

A Studio-based Teaching and Learning Model in IT: What do First Year students Think?

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Presentation Outline

- Background to the Studio Model
- The Studio Model in IT
 - Teaching and Learning environment
 - IT Tools and Infrastructure
 - Teaching and Learning Philosophy
 - Portfolio Assessment
- Evaluation Design
- Results

The Bauhaus

- Three aims
 - Rescue the arts from isolation
 - Elevate the status of the arts
 - Establish contacts with leaders of industry

The Studio Model in IT

- Components of the studio
 - Physical space
 - creation of new teaching space
 - Curriculum
 - radical redesign
 - portfolio assessment
 - Infrastructure
- Supported by a grant

Teaching and Learning Environment



- Studio 1
 - Develop IT literacy and didactic teaching
 - Foundation space to develop basic critical skills
 - Lots of group work

Teaching and Learning Environment



- Studio 2
 - Space for more intense group work
 - Large conference type table in centre of room for discussions of 25 students
 - ‘D’ shaped table around the perimeter of the room

Teaching and Learning Environment



- Internet Café
 - Informal meeting place
 - Social centre of Studio precinct
 - Accessible 24 hours every day of the week
 - Equipped with kitchenette

Teaching and Learning Environment

- Meeting Room
 - Consultations
 - Interviews
 - Studio group meetings
 - Presentations
 - Reviews
 - Ad hoc meetings



IT Tools and Infrastructure

- Loan Equipment
 - iBooks, Laptops, zip drives, digital cameras
- RFN
- Web access to studio software
- Subject Website
- Email
- Online discussion

Teaching and Learning Philosophy

- Two foci
 - Integration of curriculum across core subjects
 - Create a collaboratively work environment
- Teaching Team
 - Studio Manager
 - Studio Year Leaders
 - Academics and Tutors

Assessment

- Portfolio (80%) and Exam (20%)
- Portfolio
 - Opportunity for students to present and explain their 'learning treasures' against subject's objectives
 - 80% comprises
 - 50% for portfolio items prescribed by academic
 - 30% for portfolio items which are self-selected

Evaluation Design

- Student surveys
 - during the last week of semester 1
 - demographic data
 - students rated the four facets of the studio on 5-point Likert scales
 - space provided to allow open ended comments about aspects of the studio environment

Demographic Data

- 132 of 140 students completed survey
- 70 males, 62 Females
- 36 international, 96 local
- 124 enrolled in BIMS, 8 in double degrees
- 79% were between ages 18 and 21

The Teaching and Learning Environment

Question	Mean	SD
Rate studio space 1 as a learning space	4.35	0.92
Rate studio space 2 as a learning space	4.26	0.88
Rate studio cafe as a learning space	3.99	0.97
Rate studio meeting room as a learning space	4.03	0.91

Note: 1 = very poor, 5 = very good

IT Tools and Infrastructure

Question - How often did you use	Mean	SD
Loan equipment - iBook, zip drives, digital camera, etc	1.78	1.15
Radio frequency network	1.68	1.09
Web access to studio software	3.72	1.51
Subject Website	4.58	0.80
Email	4.33	1.15
Subject online discussion area	2.55	1.13

Note: 1 = not at all, 5 = frequently

Portfolio Assessment

Question	Mean	SD
Deciding which items to submit for the self-selected portfolio	2.59	0.98
Completing the mandatory portfolio requirements	2.66	0.87
Representing in my portfolio the level of my skills and knowledge	3.24	1.13
Organising the portfolio	2.74	0.94

Note 1= very difficult, 5 = very easy

Impact on Student Satisfaction

Ratings of student satisfaction:

- Recommend Studio to others: 3.33
- Prefer Studio as a learning environment: 3.87

Overall impression

- Overall students expressed a preference towards the studio model in comparison to the traditional lecture tutorial
 - *[the studio subject] has been a good experience when it comes to hands on work with programming.*
 - *I like to put things into practice, ahead of learning the theory behind it, so the studio openly provided that opportunity.*

More findings...

- Students were surveyed again at the end of the year
- Factors influencing student satisfaction:
 - Availability of space
 - How well students perceived the integration of the subjects
 - How well studio activities developed their knowledge
 - Negotiation with team members
 - Ability to present knowledge in portfolio

Future direction

- To conduct a longitudinal study to obtain an understanding of whether students become more adapted to the new studio model as they progress through their course.