Teaching inclusive design practices at Brunel University

Dr Hua Dong
School of Engineering and Design, Brunel University

Context

Undergraduate (approx. 400 students)
3-Year ‘Full-Time’
4-Year ‘Sandwich’ Course

<table>
<thead>
<tr>
<th>Year</th>
<th>September</th>
<th>January</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Term 1</td>
<td>Term 2</td>
<td>Term 3</td>
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<tr>
<td>Year 2</td>
<td>Term 4</td>
<td>Term 5</td>
<td>Term 6</td>
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<td>Year 3</td>
<td>Industrial Placement / Exchange</td>
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<td>Year 4</td>
<td>Term 7</td>
<td>Term 8</td>
<td>Term 9</td>
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Level 1 modules

Common modules:
Design Process
Graphic Communication 1
Design Modelling Workshop

BSc: Mechanics for Design
Electrical Technology

BA: Applications through Design
Creative Engineering Practice

Level 2 modules

Common modules:
Design Process 2
Graphic Communication 2
Design for Manufacture 1

BSc: Electronics, Programming & Interfacing
Structures, Dynamics & mechanisms

BA: Applications Through Design 2
Systems Design

Level 3 modules

Common modules:
Major project
Innovation management

Options (3 other modules):
Environmentally Sensitive Design
Human Factors
Embedded Systems for Design
Graphics
Contextual Design

Postgraduate
2 MSc programmes (25)
2 MA programmes (120)

MA Design, Strategy & Innovation
MA Branding Strategy
MSc Integrated Product Design
MSc Human Centred Design
Topics for discussion

1. How to introduce the topic of Inclusive design?
2. What are the strategies of teaching inclusive design?
3. Is ethics an issue?

Introduction to inclusive design

Inclusive design as a specific topic:
- Definition
- Terminology
- Contexts
- History
- User model
- Case studies
- Methods and tools

Incorporating inclusive design principles into project-based teaching:
- Personas
- Scenarios

2. What are the strategies of teaching inclusive design?

<table>
<thead>
<tr>
<th>Strategy: simulation</th>
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<tbody>
<tr>
<td><strong>Guest lecture on impairment simulation</strong></td>
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<tr>
<td>Consider:</td>
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<tr>
<td>Hands-on tasks</td>
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<td>Ease of access of the simulation tool</td>
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<td>Dedicated tutorial</td>
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<tr>
<td>Relevance</td>
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Persona and scenario
Strategy: simulation

Simulating environment

Consider:
Introduction to equipment
Capacity of the space
Relevance
Supervision

Strategy: involving people with disabilities

Vocational project (2007)

Consider:
Incentives
Back-up plan
Accessible venue
Time

Strategy: interdisciplinary collaboration

HEA-funded project (2009):
Working with occupational therapists

Consider:
Timetabling
Back-up plans
Communication
‘Highlights’ of the project

Strategy: developing case studies

Pill-punch (2006):
An inclusive design (major project)

Consider:
Design process
User research method
Scope for improvement

3. Is ethics an issue? (What and when?)

Commence Development viva Submission Exhibition Design Report Development work


Effective learning is through use (e.g. simulation tools)
Students benefit from working with ‘real’ people
Interdisciplinary collaboration helps students appreciate different viewpoints and develop communication skills
Inclusive design could start with a specific user group
Relevant case studies are effective in engaging students with inclusive design
Students love competitions, real-world design brief and involvement of external judges
Thank you for listening!

hua.dong@brunel.ac.uk
(0)1895 267254