



Distance Education: some issues

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Why distance Learning?

‘The United States will always do the right thing having exhausted all other possibilities’

Winston Churchill



The Open University

Total number of students
in 1999 (worldwide):

| | |
|----------------|---------|
| –undergraduate | 130,000 |
| –postgraduate | 32,000 |



The Open University

- 300+ courses
- average cost of a degree £3500
- 66% of students between 25 - 45
- half of the courses use IT to enhance teaching



How do you measure quality?

- Curriculum
- Teaching and learning
- Student progression
- Student support
- Learning resources
- Quality assurance



General Engineering

- Curriculum 4/4
- Teaching and learning 4/4
- Student progression 4/4
- Student support 4/4
- Learning resources 4/4
- Quality assurance 4/4

Total 24/24



Percentage of departments rated 'excellent' or scoring at least 22 points out of 24.

Premier League

Cambridge 94.7

York 84.6

Imperial 83.3

Oxford 80.0

LSE 77.8

Nottingham 64.0

Durham 65.2

University College, London 63.6

Warwick 62.5

Lancaster 60.0

Loughborough 60.0

First Division

St Andrews 57.9

Open University 58.3

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OU Research

- 1500 PhD students
- 10,000 Masters students
- ranked 29th in UK universities for research



Distance learning works

- OU education costs significantly less than its equivalent in full-time higher education elsewhere. Typical OU funding costs are 45% to 60% of full-time higher education.



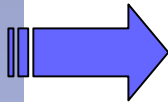
Why is the OU Successful?

- political commitment
- high quality teaching materials
- student support
- academic credibility
- research
- infrastructure



High Quality Teaching Materials

- courses created by course teams
- assessment created annually by course teams
- may include:
 - text
 - books
 - video
 - TV broadcast
 - audio
 - radio broadcast
 - home experiment kits
 - software
 - conferencing
 - CD-ROM





High Quality Teaching Materials

The Internet is
a delivery medium for
some components.



Student Support

- 7,500 associate faculty
- comment on and mark assignments
- tutorials at 235 study centres
- phone and e-mail support
- electronic assignments
- on-screen marking



Use of the Web

- consider the roles the student plays
- web site as a learning assistant, but:
- learning is best done away from a screen



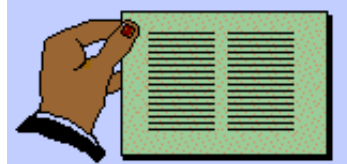
Web based courses three examples

- M206: Computing: an Object oriented approach
 - 4,500 students in 1999
- M301:Software Systems and their Development
 - 2000 students in 2000
- T171 You, your computer and the net
 - 12,000 students in 2000

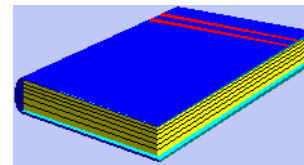


M206:

Media used in this course



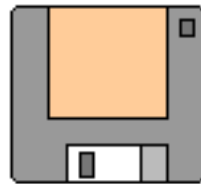
—printed text (53)



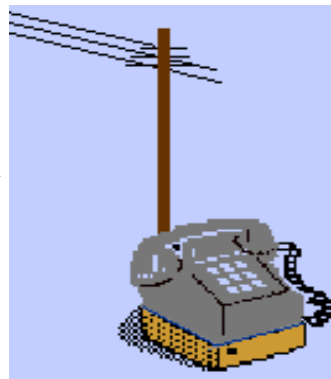
—course book (1)



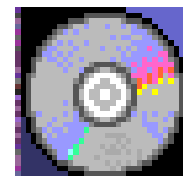
—broadcast television (11)



—Smalltalk Learning Book (1000)



—Network technology:
the Web (1000) +
conferencing (>1500)



—interactive CD-ROM (3)



Use of media

- if it moves, use the web site
- if it doesn't.....

- use as a delivery medium



Use of web

- Web pages to read
 - news
 - lists
 - TV notes
- Web pages to print
 - assignments
 - use pdf files
- And designed accordingly



Creating a new university

- United States Open University opens in 2000
- uses UKOU materials
- uses electronic communication from the outset



United States Open University

Target

- the Community College leaver
- professional development



United States Open University

- Offer two Computing programs
- BS in Computing
- MS in Computing
- Plus Humanities, IT and Business



Associate Faculty

- Essential contributors to quality of programs
- must be good teachers
- integrate with permanent staff
- involve in faculty business
- eventually involve in course adaptations



Professional Development

- Master's programme in Computing
- 4 credit hour courses
- target the IT professional
- joint effort with IEEE



Titles and numbers (UK 1999)

- Operating Systems... 563
- Project management 1325
- Relational Databases 758
- Software Engineering 944
- Java 941
- HCI 454



New developments

- Paperless assignments
- Exams in the home
- as part of a new electronic infrastructure
- look again at assessment



ETMA Marking Tool

Microsoft Word - AW22A11.DOC

File Edit View Insert Format Tools Table Window TMA and PT3 Help

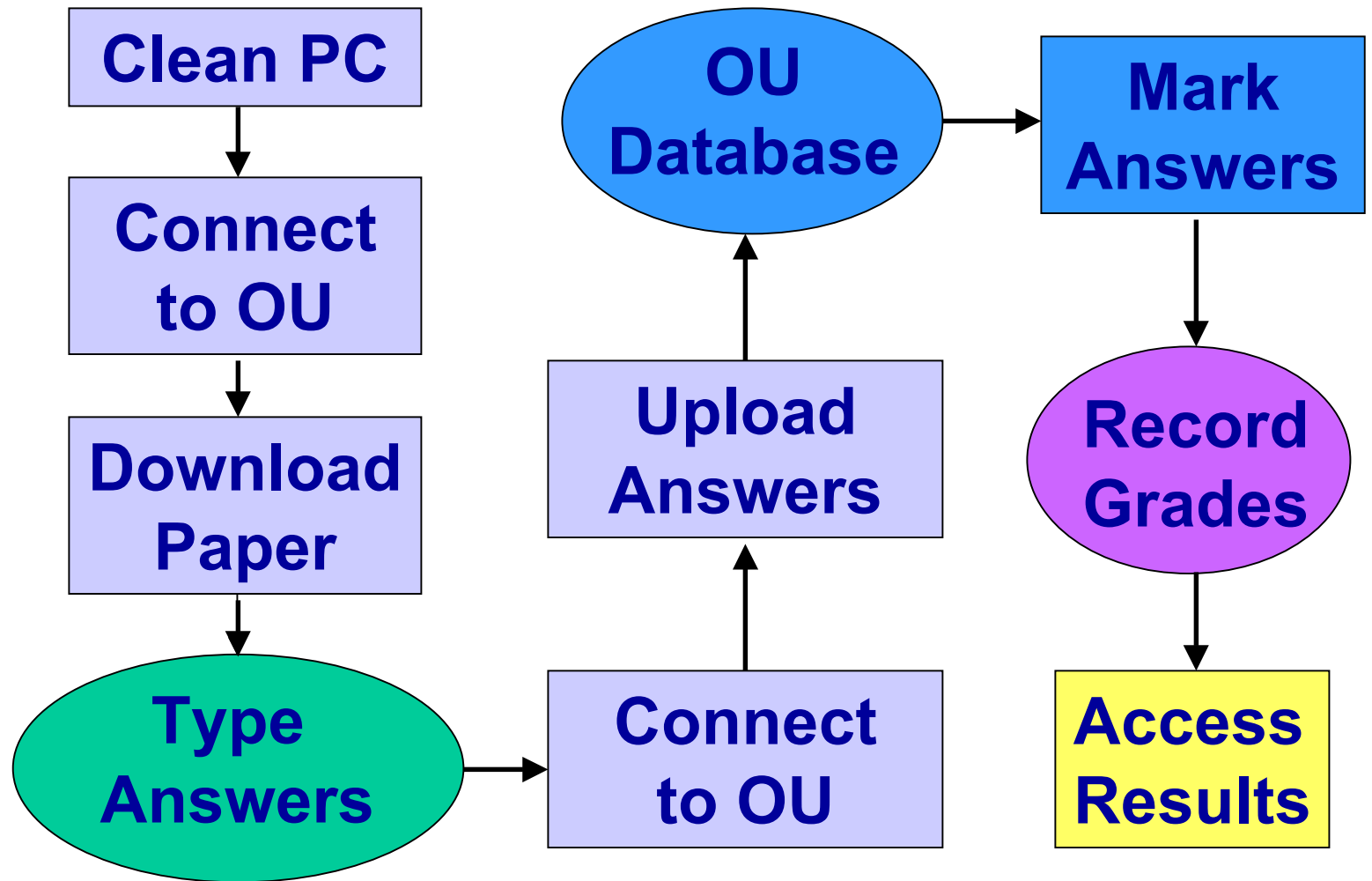
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Question 1
Smalltalk is the **BEST THING** since sliced bread.

- Assign Mark
- Part Mark
- Q1 Total
- Q2 Total
- Q3 Total
- Add Annotation
- Insert Tick Mark
- Write Tutor Comment
- Highlighted By Tutor
- Mark as Late
- Revision marks Off
- Revision marks On
- About marking tool



Electronic Exams





Cheating Control

- immediately after the exam, a random sample of students are telephoned, asked to identify themselves and asked a question related to the exam
- a random sample of students are invited to a viva-voce examination (including some of those from the previous step)



Costs

- Quality costs
- Support is time consuming and not cheap
- Scalability matters



Support at faculty level

- one person per course
- in addition to content specialists



Support university level

- 500 staff
- £20 million budget
- over 200,000 potential customers



University media output

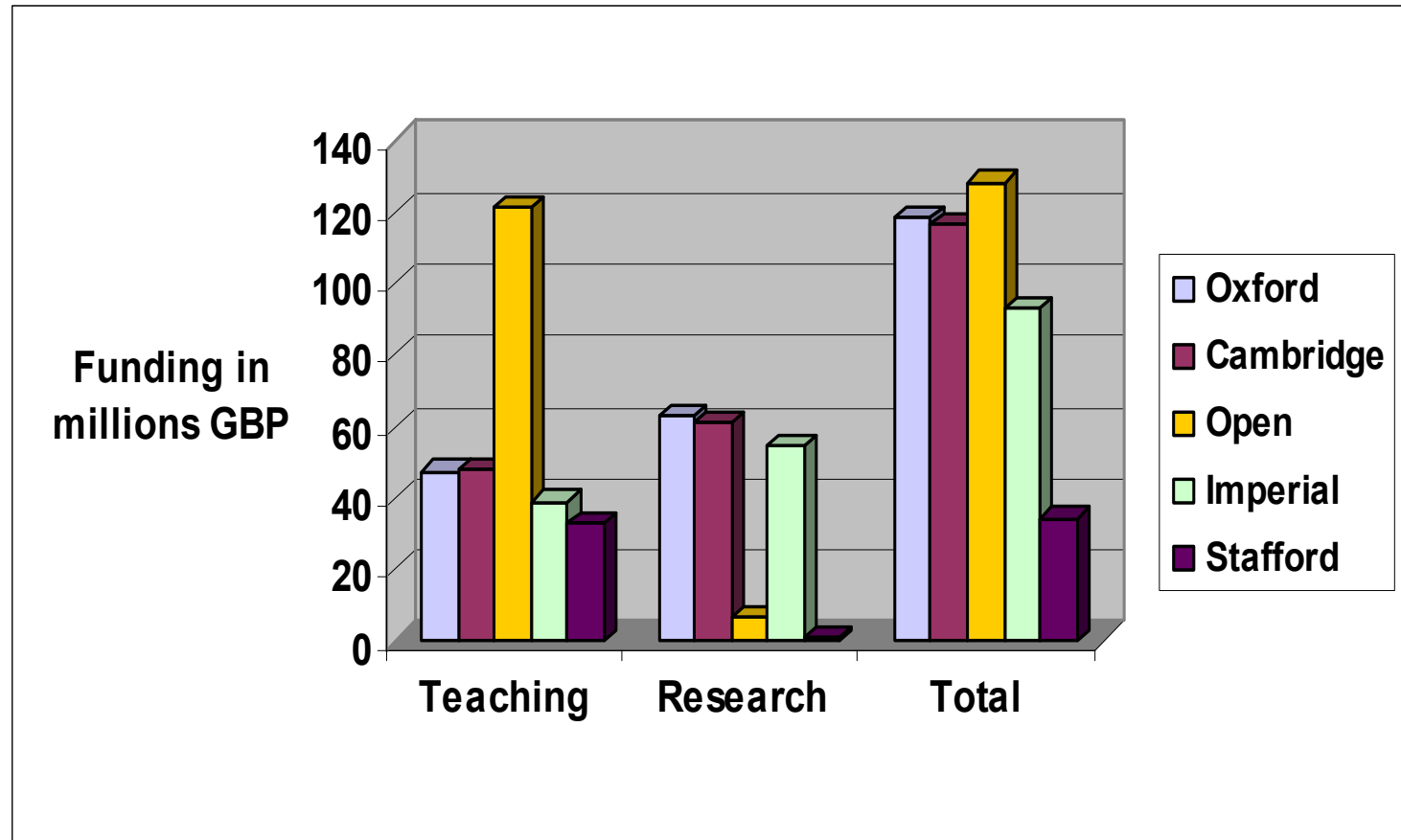
- 1,000,000 audio cassettes
- 250,000 video cassettes
- 80,000 floppy disks
- 200,000 CD-ROMs
- 20 tons of post per week



Customer Service & Operational Support

- student helpdesk
 - 09:00 - 23:30 hrs, seven days a week
 - support for 60,000 students and tutors
 - 59,000 queries in 1999 (46,000 by telephone)

Funding 1999





Conclusion

I.

The Internet, as a communications medium, can support and enhance the educational process, particularly for study at home.



Conclusion

II.

Pick the media for pedagogic reasons.

Conclusion

III.

- Quality is not cheap
- Support is time consuming and not cheap
- Distance learning is not cheap



Conclusion

IV.

Meet student expectations

V.

Scalability matters



Thank you for your
attention.

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