



Flexible Learning Futures

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USQ’s Strategic Direction 2008 - 2013

To be a world leader in
 open and flexible education
 through the effective deployment
 of information and communication
 technologies




The Institutional Context 2008

**USQ Learning Futures
Innovation Institute**

Software Research
& Development Lab

Technology Enhanced
Learning Laboratory


<http://www.usq.edu.au/lfii/>



The Technology-Pedagogy Interface

“The single greatest challenge facing
 managers in the developed countries of
 the world is to increase the productivity of
 knowledge and service workers”

Source: Peter Drucker (1991)



Theoretical Framework: Five Generations of Distance Education Technology

- The Correspondence Model
- The Multimedia Model
- The Telelearning Model
- The Flexible Learning Model
- The Intelligent Flexible Learning Model

First Generation (Asynchronous)

MODELS OF DISTANCE EDUCATION AND ASSOCIATED DELIVERY TECHNOLOGIES	CHARACTERISTICS OF DELIVERY TECHNOLOGIES					INSTITUTIONAL VARIABLE COSTS APPROACHING ZERO	
	FLEXIBILITY			HIGHLY REFINED MATERIALS	ADVANCED INTERACTIVE DELIVERY		
	Time	Place	Pace				
THE CORRESPONDENCE MODEL • Print	Yes	Yes	Yes	Yes	No	No	

Second Generation (Asynchronous)

MODELS OF DISTANCE EDUCATION AND ASSOCIATED DELIVERY TECHNOLOGIES	CHARACTERISTICS OF DELIVERY TECHNOLOGIES					INSTITUTIONAL VARIABLE COSTS APPROACHING ZERO
	FLEXIBILITY			HIGHLY REFINED MATERIALS	ADVANCED INTERACTIVE DELIVERY	
	Time	Place	Pace			
THE MULTIMEDIA MODEL						
• Print	Yes	Yes	Yes	Yes	No	No
• Audiotape	Yes	Yes	Yes	Yes	No	No
• Videotape	Yes	Yes	Yes	Yes	No	No
• Computer-based learning (eg CML/CAL)	Yes	Yes	Yes	Yes	Yes	No
• Interactive video	Yes	Yes	Yes	Yes	Yes	No



Variable costs tend to increase or decrease directly (often linearly) with fluctuations in the volume of activity.

In traditional distance education delivery, the distribution of packages of self-instructional materials (printed study guides, audiotapes, videotapes, etc) is a variable cost, which varies in direct proportion to the number of students enrolled.

Third Generation (Synchronous)

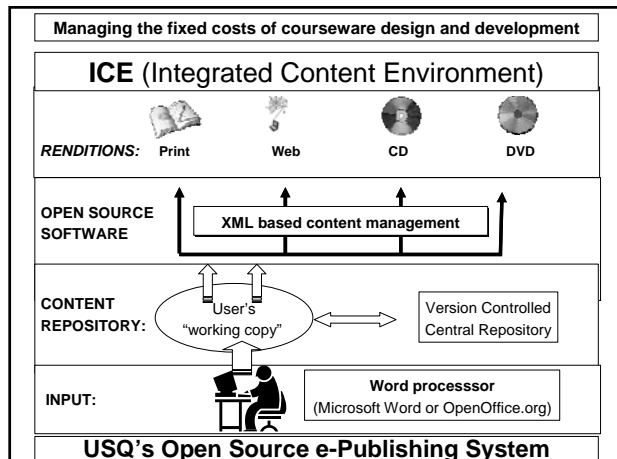
MODELS OF DISTANCE EDUCATION AND ASSOCIATED DELIVERY TECHNOLOGIES	CHARACTERISTICS OF DELIVERY TECHNOLOGIES					INSTITUTIONAL VARIABLE COSTS APPROACHING ZERO
	FLEXIBILITY			HIGHLY REFINED MATERIALS	ADVANCED INTERACTIVE DELIVERY	
	Time	Place	Pace			
THE TELELEARNING MODEL						
• Audio-teleconferencing	No	No	No	No	Yes	No
• Videoconferencing	No	No	No	No	Yes	No
• Audiographic communication	No	No	No	Yes	Yes	No
• Broadcast TV/Radio and Audio-teleconferencing	No	No	No	Yes	Yes	No

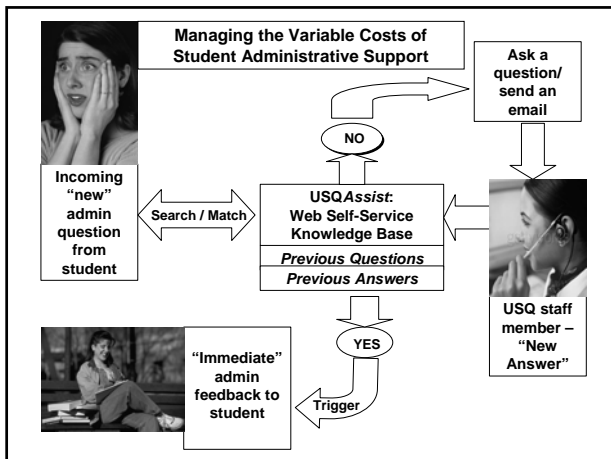
Fourth Generation (Asynchronous)

MODELS OF DISTANCE EDUCATION AND ASSOCIATED DELIVERY TECHNOLOGIES	CHARACTERISTICS OF DELIVERY TECHNOLOGIES					INSTITUTIONAL VARIABLE COSTS APPROACHING ZERO
	FLEXIBILITY			HIGHLY REFINED MATERIALS	ADVANCED INTERACTIVE DELIVERY	
	Time	Place	Pace			
THE FLEXIBLE LEARNING MODEL						
• Interactive multimedia (IMM)	Yes	Yes	Yes	Yes	Yes	Yes
• Internet-based access to WWW resources	Yes	Yes	Yes	Yes	Yes	Yes
• Computer mediated communication (CMC).	Yes	Yes	Yes	Yes	Yes	No

Fifth Generation (Asynchronous)

MODELS OF DISTANCE EDUCATION AND ASSOCIATED DELIVERY TECHNOLOGIES	CHARACTERISTICS OF DELIVERY TECHNOLOGIES					INSTITUTIONAL VARIABLE COSTS APPROACHING ZERO
	FLEXIBILITY			HIGHLY REFINED MATERIALS	ADVANCED INTERACTIVE DELIVERY	
	Time	Place	Pace			
THE INTELLIGENT FLEXIBLE LEARNING MODEL						
• Interactive multimedia	Yes	Yes	Yes	Yes	Yes	Yes
• Internet-based access to WWW resources	Yes	Yes	Yes	Yes	Yes	Yes
• CMC, using automated response systems	Yes	Yes	Yes	Yes	Yes	Yes
• Campus portal access to institutional processes & resources	Yes	Yes	Yes	Yes	Yes	Yes
• Webcasting and the Live Online Classroom	No/Yes	No/Yes	No/Yes	Yes	Yes	No/Yes





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Web Self-Service Knowledge Base: The Consumer Context

- 2002: 48,983 student visits
- 2003: 209,926 student visits
- 2004: 299,900 student visits
- 2005: 441,459 student visits
- 2006: 624,244 student visits
- 2007: 766,902 student visits

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Managing the Variable Costs of Customer Contacts

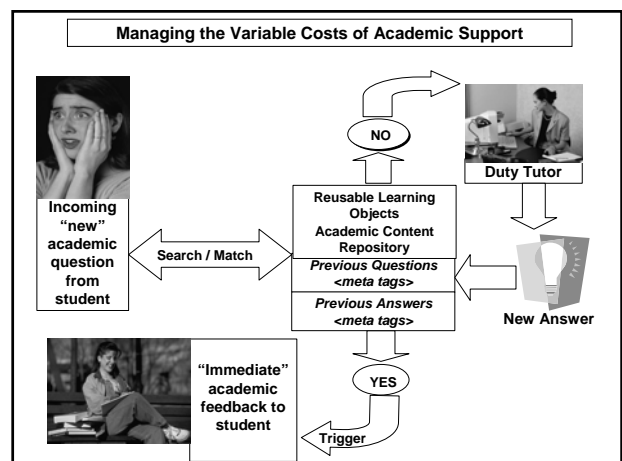
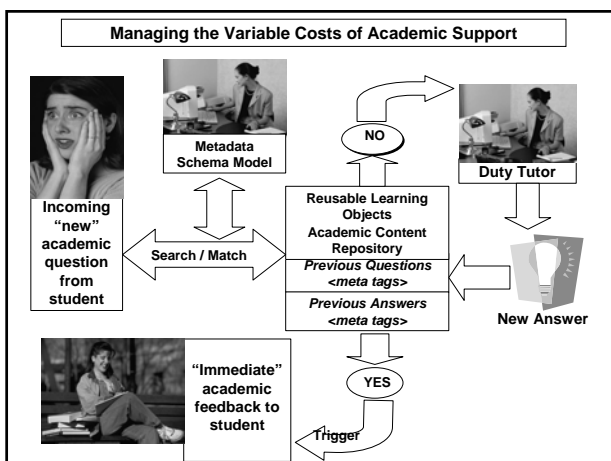
Face-to-face contact	US \$8.00
Phone contact (average)	US \$4.00 - \$6.00
Email	US \$0.50 - \$2.50
Web Self-Service	US \$0.24

Source: Gartner Group Inc.

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USQAssist

During 2007, USQAssist processed 766,902 student visits at an approx. cost of \$184,056 compared to an estimated equivalent phone enquiry cost of approx. \$3.83 million.



Managing the fixed costs of courseware design and development

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The Goals of the OCW Consortium

- Extend the reach and impact of open courseware around the world
- Foster the development of additional open courseware projects
- Ensure the long-term sustainability of open courseware projects by identifying ways to improve effectiveness and reduce costs

<http://ocw.usq.edu.au/>

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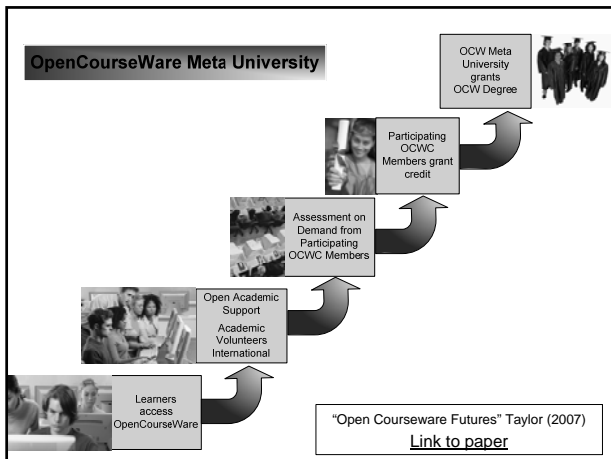
Open Educational Resources Movement

- Open Source
- Open Content
- Open Access Journals (3,055 and rising)
- OpenCourseWare Consortium (128 institutions and rising)

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Higher Education Futures: A Parallel Universe?

- Open Academic Support
- Open Assessment
- Open Curriculum
- Open Accreditation



Managing the Variable Costs of Academic Support

Academic Volunteers International
 USQ Home | Study at USQ | Contact Us | Search

- USQ has registered the relevant internet domain names for Academic Volunteers International
- USQ is developing an extensible web architecture and associated software as an open source initiative

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5th Generation

As open courseware, academic volunteer, and intelligent database initiatives become more comprehensive:
 the institutional variable costs for the provision of effective student support will tend towards zero

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Higher Education

- A universal aspiration?
- A universal exasperation?
- A universal reality?
- Open Mind!