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Online Assessment in NSW

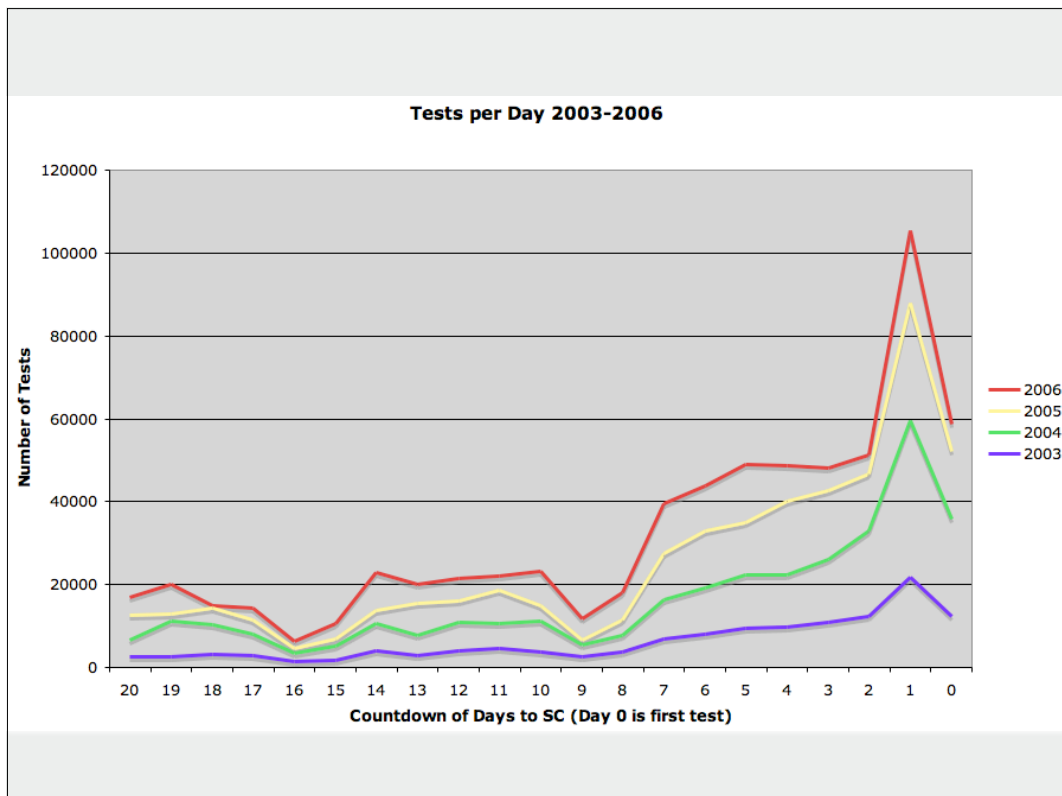
- 2006 Computer Skills Test (CST).
 - 56,000 students do online test over 3 days
 - 100 questions from a larger item bank
- Taking parts of other tests online within 5 years.
For example, multiple-choice parts of Mathematics, Science etc.
- Pilot with two subjects August 2007

2 Separate Projects

- Practice online “Assessment for learning” website
- Online Examination Delivery Infrastructure for national exams E.g.
 - School Certificate (15 year olds)
 - Higher School Certificate (18 year olds)
 - Computer Skills Test

Multiple Choice Website

- Over 2 months
 - 1 Million tests
- One Day
 - 105,000 tests.
 - 120 tests per minute for 8 hours.
 - 1,131,000 questions answered
 - 769,000 Correct
 - 362,000 Wrong



Computer Facilities in Australian Schools

- Dept of Education Government schools: Broadband and uniform network administration
- Independent Schools (E.g. Catholic Education Authority) Huge variation of standard of Internet Connection, platform, and facilities.

Online Testing Approaches

- Desktop application containing questions. Sends answers to an online server
- Website application in HTML with everything done inside a browser
- Website application in Flash
- Small Desktop application holding no question information- questions come from server, answers returned to server.

Challenges of e-Assessment

- Equality
 - Similar performance regardless of bandwidth
 - Minimal computer requirements
- Reliability
 - Internet connection failure/ Computer crash.
- Logistics
 - Exams over a number of days
- Security
 - Questions stored centrally
- Accessibility
- Special Provisions

Accessibility & Special Provisions

- Large text / images
- Different colour text / images
- Screen Reader software
- Human reader
- Students with mobility issues- Keyboard based navigation etc.
- Pre recorded audio questions
- Extra time for certain students
- Pause button

Question Types

- Multiple-choice.
- Multiple-choice with - multiple answers (E.g. Answer = A & B)
- One line response
- Multiple line responses- with possible manual marking.
- Aural/ Video stimulus
- Interactive Questions
 - Drag and drop
 - Zoom-able maps
 - Hotspots
 - Music Questions
- Oral response

BOARD OF STUDIES NSW

2006 Computing Skills Practice Test

Enter Login Details

Student Number:

Computing Skills Test password:

The password is 'friday'

Login

Exit

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2006 Computing Skills Practice Test

General Instructions

Total Marks: 40
Working time: 35 minutes plus allowance if applicable

This test has five sections:

- Computer Operati
- Word Processing
- Spreadsheets and
- Graphics and Multi
- Internet and Email

All sections are worth 8 marks. Attempt all questions.

Display Preferences

Common Colours

Aa

Aa

Aa

Aa

Aa

More Colours

Text color

Background color

Zoom Level

Regular

Larger

Largest

Preview

This is a sample of the text showing different sizes, text colours and background colours.

Radio 1

Radio 2

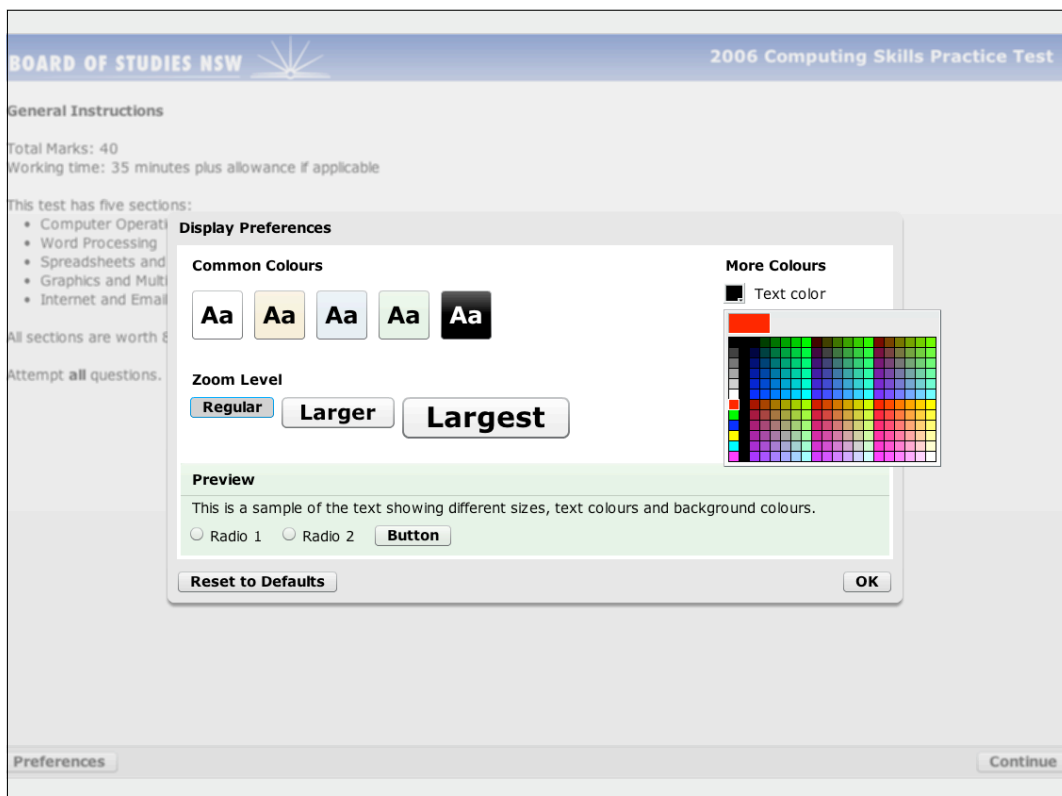
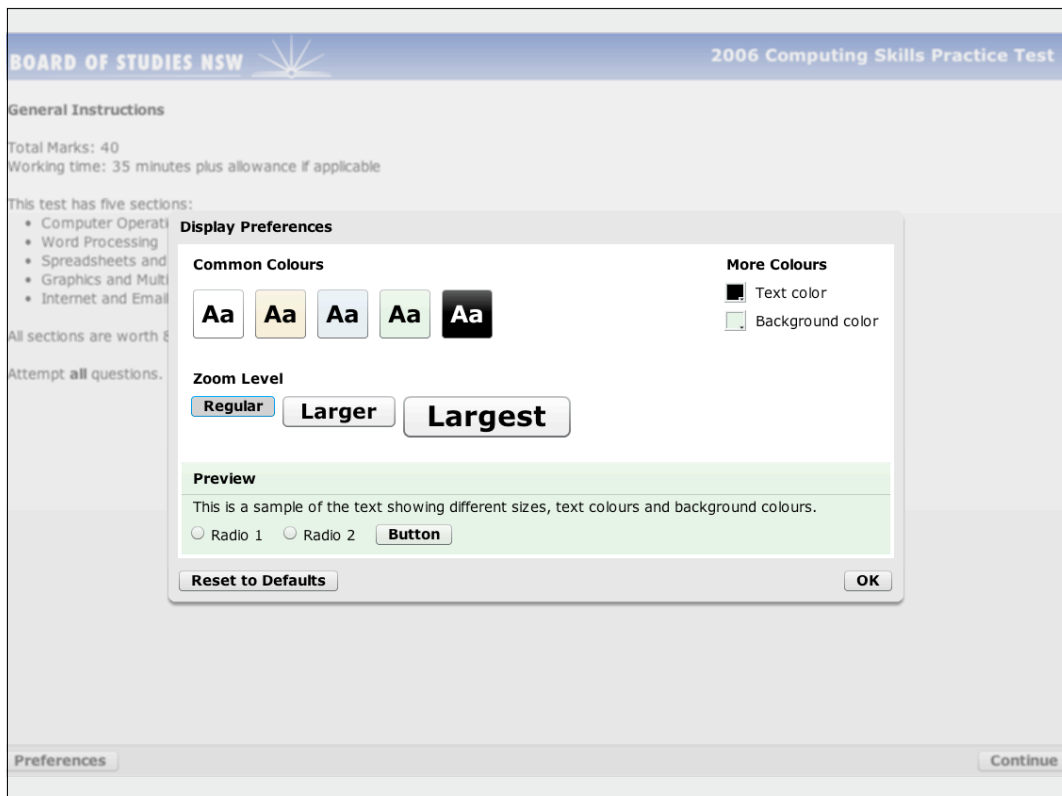
Button

Reset to Defaults

OK

Preferences

Continue



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2006 Computing Skills Practice Test

General Instructions

Total Marks: 40
Working time: 35 minutes plus allowance if applicable

This test has five sections:

- Computer Operations
- Word Processing
- Spreadsheets and Databases
- Graphics and Multimedia
- Internet and Email

All sections are worth 8 marks.

Attempt **all** questions.

Preferences

Continue

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2006 Computing Skills Practice Test

How to answer a question

- Select the alternative A,B,C or D that best answers the question.
- To move between questions click on the question number in the column on the left of the screen or click on the Next or Prev buttons at the bottom of the screen.
- You can change your answer at any time.

When you have finished

- Check that you have answered all questions.
- The numbers of all questions are shown in the column on the left of the screen.
- When you have completed the test, click on the Finish button.
- At the end of the test, you will see a message box.

Display Preferences

Common Colours

Aa

Aa

Aa

Aa

Aa

More Colours

☐ Text color

☐ Background color

Zoom Level

Regular

Larger

Largest

Preview

This is a sample of the text showing different sizes, text colours and background colours.

☐ Radio 1 ☐ Radio 2 **Button**


Reset to Defaults

Cancel OK

Preferences

< Back Continue

BOARD OF STUDIES NSW



2006 Computing Skills Practice Test

How to answer a question

- Select the alternative A,B,C or D that best answers the question.
- To move between questions you can click on a question number in the column on the left of the screen or click on the **Next** or **Prev** buttons at the bottom of the screen.
- You can change your answer to any question at any time.

When you have finished


- Check that you have answered all questions.
- The numbers of all questions that you have answered will be shown in bold type on the left of the screen
- When you have completed all questions, click the **I'm Finished** button.
- At the end of the test you will be asked to click the **Send**

Preferences

< Back

Continue

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2006 Computing Skills Practice Test

Test is now loaded - 40 questions

Special provisions:

- You have 2 minutes 30 seconds extra time
- You may use the Preferences button to change zoom and colour

Click Begin Test to start.

Preferences

< Back

Begin Test

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2006 Computing Skills Practice Test

Computer operations

5/40

Time 36:58 of 37:30

Qs

1

2

3

4

5

6

7

8


9

10

11


In an English lesson, you create a résumé using a computer.

Which command should be selected to print your résumé in landscape orientation?

(A) ☐  Save...

(B) ☐ Save As...

(C) ☐ Page Setup...

(D) ☐  Print Preview...

Preferences

Prev

Next

Pause

I'm Finished

BOARD OF STUDIES NSW

2006 Computing Skills Practice Test

Computer operations

5/40

Time 36:25 of 37:30

Qs

1

2

3

4

5

6

7

8

9

10

11

In an English lesson, you create a résumé using a computer.

Which command should be selected to print your résumé in landscape orientation?

(A) ☐  Save...

(B) ☐ Save As...

(C) ☐ Page Setup...

(D) ☐  Print Preview...

Display Preferences

Common Colours

More Colours

Zoom Level

Preview

Reset to Defaults

Cancel

OK

Preferences


Prev

Next

Pause

I'm Finished

BOARD OF STUDIES NSW



2006 Computing Skills Practice Test

Qs

Computer operations

5/40

Time 35:43 of 37:30

1

2

3

4

5

6

7

8


9

10

11


In an English lesson, you create a résumé using a computer.

Which command should be selected to print your résumé in landscape orientation?

(A) ☒  Save...

(B) ☐ Save As...

(C) ☐ Page Setup...

(D) ☐  Print Preview...

Preferences


Prev

Next

Pause

I'm Finished

BOARD OF STUDIES NSW



2006 Computing Skills Practice Test

Are you sure you want to finish the test now?

You have **not** answered every question.
There are **35 unanswered** questions.

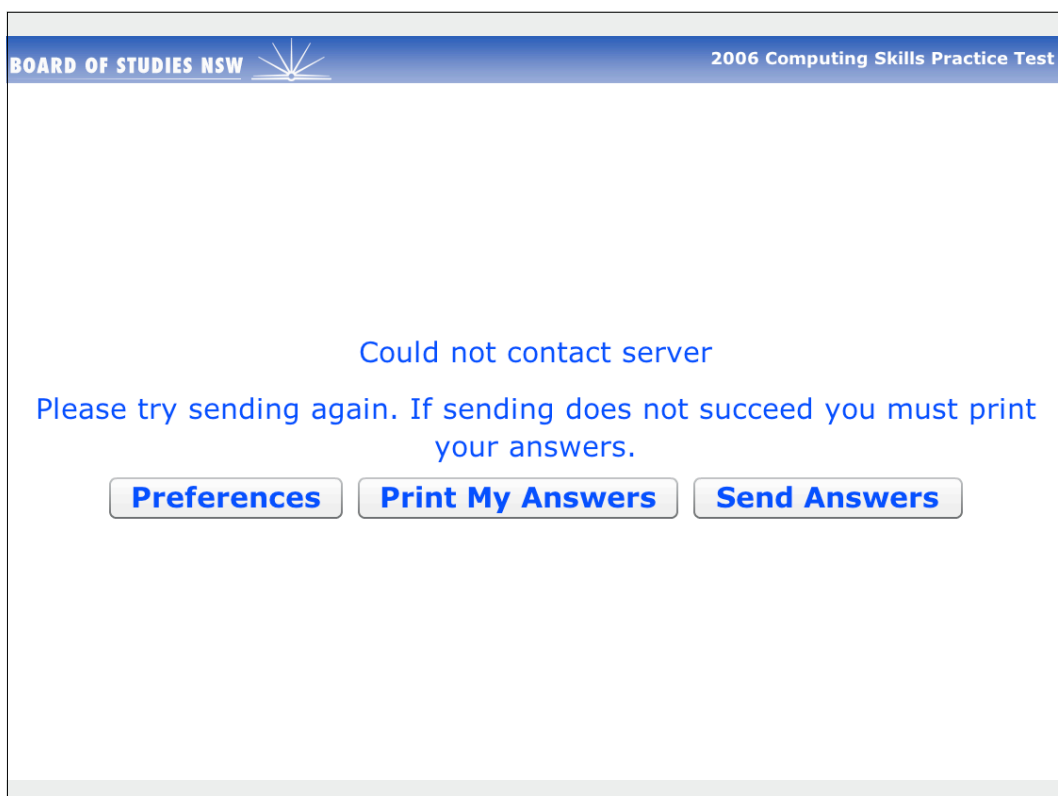
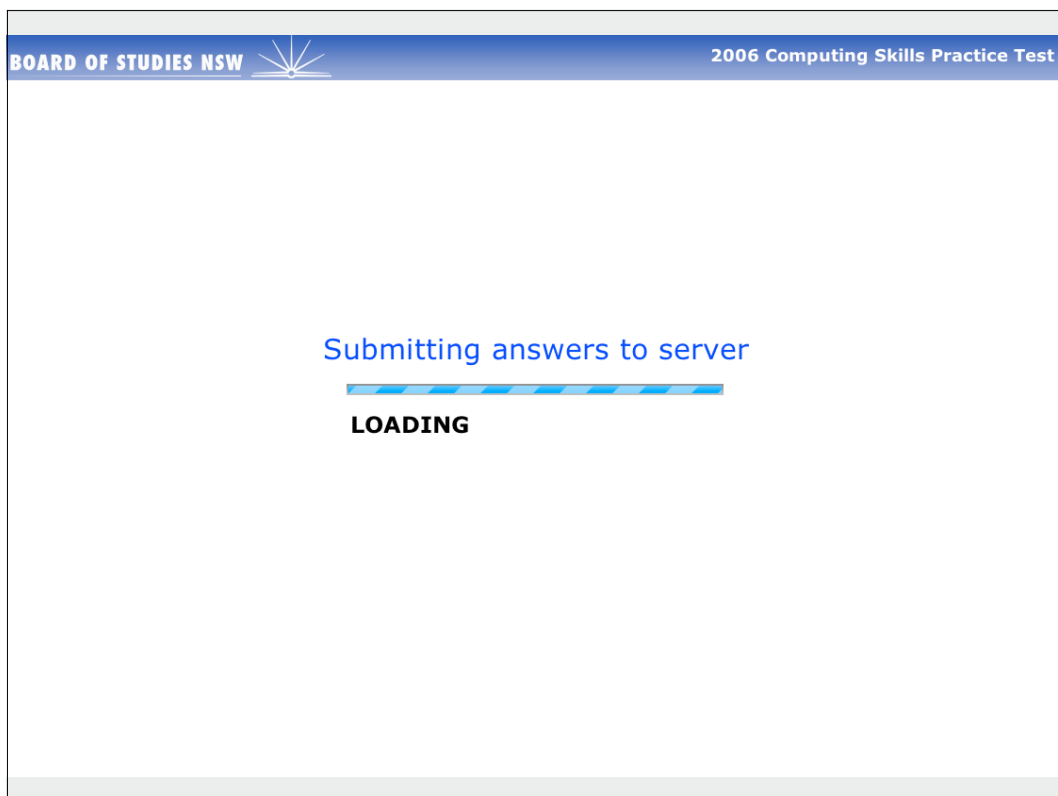
You have 35:30 remaining.

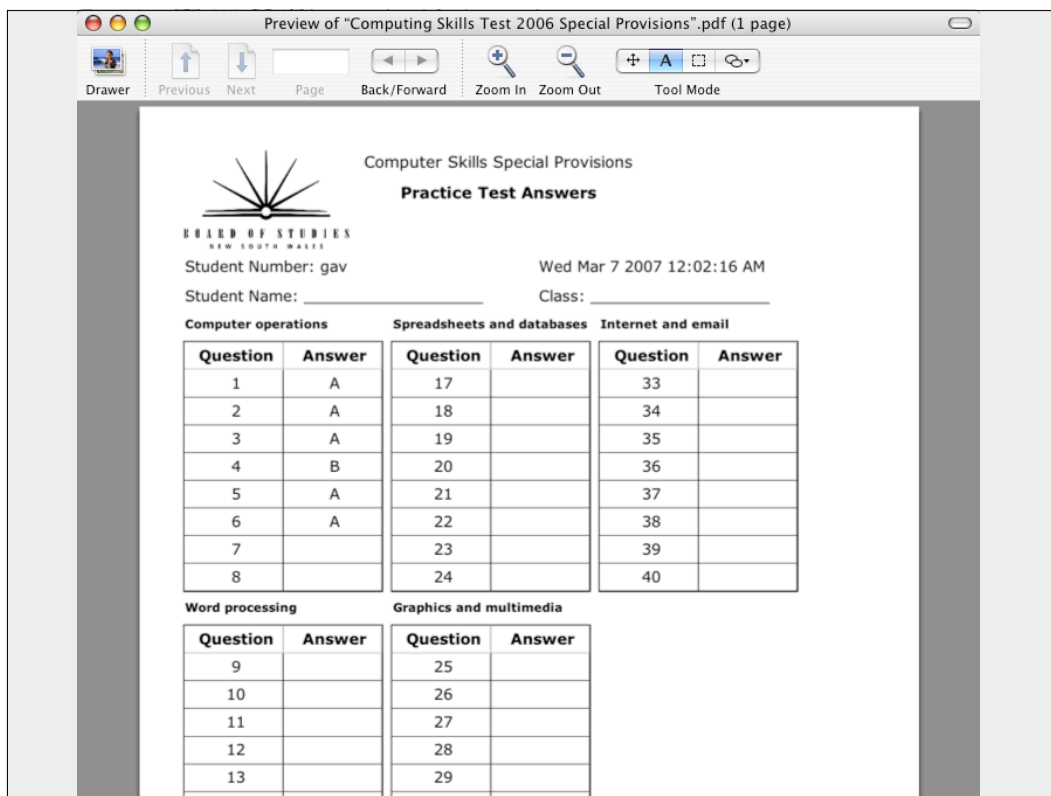
If you wish to review your answers click **Back** to go back to the test.

Back

Send Answers

You will not be able to go back once you click on Send Answers.
Click on Back to return to the questions.
Click on Send Answers to send your answers.





Business Case

- Delivery of large scale high-stakes examinations is difficult and costly. For example, Irish exams cost 549 euro per student on average (110,000 students)

Source: Irish Independent

<http://www.independent.ie/education/latest-news/hanafin-to-cut-down-writing-stress-in-leaving-shakeup-955363.html>

- **20 euro per student students could easily deliver all on-screen examinations**

- This would eliminate the following costs: Printing, secure delivery of examination papers, secure collection of examination papers, audit trail of delivery and collection of papers, marking of some types of questions (eg. Multiple choice), delivery of examination papers to markers, audit trail of same, dataentry of results, storage of paper exams for x years, retrieval of paper exams for remarking etc.
- It would provide reductions in the following costs: Marking of examinations, secure development of questions, double-marking by two examiners, remarking of exams, paper and printing costs in general etc
- Remote online marking would save AU\$3.8 million in rent alone in NSW Source: NSW Board of Studies 2006 Annual Report

Why e-Assessment?

- Internally, NSW Board of Studies see e-Assessment as a way to significantly reduce examination delivery costs over the next 3-5 years, while delivering better assessments. This is due to the financial and educational success in online delivery of the existing on-screen examinations.
- Logistically and financially, it is virtually impossible to provide a large-scale Junior Certificate Oral Irish examination in 2010 due to lack of teachers. Mobile phone based e-Assessment, currently being trialled, will be much more cost efficient.
<http://www.independent.ie/education/latest-news/move-to-conduct-disruptive-oral-exams-in-holidays-164569.html>
- Student response has been excellent.
 - Students do millions of online self-tests on the Board of Studies website
 - Students doing high-stakes examinations online in 2006 provided very favourable feedback.
 - Students involved in the oral Irish mobile phone trial, were seen anecdotally to improve their oral Irish skills over the course of the trial