for you:

1a) Experience that did not word well
1b) Reason this did not work for me
2a) Experience that did not wort well
2b) Reason this did not word for me
3a) Experience that did not work well
3b) Reason this did not word for me

| Have you taken the Introduction to Entrepreneurship Class Z1.104 | Yes | No |
| :--- | :--- | :--- |
| If No: Please return your questionnare |  |  |
| If Yes: Please complete the following section in your own words: |  |  |

## The focus of the following questions is your learning and what helps you learn. This includes your motivation and achievement of learning outcomes

Name three aspects of the DMI.E computer based class you consider to be as good or better than the Z1.104 program and explain why these aspects were effective for your learning:
1a) Aspect that worked well
1b) Reason this worked for me
2a) Aspect that worked well
2b) Reason this worked for me
3a) Aspect that worked well
3b) Reason this worked for me
The focus of the following questions is your learning and what does not help you learn. This includes affecting your motivation and achievement of learning outcomes

Name three aspects of the $\mathbf{7 . 1 . 1 0 f}$ computer based class you consider to be as good or better than the DMLE program and explain why these aspects were effective for jour learning:
1a) Aspect that did not work well
1b) Reason this did not work for me:
2a) Aspect that did not work well
2b) Reason this did not work for me
3a) Aspect that did not work well
3b) Reason this did not work for me

## A.10.2 Questionnaire 2 SEI DMLE Semester 11999 to 2000

## Research Questionnaire

This questionnaire has been compiled specificall for research purposes. The focus of this research is on the use of interactive technology within learning contexts and the extent to which the use of such technology is found helpful, or not, by the learners or users

Please take the time in add comments of your own. in relation to your learning, as these are particularly relevant for this research

Thank you for assisting with thes research

## Personal Details:

(PLEASE PRINT IN BIOCX CAPIT.ALS)

| Name: |  |
| :--- | :--- |
| Core Faculty: |  |
| Term Time Tel. No.: |  |
| Email: |  |

Using a scale of 1 (nof effective) to 5 (highly effective) please rate the following:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Text Elements of Program |  |  |  |  |  |
| Simulation Elements of Program |  |  |  |  |  |
| Feedback Given in Simulations |  |  |  |  |  |
| Sound Element of Simulations |  |  |  |  |  |
| Picture Element of Video Clins |  |  |  |  |  |
| Sound Elements of Vidoo Clips |  |  |  |  |  |
| Visual Elements (look) of Program |  |  |  |  |  |

## Using a scale of I (rotally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | $\mathbf{l}$ | 2 | 3 | 4 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book | 5 |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |
| The text helped me to understand the material |  |  |  |  |  |
| The simulations helped me to understand the material |  |  |  |  |  |
| The video clips helped me to understand the material |  |  |  |  |  |
| The sound element helped me to understand the material |  |  |  |  |  |
| The text elements were not essential so I focused on other material |  |  |  |  |  |
| The simulations were not essential so I focused on other material |  |  |  |  |  |
| The video clips were not essential so I focused on other material |  |  |  |  |  |
| The feedback elements were not essential so I focused on other material |  |  |  |  |  |
| I found the visual elements (look) of the windows motivating |  |  |  |  |  |
| The learning summaries increased my depth of thought |  |  |  |  |  |
| The notepad exercises increased my depth of thought |  |  |  |  |  |
| I skimmed the material, rather than cover it all, in order to save time |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |

Using a scale of 1 (totally disagree) 105 (agree totally) please rate your experience in terms of the following statements:

|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've used | 5 |  |  |  |
| This material is more motivating than some lectures I've experienced |  |  |  |  |
| This material is more motivating than most lectures I've experienced |  |  |  |  |
| This material is more motivating than the best lectures I've experienced |  |  |  |  |
| The content is more important to me than the quality of the presentation |  |  |  |  |
| The presentation of this multi-media material is as good as others I've experienced |  |  |  |  |
| This material contained too much text |  |  |  |  |
| I find myself wanting to read the text material from a print out rather than on screen |  |  |  |  |
| I'm not sure whether I'm learning uhat I should from this computer based material |  |  |  |  |
| The on-screen feedback given helps me check I'm learning |  |  |  |  |
| I would find multiple choice tests helpful to check my learning |  |  |  |  |
| I would find more tutor input helpful |  |  |  |  |
| I would prefer working alone with this computer based material |  |  |  |  |
| I prefer team working with this computer based material |  |  |  |  |
| I would prefer to have more tutor input |  |  |  |  |

Please indicate your preference (1: not liked to 5 greasly liked) for the following options relating to computer based
learning environments:

| Type of Computer-Based Environment | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) | 5 |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |
| Simulated Environment (e \& Ofice Scene with sources of information and Tasks to be undertaken.) |  |  |  |  |
| Combination of Electronic lbook. Computer Game and Simulated Environment |  |  |  |  |

In your opinion, which of the above environments most appropriately describes this computer-based module? Please state the names of other multi-media materials you have used (if applicable)

The module makes use of text, video and interactive exercises. Please rate the following elements of these, in terms of their effectiveness for your learning, on a scale of 1 (not effective)- $\mathbf{5}$ (highly effective) and offer a comment of explanation if possible.

| Exercise Element | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Comment: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graphics Used |  |  |  |  |  |  |
| Colours Used |  |  |  |  |  |  |
| Scenarios Used |  |  |  |  |  |  |
| Text Used |  |  |  |  |  |  |
| Videos Used |  |  |  |  |  |  |
| Tasks Specified |  |  |  |  |  |  |
| Feedback Given |  |  |  |  |  |  |
| Relevance of Exercise to Subject |  |  |  |  |  |  |
| Difficulty Level of Exercises |  |  |  |  |  |  |

## Suggestions for improvement:

Using a scale of 1 (totally disagree) to 5 (agree totally) please rate your learning in terms of the following statements:

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I would have been better reading a book |  |  |  |  |  |
| I worked through all elements of the material |  |  |  |  |  |
| The interactive exercises helped me to understand the material |  |  |  |  |  |
| The interactive exercises were not essential so I focused on other material |  |  |  |  |  |
| I found the visual elements (look) of the screen displays motivating |  |  |  |  |  |
| The Slideman exercise increased my depth of thought |  |  |  |  |  |
| The Mondo exercises increased my depth of thought |  |  |  |  |  |
| I skimmed the material, rather than read it all, in order to save time |  |  |  |  |  |
| I revisited material when I found other things related to it |  |  |  |  |  |

## Comments:

Using a scale of I (totally disagree) to 5 (agree totally) please rate your experience in terms of the following statements:

|  | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| My view of this material has been influenced by other multi-media material I've used | $\mathbf{5}$ |  |  |  |
| This material is more motivating than some lectures I've experienced |  |  |  |  |
| This material is more motivating than most lectures I've experienced |  |  |  |  |
| This material is more motivating than the best lectures I've experienced |  |  |  |  |
| The content is more important to me than the quality of the presentation |  |  |  |  |
| The presentation of this multi-media material is as good as others I've experienced |  |  |  |  |
| This material contained too much text |  |  |  |  |
| I find myself wanting to read this material from a print out rather than on screen |  |  |  |  |
| I'm not sure whether I'm learning what I should from this computer based material |  |  |  |  |
| The on-screen feedback given for the interactive exercises helps me check I'm leaming |  |  |  |  |
| I would find multiple choice tests helpful to check my learning from this material |  |  |  |  |
| I would find more tutor input helpful |  |  |  |  |
| I felt quite isolated when working with this computer based material |  |  |  |  |
| I would have preferred working on my own with this material |  |  |  |  |
| I learned more by working in a team with this material |  |  |  |  |

## Comments:

## Learning Style Inventory <br> (Adapted from Internet material by Jerry Cerny)

Note: The following evaluation is a short quick way of assessing your learning style, answers are neither right or wrong. Please answer each question as honestly as you can.

## Please tick the appropriate box after each statement:



Inter-Universities North (c) 1998 Created by Dee Dee from NorCom Communications

## Please answer the following questions as accurately as possible:

| Question | Response |
| :--- | :--- |
| How comfortable do you feel about using this computer based material. Please explain why this is so |  |
| Which part of this computcr-based class did you find most motivating? Please explain why this was the case. |  |
| Which part of this computer-based class did you find least motivating? Please explain why this was the case. |  |
| What would you consider to be the most important thing you have learned in this class? Please explain why this <br> was the case. |  |
| What would make the material in this class more interesting for you? Please explain why this would be the case. |  |
| How could the tasks contained in this material be improved for you, and how would this improvement affect your <br> learning? (e.g. allowed more / fewer attempts, offered more / less help before / during attempt) |  |
| How could the feedback on your practice sessions. your attempts at the tasks, be improved for you, and how would <br> this improvement affect your learning? (e g. more detail of uhy particular responses are better than others) |  |
| What does the simulation element of the package offer for your learning that other forms of presentation would <br> not? (e.g. alternative courses of action and possible reaction, effects of particular stresses on materials) |  |


| Question | Response |
| :---: | :---: |
| How might the simulation element of the package be improved for you, and how would this improvement affect your learning? (e.g. additional material included to allow other conditions to be simulated, different way of showing material - sound / video) |  |
| How might the feedback for the simulation element of the package be improved for you, and how would this improvement affect your learning? (e.g. more visual change on screen as controls operated, on screen demonstration of outcomes showing "correct" and "incorrect" to highlight differences) |  |
| How might the simulation material be made closer to reality and how would the change affect your learning? (e.g. use realistic images, make three dimensional, include sound, have real cases - facts and figures) |  |
| In what ways does the package engage you in finding solutions to issues or problems? (e.g. requires design decisions to be made and shows effect on production and profit) |  |
| What did attempting to solve the problems presented in the package help you leam? (e.g. discovered that some things affected others that previously I hadn't connected) |  |
| How might the problem-solving element of the package be improved for you, and how would this improvement affect your learning? (e.g. provide an example of a similar problem and its solution before setting actual problem) |  |
| What feedback does the package offer in the problem-solving element and how does this feedback affect your learning? (e.g. comparison offered between answer given and "correct" solution) |  |
| How might this problem-solving feedback be improved for you, and how would the improvement affect your learning? (e.g. show range of possible solutions and compare with answer given to show where answer could be improved) |  |
| How might the problem-solving element be made more interesting for you?(e.g. offer range of subject matter and range of problem complexity - user to choose) |  |
| What made you actively think most in this material? (e.g. reading text from screen and reflecting on meaning. finding ways of solving problems set) |  |
| Which part of this package got you most fully engaged, to the level where you felt you were really concentrating? (e.g. trying to understand authors viewpoint in text, watching video clip, manipulating simulation) |  |
| Which part of the package entertained you most and made you feel that you were enjoying using the material? (e.g. getting feedback on answers and trying again, selecting which material to look at for information when trying to solve problems set) |  |
| What parts of the package helped you to better understand material you already knew' (e.g. text giving outline of material, video showing material in real situation) |  |
| What helped you most to increase your understanding, of the material which was new to you in the package? (e.g. text explaining material, voice over describing material, video of material. multiple choice tests) |  |
| What could be offered in the package to help further improve your understanding of the subject area? (e.g. additional text / spoken comment/ video clips / multiple choice tests on material. |  |
| What aspects of computer-based materials do you find particularly valuable for learning, as compared to other forms of learning materials? |  |
| What impressed you most about this computer-based material compared to other learning materials? |  |
| What affected your frame of mind either positively, or negatively, when you were using this computer-based material? |  |
| What irritated you most when using this computer-based material? |  |
| What is the best computer based material you have used and what made it so good? |  |
| What is the worst computer based material you've used and what made it so bad? |  |
| What helps you to be sure you are actually learning from computer based material? |  |
| What types of assessment / test would you find helpful in letting you know hou well you understood the computer-based material? |  |
| What forms of learning material would you prefer to be offered in a face to face session, rather than computer based? Why so? |  |

## Name one learning experience you consider worked well for you, as you worked through this material, and explain why the experience was effective for you:

a) Experience that worked well:
b) Reason this worked for me:

```
Name one learning experience you consider did not work well for you, as you worked through this unit, and explain
why the experience was not effective for you:
a) Experience that did not work well:
b) Reason this did not work for me
```


## If you have taken the $Z 1.104$ class "Introduction to Entrepreneurship" complete the following section in your own words:

Name one aspect of the DMLE computer based class you consider to be as good or better than the Z1.104 program and explain why this aspect was effective for your learning:

Name one aspect of the Z1. 104 computer based class you consider to be as good or better than the DMLE program and explain why this aspect was effective for your learning:

Thank you for completing this questionnaire.

## A.10.3 Questionnaire 3 SEI DMLE 99/00 Semester 22000 to 2001

## "DMLE" Feedback Questionnaire Nov. 2000

It would be greatly appreciated if you could offer feedback on your experience with this computer-based material. Your feedback will be of value for research purposes and departmental development of additional computer-based materials. Please answer the following questions in your own words, including a comment to explain why you hold the view that you do

| Question | Response |
| :--- | :--- |
| What impressed you most about this computer-based material? |  |
| Which element of this computer-based material got you most fully engaged? (to the level where <br> you felt you were really concentrating) |  |
| What have you found least engaging about this computer-based material? (where your attention <br> wandered) |  |
| What did you find irritating or confusing in this computer-based material? |  |
| Which elements of the computer-based material affected your depth of thought and how so? <br> (i.e. made you think most) |  |
| How could we make it easier for you to learn from this computer-based material? |  |
| How could we ensure you learn what you should from this computer-based material? |  |
| How did the interactive simulation parts of this computer-based material affect your learning? |  |
| How did the visual / screen display in this material affect your learning? |  |
| How did the use of video clips, in this computer-based material affect your learning? |  |
| Do you find the computer-based material more, or less, helpful for your learning than (traditional) <br> lectures? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your leaming than (class <br> based) case-studies? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than (academic) <br> books? Why so? |  |
| What forms of learning material would you prefer to be offered in a face to face session, rather <br> than computer-based? Why so? |  |

Thank you for completing this questionnaire.

## Appendix 11: Questionnaires Used in Case 4 SEI HBS

## A. 11 Questionnaire 1 SEI HBS 99/00 Semester 11999 to 2000

"Launching a High-Risk Business" Feedback Questionnaire Dec99
It would be greatly appreciated if you could offer feedback on your experience with this computer-based material. Your
feedback will be of value for research purposes and departmental development of additional computer-based materials. Please answer the following questions in your own words, including a comment to explain why you hold the view that you do.

| Question | Response |
| :--- | :--- |
| What impressed you most about this computer-based material? |  |
| Which element of this computer-based material got you most fully engaged? <br> (to the level where you felt you were really concentrating) |  |
| What have you found least engaging about this computer-based material?(where your attention <br> wandered) |  |
| What did you find irritating or confusing in this computer-based material? |  |
| Which elements of the computer-based material affected your depth of thought and how so? (i.e. <br> made you think most) |  |
| How could we make it easier for you to learn from this computer-based material? |  |
| How could we ensure you learn what you should from this computer-based material? |  |
| How did the interactive simulation parts of this computer-based material affect your learning? |  |
| How did the visual / screen display in this material affect your learning? |  |
| How did the use of video clips, in this computer-based material affect your learning? |  |
| Do you find the computer-based material more, or less, helpful for your learning than (traditional) <br> lectures? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than (class <br> based) case-studies? Why so? |  |
| Do you find the computer-based material more, or less, helpful for your learning than (academic) <br> books? Why so? |  |
| What forms of learning material would you prefer to be offered in a face to face session, rather <br> than computer-based? Why so? |  |

Thank you for completing this questionnaire

## Appendix 12: Questionnaires Used in Case 5 Woolwich MNE

## A.12.1 Letter Accompanying Woolwich Q1

## Information for Participants

PhD Research Details: Billy Cooper
(Department of Management Science, University of Strathclyde
My research interest lies in the use of computer based materials for learning. It is important for me to gain an understanding of the way in which learners consider the materials they are using affect their learning. The view of the learner is central to my research.

In order to gain an initial impression from you I have compiled a questionnaire, which I would ask you to complete and return to me. This may be done by email, fax, or by traditional post.

I will contact you within two weeks of receiving your completed questionnaire in order to begin the feedback process.
You will be asked to offer comment and / or elaboration, on the initial feedback, and I will again contact you within two weeks of receiving your subsequent replies.

The intention is that via the two way communication flow a clear understanding will be gained of your learning experience, using the computer-based package concerned. From this should come an understanding of the elements. which you found helpful, unhelpful, or irrelevant for your learning.

## My contact details:

## Email: billy.c(astrath.ac.uk

Telephone: $\quad$ Office 01415484598

Fax: 01415527602
Postal Address:

Your help with this research is greatly appreciated.
Billy

## A.12.2 Questionnaire 1 Woolwich MNE Semester 1 to 21999 / 2000

## Research Questionnaire

| Name <br> (PLEASE PRINT IN BLOCK CAPITALS) | Date |
| :--- | :--- |
| Job Title: | Contact Details <br> Tel: <br> Fax: <br> Email: |
| Training Package Used: | Dates Package Used: <br> Qualification / Certification Gained: <br> Mode of Training: <br> (e.g. home / office based) |

## Please answer the following questions as accurately as possible:

Definition of "Practice" : repeated performance as a means of acquiring a skill (Chambers $20^{\text {th }}$ Century Dictionary)
Definition of "Simulation" : to feign / to have or assume a false appearance of / to mimic (Chambers $20^{\text {th }}$ Century Dictionary)

| Question | Answer |
| :--- | :--- |
| What does this material allow you to practice doing or discover how to do? (e.g. tasks to <br> complete, items to manipulate / new procedures, working practices) |  |
| How much freedom do you have as to the number of times you try the same task and how does <br> this affect your learning? (e.g. maximum number of attempts, unlimited ) |  |
| What level of feedback does this package offer on your attempts at the tasks involved, and how do <br> you obtain this feedback? (e.g. told right / wrong, explanation of possible answers) |  |
| How long do you have to wait for feedback on your attempts at the tasks involved and how does <br> this affect your learning? (e.g. immediate, after three attempts) |  |
| How could these practice sessions, your attempts at the tasks, be improved for you, and how <br> would this improvement affect your learning? (e.g. allowed more / fewer attempts, offered more / <br> less help before / during attempt) |  |
| How could the feedback on your practice sessions, your attempts at the tasks, be improved for <br> you, and how would this improvement affect your learning? (e.g. more detail of why particular <br> responses are better than others) |  |
| What does this package offer that simulates a real situation for you and how does this affect your <br> learning? (e.g. office interactions, laboratory experiments) |  |
| What does the simulation element of the package offer for your learning that other forms of <br> presentation would not? (e.g. alternative courses of action and possible reaction, effects of <br> particular stresses on materials) |  |
| How might the simulation element of the package be improved for you, and how would this <br> improvement affect your learning? (e.g. additional material included to allow other conditions to <br> be simulated, different way of showing material - sound / video) |  |
| What feedback are you offered in the simulation element of the package and how does this <br> feedback affect your learning? (e.g. situation changes as you adjust the available controls, window <br> comes on screen offering comment) |  |
| How might the feedback for the simulation element of the package be improved for you, and how <br> would this improvement affect your learning? (e.g. more visual change on screen as controls <br> operated, on screen demonstration of outcomes showing "correct" and "incorrect" to highlight <br> differences) |  |
| How might the simulation material be made closer to reality and how would the change affect <br> your learning? (e.g. use realistic images, make three dimensional, include sound, have real cases - <br> facts and figures) |  |


| Question | Answer |
| :---: | :---: |
| In what ways does the package engage you in finding solutions to issues or problems? (e.g. requires design decisions to be made and shows effect on production and profit) |  |
| What did attempting to solve the problems presented in the package help you learn? (e.g. discovered that some things affected others that previously I hadn't connected) |  |
| How might the problem-solving element of the package be improved for you, and how would this improvement affect your leaming? (e.g. provide an example of a similar problem and its solution before setting actual problem) |  |
| What feedback does the package offer in the problem-solving element and how does this feedback affect your learning? (e.g. comparison offered between answer given and "correct" solution) |  |
| How might this problem-solving feedback be improved for you, and how would the improvement affect your learning? (e.g. show range of possible solutions and compare with answer given to show where answer could be improved) |  |
| How might the problem-solving element be made more interesting for you? (e.g. offer range of subject matter and range of problem complexity - user to choose) |  |
| What made you actively think most in this material? (e.g. reading text from screen and reflecting on meaning, finding ways of solving problems set) |  |
| Which part of this package got you most fully engaged, to the level where you felt you were really concentrating? (e.g. trying to understand authors viewpoint in text, watching video clip, manipulating simulation) |  |
| Which part of the package entertained you most and made you feel that you were enjoying using the material? (e.g. getting feedback on answers and trying again, selecting which material to look at for information when trying to solve problems set) |  |
| What parts of the package helped you to better understand material you already knew? (e.g. text giving outline of material, video showing material in real situation) |  |
| What helped you most to increase your understanding, of the material which was new to you in the package? (e.g. text explaining material, voice over describing material, video of material, multiple choice tests) |  |
| What could be offered in the package to help further improve your understanding of the subject area? (e.g. additional text / spoken comment/video clips / multiple choice tests on material, |  |
| What aspects of computer-based materials do you find particularly valuable for learning, as compared to other forms of learning materials? |  |
| What impresses you most about the computer-based material compared to other learning materials? |  |
| What gives you a positive frame of mind when you are using the computer-based material? |  |
| What irritates you when using computer-based material? |  |
| What is the best computer based material you have used and what made it so good? |  |
| What is the worst computer based material you've used and what made it so bad? |  |
| What helps you to be sure you are actually learning from computer based material? |  |
| What types of assessment / test would you find helpful in letting you know how well you understood the computer-based material? |  |
| What forms of learning material would you prefer to be offered in a face to face session. rather than computer based? Why so? |  |

Please indicate your preference (1: not liked to 5 greatly liked) for the following options relating to computer based learning environments:

| Type of Computer-Based Environment | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Electronic Book (text shown on screen) |  |  |  |  |  |
| Game approach where points are scored for correct answers |  |  |  |  |  |
| Simulated Environment (e.g. Office Scene with sources of information and Tasks to be <br> undertaken.) |  |  |  |  |  |
| Combination of Electronic Book, Computer Game and Simulated Environment |  |  |  |  |  |

```
Learning Style Inventory
(Adapted from Internet material by Jerry Cerny)
```

Note: The following evaluation is a short, quick way of assessing your learning style, answers are nether right or wrong.
Please answer each question as honestly as you can.

## Please tick the appropriate box after each statement:

| Often | Seldom <br> Some <br> Times | Often |  |
| :--- | :--- | :--- | :--- |
| 1. Can remember more about a subject through the lecture method with information, explanations and discussion. |  |  |  |
| 2. Prefer information to be written on the chalkboard, with the use of visual aids and assigned readings. |  |  |  |
| 3. Like to write things down or to take notes for visual review. |  |  |  |
| 4. Prefer to use posters, models, or actual practice \& some activities in class. |  |  |  |
| 5. Require explanations of diagrams, graphs, or visual directions. |  |  |  |
| 6. Enjoy working with my hands or making things. |  |  |  |
| 7. Am skillful with \& enjoy developing \& making graphs \& charts. |  |  |  |
| 8. Can tell if sounds match when presented with pairs of sounds. |  |  |  |
| 9. Remember best by writing things down several times. |  |  |  |
| 10. Can understand and follow directions on maps. |  |  |  |
| 11. Do better at academic subjects by listening to lectures \& tapes. |  |  |  |
| 12. Play with coins or keys in pockets. |  |  |  |
| 13. Learn to spell better by repeating the words out loud than by writing the word on papers. |  |  |  |
| 14. Can better understand a news article by reading about it in the paper than by listening to the radio. |  |  |  |
| 15. Chew gum, smoke, or snack during studies. |  |  |  |
| 16. Feel the best way to remember is to picture it in your head. |  |  |  |
| 17. Learn spelling by "finger spelling" words. (i.e. drawing letters in the air) |  |  |  |
| 18. Would rather listen to a good lecture or speech than read about the same material in a textbook. |  |  |  |
| 19. Am good at working and solving jigsaw puzzles and mazes. |  |  |  |
| 20. Grip objects in hands during learning period. |  |  |  |
| 21. Prefer listening to the news on the radio rather than reading about it in the newspaper. |  |  |  |
| 22. Obtain information on an interesting subject by reading relevant materials. |  |  |  |
| 23. Feel very comfortable touching others, hugging, handshaking. |  |  |  |
| 24. Follow oral directions better than written ones. |  |  |  |

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## Approaches and Study Skills Inventory

This part of the questionnaire has been taken from the ASSIST material developed by Professor N. Entwistle of Edinburgh University. It has been designed to allow you to describe, in a systematic way, how you go about learning and studying. The technique involves asking you a substantial number of questions, which overlap to some extent. to provide good overall coverage of different ways of studying. Most of the items are based on comments made by other students. Please respond truthfully, so that your answers will accurately describe your actual ways of studying, and work your way through the questionnaire quite quickly.

## A. What is learning?

When you think about the term 'LEARNING ', what does it mean to you?
Consider each of these statements carefully, and rate them in terms of how close they are to your own way of thinking about it

Please tick the appropriate box after each statement:

|  | Very <br> different | Quite <br> different | Not so <br> close | Rather <br> close | Very <br> close |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. Making sure you remember things well. |  |  |  |  |  |
| b. Developing as a person. |  |  |  |  |  |
| c. Building up knowledge by acquiring facts and information |  |  |  |  |  |
| d. Being able to use the information you've acquired. |  |  |  |  |  |
| e. Understanding new material for yourself. |  |  |  |  |  |
| f. Seeing things in a different and more meaningful way. |  |  |  |  |  |

## B. Approaches to studying

The next part of this questionnaire asks you to indicate your relative agreement or disagreement with comments about studying again made by other students. Please work through the comments, giving your immediate response. In deciding your answers, think in terms of this particular class. It is also very important that you answer all the questions: check you have.

Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat | Agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| l. I manage to find conditions for studying which allow me to <br> get on with my work easily |  |  |  |  |  |
| 2. When working on an assignment, I'm keeping in mind <br> how best to impress the marker |  |  |  |  |  |
| 3. Often I find myself wondering whether the work <br> I am doing here is really worthwhile |  |  |  |  |  |
| 4. I usually set out to understand for myself the meaning <br> of what we have to learn |  |  |  |  |  |
| 5. I organise my study time carefully to make the best use of it |  |  |  |  |  |
| 6. I find I have to concentrate on just memorising a good deal <br> of what I have to learn |  |  |  |  |  |
| 7. I go over the work I've done carefully to check the reasoning <br> and that it makes sense |  |  |  |  |  |
| 8. Often I feel I'm drowning in the sheer amount of material <br> we're having to cope with |  |  |  |  |  |
| 9. I look at the evidence carefully and try to reach my own <br> conclusion about what I'm studying |  |  |  |  |  |
| 10. It's important for me to feel that I'm doing as well as <br> I really can on the courses here |  |  |  |  |  |
| II. I try to relate ideas I come across to those in other topics <br> or other courses whenever possible |  |  |  |  |  |
| 12. I tend to read very little beyond what is actually required <br> to pass |  |  |  |  |  |
| 13. Regularly I find myself thinking about ideas from lectures <br> when I'm doing other things |  |  |  |  |  |
| 14. I think I'm quite systematic and organised when it comes <br> to revising for exams |  |  |  |  |  |
| 15. I look carefully at tutors' comments on course work to see <br> how to get higher marks next time |  |  |  |  |  |
| 16. There's not much of the work here that I find interesting <br> or relevant |  |  |  |  |  |


|  | Disagree | Disagree Somewhat | Unsure | Agree Somewhat | Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17. When I read an article or book, I try to find out for myself exactly what the author means |  |  |  |  |  |
| 18. I'm pretty good at getting down to work whenever I need to |  |  |  |  |  |
| 19. Much of what I'm studying makes little sense: it's like unrelated bits and pieces |  |  |  |  |  |
| 20. I think about what I want to get out of this course to keep my studying well focused |  |  |  |  |  |
| 21. When I'm working on a new topic, I try to see in my own mind how all the ideas fit together |  |  |  |  |  |
| 22 I often worry about whether I'll ever be able to cope with the work properly |  |  |  |  |  |
| 23. Often I find myself questioning things I hear in lectures or read in books |  |  |  |  |  |
| 24. I feel that I'm getting on well, and this helps me put more effort into the work |  |  |  |  |  |
| 25. I concentrate on learning just those bits of information I have to know to pass |  |  |  |  |  |
| 26. I find that studying academic topics can be quite exciting at times |  |  |  |  |  |
| 27. I'm good at following up some of the reading suggested by lecturers or tutors |  |  |  |  |  |
| 28. I keep in mind who is going to mark an assignment and what they're likely to be looking for |  |  |  |  |  |
| 29. When I look back, I sometimes wonder why I ever decided to come here |  |  |  |  |  |
| 30. When I am reading, I stop from time to time to reflect on what I am trying to learn from it |  |  |  |  |  |
| 31. I work steadily through the term or semester, rather than leave it all until the last minute |  |  |  |  |  |
| 32. I'm not really sure what's important in lectures so I try to get down all I can |  |  |  |  |  |
| 33. Ideas in course books or articles often set me off on long chains of thought of my own |  |  |  |  |  |
| 34. Before starting work on an assignment or exam question, I think first how best to tackle it. |  |  |  |  |  |
| 35. I often seem to panic if I get behind with my work |  |  |  |  |  |
| 36. When I read, I examine the details carefully to see how they fit in with what's being said |  |  |  |  |  |
| 37. I put a lot of effort into studying because I'm determined to do well |  |  |  |  |  |
| 38. I gear my studying closely to just what seems to be required for assignments and exams |  |  |  |  |  |
| 39. Some of the ideas I come across on the course I find really gripping |  |  |  |  |  |
| 40. I usually plan out my week's work in advance, either on paper or in my head |  |  |  |  |  |
| 41. I keep an eye open for what lecturers seem to think is important and concentrate on that |  |  |  |  |  |
| 42. I'm not really interested in this course, but I have to take it for other reasons |  |  |  |  |  |
| 43. Before tackling a problem or assignment, I first try to work out what lies behind it |  |  |  |  |  |
| 44. I generally make good use of my time during the day |  |  |  |  |  |


|  | Disagree | Disagree <br> Somewhat | Unsure | Agree <br> Somewhat | Agree <br> 45. I often have trouble in making sense of the things I have <br> to remember |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 46. I like to play around with ideas of my own even if they <br> don't get me very far |  |  |  |  |  |
| 47. When I finish a piece of work, I check it through to see if <br> it really meets the requirements |  |  |  |  |  |
| 48. Often I lie awake worrying about work I think I won't be <br> able to do |  |  |  |  |  |
| 49. It's important for me to be able to follow the argument, or <br> to see the reason behind things |  |  |  |  |  |
| 50. I don't find it at all difficult to motivate myself |  |  |  |  |  |
| 51. I like to be told precisely what to do in essays or <br> other assignments |  |  |  |  |  |
| 52. I sometimes get 'hooked' on academic topics and feel I <br> would like to keep on studying them |  |  |  |  |  |

## F. Preferences for different types of course and teaching

Try not to use unsure, unless you really have to, or if it cannot apply to you or your course.
Please tick the appropriate box after each statement:

|  | Definitely <br> Dislike | Dislike to <br> Some <br> Extent | Unsure <br> Like to <br> Some <br> Extent | Definitely <br> Like |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a. lecturers who tell us exactly what to put down in our notes |  |  |  |  |  |
| b. lecturers who encourage us to think for ourselves and show us <br> how they themselves think |  |  |  |  |  |
| c. exams which allow me to show that I've thought about the <br> course material for myself. |  |  |  |  |  |
| d. exams or tests which need only the material provided <br> in our lecture notes. |  |  |  |  |  |
| e. courses in which it's made very clear just which books <br> we have to read. |  |  |  |  |  |
| f. courses where we're encouraged to read around the subject <br> a lot for ourselves |  |  |  |  |  |
| g. books which challenge you and provide explanations which <br> go beyond the lectures |  |  |  |  |  |
| h. books which give you definite facts and information which <br> can easily be learned |  |  |  |  |  |

Finally, how well do you think you have been doing in your assessed work overall, so far?
Please rate yourself objectively, based on the grades you have been obtaining

| Rather Badly |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |

Thank you for completing this questionnaire.

## A.12.3 Letter Accompanying Q2

Hi E.
Many thanks for the feedback you gave to my original questionnaire, this is very valuable for my research and I greatly appreciate the time you set aside to respond.

I have enclosed a map style diagram which offers a possible view of the effect on your learning, of the various elements within the computer-based package.

I have also enclosed a second stage questionnaire which asks for your comment on my interpretation of your response and poses some further questions based on your initial feedback.

Please complete the questionnaire and make any amendments to the map diagram, as requested on the questionnaire form. Then return them to me in the stamped addressed envelope enclosed.

Should you require any further clarification, or comment please feel free to contact me at any time.
My contact details:
Email: billy.c@strath.ac.uk
Telephone: $\quad$ Office 01415484598
Home ******* ****
Fax: 01415527602
Postal Address:
Your continued participation in my research is greatly appreciated.
Billy

## A.12.4 Questionnaire 2 Woolwich MNE Semester 1 to 21999 / 2000

## E ....... : Initial Feedback on Questionnaire Response

## Table 1

This table summarises your initial feedback in terms of possibilities for improving the computer-based package. Please offer your comments to either confirm that this is a true statement of your viewpoint, or to adjust the statement in order that it become a true statement of your viewpoint.

| While you considered the package to be useful for your learning you consider it <br> might be improved in a number of aspects: | Your Comment on This Feedback? |
| :--- | :--- |
| Where text is used it should be as succinct as possible |  |
| Multiple choice questions would be helpful for your understanding of the text |  |
| Feedback should be offered on both right and wrong answers explaining why the <br> answers were right or wrong |  |
| The material should focus on your understanding rather than just recall, as recall <br> approaches result in boredom |  |
| Any new words or jargon should be clearly explained to avoid irritation |  |
| Simulations should be kept realistic to reinforce the concepts addressed in the material <br> and their number should be increased |  |
| Feedback on the simulations should remain in the form of demonstrations which offer a <br> level of enjoyment and engagement, encouraging active thought and developing <br> understanding of new material |  |
| Setting questions in advance of offering information should be continued as this focuses <br> the thoughts in a way which reveals gaps in understanding |  |
| Multiple perspectives should be offered on the material, issues and possible solutions to <br> problems |  |

## Table 2

This table summarises your initial feedback in terms of the value, for you, of the various elements within the package. Please offer your comments to either confirm that this is a true statement of your viewpoint, or to adjust the statement in order that it become a true statement of your viewpoint.

Please offer your response to the follow up question relating to the feedback statement.

| Feedback on Questionnaire | Your Comment on This Feedback |
| :--- | :--- |
| The practice sessions within the package allow you to discover how to do practical exercises. <br> The feedback is offered immediately on completion of the answer if the response is correct <br> and after two attempts where an error is made on your part. This allows you to practice <br> answering questions. |  |
| Follow-Up Question | Your Response? |
| If feedback is offered after a second attempt - how can you gain from continuing to practise <br> answering the same question after the answer has been provided? (eg Did you go back to the <br> same question at a later stage and check that you had taken in the solution to the extent that <br> you could then answer correctly?) |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| The possibility of attempting the tasks for an unlimited number of times and the provision of <br> feedback confirming when you were right and correcting wrong answers helped you to go at <br> your own pace, which helped your learning. |  |
| Follow-Up Question | Your Response? |
| In what way was going at your own pace helpful for your learning? | Your Comment on This Feedback |
| Feedback on Questionnaire |  |
| By posing questions prior to offering the information, the package increased your level of <br> thought. The problem solving tasks within the package helped you to notice points you had <br> not taken in (fully understood) from reading the text. |  |


| Follow-Up Question | Your Response? |
| :---: | :---: |
| Were some of the questions or problems more helpful than others for your learning? If so, which were more helpful and why so? Which were least helpful and why so? |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| The demo's were feedback from the simulation element of the package. These demo's allowed you to see other ways of doing the task, or solving the problems. The demo's within the computer-based material were particularly helpful for your learning. They helped you enjoy using the material, got you fully engaged to the level where you were really concentrating, made you actively think and increased your understanding of new material. The demo's were the element which impressed you most about the computer-based material compared to other forms of learning materials. |  |
| Follow-Up Question | Your Response? |
| Which aspect(s) of the demo's created this effect for you? |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| The simulation element within the package could be improved by increasing the amount of simulation contained in the package. |  |
| Follow-Up Question | Your Response? |
| Would this be instead of other aspects of the material (eg text) or in addition to all the existing material? In what way would this change help your learning? |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| The simulated labs in the package are particularly close to reality for you and they are helpful in that they reinforce the concept just recently covered (in the text?) in the package. |  |
| Follow-Up Question | Your Response? |
| How important for your learning is this aspect of realism and in what way does it impact on your learning? |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| The text element in the package was helpful for you by increasing your understanding of material you already knew. |  |
| Follow-Up Question | Your Response? |
| Why was the text element more useful for material you already knew, but the demo's were better for your understanding of material which was new to you? (In what way did your learning differ in these aspects?) |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| Your responses to the questionnaire suggest that while you find text material helpful, in increasing your understanding of known material, you are irritated by any unexplained words (jargon?). You prefer succinct use of text, you value feedback to confirm your understanding of text material, multiple choice testing would help you confirm your understanding of text material. |  |
| Follow-Up Question | Your Response? |
| What makes succinct use of text in computer-based materials better for your learning? $\quad$. |  |
| Feedback on Questionnaire | Your Comment on This Feedback |
| Your approach to learning is to seek understanding rather than mere recall, which you consider boring. You value becoming engaged with the problem solving aspects within the material and appreciate the value of multiple perspectives and alternative solutions. |  |
| Follow-Up Question | Your Response? |
| What style of multiple choice presentation would you prefer and why so? (eg rank order, choose one from five, click on an image etc) |  |
| Follow-Up Question | Your Response? |
| What level of feedback would be most useful to you following your responses to the multiple choice questions and why? (eg text explaining why responses were correct / incorrect, animation / simulation demonstrating outcome of correct and incorrect responses etc) |  |
| Follow-Up Question | Your Response? |
| If you had to describe a way this could be achieved using computer-based material, what would it be? (eg a complex game package, lots of problems to solve, etc) What should it look / feel like for users? |  |

## Mapped Representation of Feedback

This "map" is intended to show the complexity of the issue being considered, in this case the way in which the computer-based package concerned affects your learning.

The arrows should be taken to mean may/ is likely to lead to (ie the element or aspect at the tail of the arrow may lead to / or is likely to lead to the element or aspect at the tip of the arrow). Where there is a negative ( - ) sign the element or aspect at the tail of the arrow is likely to negatively affect, or reduce the likelihood of, the element or aspect at the tip of the arrow.

Please look over the map and offer your feedback as to whether it is an accurate representation of your experience in learning using the computer-based package concerned.

Please make any adjustments to the map where you consider there is an error or omission.

## Feedback on Map

Thank you for responding to this follow-up questionnaire and map.
Insert Map: E.............


## A.12.5 Letter Accompanying Woolwich Q3

Hi E $\qquad$
Many thanks for the feedback you gave to my earlier questionnaires, this is very valuable for my research and I greatly appreciate the time you set aside to respond.

I have enclosed a summary, which offers an overview of the effect on your learning, of the various elements within the computer-based package.

This document asks for your comment on my summary of the responses, from those who participated in this research
Please complete the comments boxes, as requested on the summary document. Then return them to me in the stamped addressed envelope enclosed.

Should you require any further clarification, or comment please feel free to contact me at any time.
My contact details:
Email: billy.c@strath.ac.uk
Telephone: Office 01415484598
Home **** *** ****
Fax: 01415527602
Postal Address: ******

Your continued participation in my research is greatly appreciated.
Billy

## A.12.6 Questionnaire 3 Woolwich MNE Semester 21999 to 2000

## Woolwich Group: E......... Feedback on Overall Summary of Responses

This text summarises overall feedback in terms of the value, for you, of the package for your learning and possibilities for improving the computer-based package. Please offer your comments to either confirm that this is a true summary of your viewpoint, or to adjust the summary in order that it become a true statement of your viewpoint.

## Summary of Responses

Where text is used it should be as succinct as possible, making it clear which are the most important facts. It must also be as thorough as possible, giving more detailed information. This should offer an index search facility "engine" for speed of information retrieval. It makes study time shorter. The student should be allowed to choose how much detail they want. Lots of "facts" improve understanding of the subject area. If you don't know something well, being shown the basics visually helps. Then when you have grasped that (or already know the basics) extra facts in text can extend your knowledge. Any new words or jargon should be clearly explained to avoid irritation.
Your Comments:
(Please state where you agree / disagree with the general overview)

## Summary of Responses

The number of screens in the material should be reduced, as it becomes irritating having to look at lots of different screens. The layout for the feedback from the simulation could be improved in terms of how the results are given. Feedback should be offered on both right and wrong answers explaining why the answers were right or wrong. (In case you got the answer right by luck, or for the wrong reasons.) The answers provided should be revealed in stages, which would make the feedback less detailed and promote more thinking. Feedback for correct answers should offer more detail if desired. This should offer links to detailed information on the subject area concerned. Feedback on the simulations should remain in the form of demonstrations which offer a level of enjoyment and engagement, encouraging active thought and developing understanding of new material Being prompted and praised on your worst area would improve the feedback on the practice sessions. Text should be the form used for feedback explaining why response was correct or incorrect.

## Your Comments:

(Please state where you agree / disagree with the general overview)

## Summary of Responses

Setting questions in advance of offering information should be continued as this focuses the thoughts, in a way which reveals gaps in understanding. The problem-solving element could be made more complex, which would make it more interesting. Multiple perspectives should be offered on the material, issues and possible solutions to problems. A facility for collating notes while using the material would improve the problem-solving element within the material. Having more personal time would improve the practice sessions. The practice sessions should offer more practical involvement. Having lots of "practicals" would improve understanding of the subject area. Simulations should be kept realistic to reinforce the concepts addressed in the material and their number should be increased. The simulation should offer greater flexibility to explore an increased range of scenarios. The simulation should allow errors to be made and offer detailed feedback on all solutions attempted. The feedback should offer access to all possible solutions and outline the merits of each solution. The pros and cons of different ideas would be good. Sometimes a number of options will work, but only one can be chosen. This is frustrating. The simulation should offer use of an unrestricted live application to increase the realism. Simulation of the real application, rather than restricted function screen shots, would make the material closer to reality. This would allow users to "play" as they can in the real software and would help understanding and improve practical ability, and ability to answer questions on the material.

## Your Comments:

(Please state where you agree / disagree with the general overview)




[^0]:    (Note due to an error in the questionnaires some items were incorrectly entered. These were disregarded in the results)

[^1]:    (Note. due to an error in the questionnaires some items were inserted which were unintended, these were disregarded in the calculations of results)

[^2]:    (Note Interview questions were developed in relation to the comments made by interviewees, therefore varied in phrasing and focus.
    The responses were categorised in terms of the comments made by respondents and the results are shown in the table below The opening questions posed are listed in the appendices for the interviews conducted.)

[^3]:    Suggestions for improvement of navigation elements:

[^4]:    Given an ideal world, what would be your preferred way of learning using a computer as an aid?

[^5]:    Suggestions for improvement of navigation elements:

[^6]:    a) in areas where you are currently less than confident
    b) in areas where you are currently confident
    c) in areas where you are currently very confident

[^7]:    In your opinion, which of the above environments most appropriately describes this computer-based module?

[^8]:    Please state the names of other multi-media materials you have used (if applicable)
    Please state how often you have made use of email 10 contact the class tutor for this module

[^9]:    Please complete the following section in your own words, for the units you have just completed:

[^10]:    Thank you for completing this questionnaire.

[^11]:    Question 5 "What were your goals when you started out and have these changed over time?"
    Catherine Jones
    "My goal was quite simple. I wanted to make as much money as possible, as quickly and easily as possible. I figured I couldn't really lose 'cos if I didn't sell much that month I still got my basic allowance. I've still got the same goal."
    Emily Thomson
    "I suppose my goal was to become established in terms of reputation within the industry and to build my consultancy to the level where I could employ additional staff at a professional level of salary and job security. Ideally I wanted to show my previous employers that they had made the wrong decisions with their organisational change process by becoming more successful as a private consultancy than they would ever have permitted as an employee."
    George Brown
    "I don't know what my dad's goals are these days. He just makes decisions and I find out later. My goals are to expand the range we stock and to get even better deals from our suppliers so that we can keep our low prices and increase our profit."

[^12]:    Please state the names of other multi-media materials you have used (if applicable)
    Please state how often you have made use of email to contact the class tutor for this module

[^13]:    Name one learning experiences you consider did not work well for you, as you worked through this material, and explain why the experience was not effective for you:
    Experience that did not work well:
    Reason this did not work for me:

[^14]:    Confidence Lor
    Please indicate yow cwrrent lovel of confidence. by fiching in the relevant box, for each of the block elements listed in the Confidence log below:

