

---

# **Making reasonable adjustments for disabled HE students in STEM**

**Mick Healey**  
**HE Consultant and Researcher**  
[www.mickhealey.co.uk](http://www.mickhealey.co.uk); [mhealey@glos.ac.uk](mailto:mhealey@glos.ac.uk).

---

# Brief biography

---

- HE Consultant and Researcher,
  - Economic geographer and Director Centre for Active Learning,
  - Emeritus Professor, University of Gloucestershire,
  - Director of Centre for Active Learning (2005-10),
  - National Teaching Fellow and Senior Fellow HE Academy,
  - Research interests – R&T links, SoTL, active learning, inclusive curriculum,
  - Director of two HEFCE projects on ‘Supporting the learning of disabled students’ (Geography Discipline Network),
  - Co-Director of ESRC TLRP Project Team on ‘Enhancing the quality and outcomes of disabled students’ learning in higher education’,
  - Visiting Prof Edinburgh Napier University and University of Wales Newport and Hon Prof University of Queensland.
-

# Developing an inclusive curriculum for all

---

“We believe that the claim that **everyone is impaired, not just ‘disabled people’**, is a far-reaching and important insight into human experience, with major implications for medical and social intervention in the twenty-first century.”

(Shakespeare and Watson 2002: 25)

---

# The experience of disabled students

---

- Despite growth of interest in the topic, the voice of disabled students, with a few exceptions (e.g. Riddell *et al.* 2002), has **hardly been heard, beyond the anecdotal.**
  - Will draw on **longitudinal interviews with 31 disabled students across the four universities** about their experiences of learning and assessment.
  - Supplement it with findings from a) two surveys at one of the universities: a **survey of 178 disabled students;** and a **survey of 548 disabled and non-disabled students;** and b) a **survey of disabled students studying GEES subjects in six universities.**
-

# Barriers related to modes of teaching

---

	HEI	GEES
Disability-related barriers	%	%
Lectures	44	54
Laboratories / practicals		25
Other on campus classes	22	29
Fieldwork – residential		19
Fieldwork – non-residential		19
Fieldwork – Independent		43
Off-campus sessions	21	
Using IT facilities	17	17

---

# Barriers related to modes of teaching

---

What conclusions do you draw from the responses from the GEES students about the disability-related barriers that they have impacted on their learning in:

- a) Lectures (Table 1, p2),
  - b) Independent fieldwork (e.g. associated with dissertation) (Table 2 p3)?
-

# Barriers related to modes of assessment

---

	<b>HEI</b>	<b>GEES</b>
<b>Disability-related barriers</b>	<b>%</b>	<b>%</b>
<b>Examinations</b>	<b>30</b>	
<b>Written examinations</b>		<b>62</b>
<b>Multiple choice / other exams</b>		<b>45</b>
<b>Coursework</b>	<b>34</b>	<b>63</b>
<b>Oral presentations</b>	<b>12</b>	<b>37</b>

---

# Barriers related to modes of teaching

---

What conclusions do you draw from the responses from the GEES students about the disability-related barriers which have affected their experience of different types of assessment (Table 3 p4)?

---

# Reasonable adjustments - need

---

Legislation in the UK puts a duty on universities and colleges to make reasonable adjustments in advance for the needs of disabled students and to produce disability equality statements.

All staff, academic and support, have a responsibility for providing a learning environment in which disabled students are not disadvantaged.

---

# Reasonable adjustments - argument

---

**It is invidious to treat disabled students as a separate category; rather they fall along a continuum of learner differences and share with other higher education students similar challenges and difficulties; sometimes the barriers are more severe for them, but sometimes they are not.**

---

# Reasonable adjustments - approaches

---

**Assimilate** - special arrangements made for particular disabled students to help them cope e.g. provision of hearing loops; handouts in Braille; extra time in exams; stickers for students with dyslexia.

**Alternative arrangements** - provided for particular students e.g. a virtual fieldcourse for a student with a mobility impairment; a viva is provided to test the same learning outcomes as a written assessment.

**Inclusive** - *all* students are provided with adjustments e.g. handouts before lectures; alternative assessments designed to test the same learning outcomes.

---

# Reasonable adjustments - assimilate

---

**Daisy (Heritage & Tourism, visual & dyslexia) went on a fieldtrip without a note taker.**

“The lecturer said to certain people to take notes for that day for me but I never actually got round to pushing them to give them to me so I kind of ended up with my own hand written notes and a few gaps.”

**Jean (education, dyslexia) - extra time in exams**

“I have this label ... you are treated a bit different, which is good because you think ... I do need extra time in exams ... but I am aware ... of people saying to me ‘Oh I didn’t see you in the exam hall’.”

---

# Reasonable adjustments - alternative

---

**Andrew (education, cerebral palsy) was provided with an alternative fieldwork exercise.**

“Obviously there was a lot of stuff I couldn’t do because of my legs and whatever. The river study was one particular thing. They accommodated me really well. They just said ‘you don’t need to do that’ but Sheila, one of the assistants, she took me in the van and we went to a visitor centre and I evaluated the usefulness of the visitor centre. I was doing something, although it was different to the rest of them, I wasn’t just sitting in a cabin with my feet up.”

---

# Reasonable adjustments - inclusive

---

**Brandon (engineering, dyslexia), along with all the other students on his course, gets lots of handouts in advance which means he does not need his note taker.**

**“I can listen to the lecture and remember. We get lots of handouts and notes, which is good for me because rather than look at my notes I can look at theirs. In maths they gave us a CD at the beginning of the year and that has all the notes for the whole year, exam questions and answers.”**

---

# Reasonable adjustments - experiences

---

**Wide variation in the experience of the students in the reasonable adjustments made to learning, teaching and assessment (LTA) suggests there are differences in how the legislation is interpreted.**

Such findings help to explain why this is **an area which features strongly in the cases brought against higher education institutions** under the legislation in Australia and emerging case law in the UK (Adams and Brown 2002).

---

# Variation in LTA experiences

---

**Jean (education dyslexia) had different experiences with different lecturers.**

“If she put an overhead up in a lecture theatre or a workshop ... she would ... do it paragraph by paragraph ... and she would read it out as well ... so I would get it audibly and visually.”

“She moves into the group as overheads are swishing on and off, she is talking about something else which is so important that I am supposed to be taking it down and I am a bit like ... ‘what do you want me to do?’”

---

# Variation in LTA experiences

---

**Two students with the same disability may have widely different experiences.**

**“I’m good at oral presentations but sometimes misspell on OHPs” (Dyslexia).**

**“I hate oral presentations because it is very difficult for me to converse my ideas out aloud and this is not to do with confidence but speech problems” (Dyslexia).**

---

# LTA experiences

---

**This suggests that devising general policies may not meet the specific needs of individuals.**

**However, making numerous individually-tailored adjustments is not sustainable; though may be essential in a minority of cases.**

**What is required is an inclusive approach which removes the distinction between teaching and assessing disabled and non-disabled students.**

---

## **Table 4 LTA experiences of disabled and non-disabled students (p5)**

---

<b>Agree/Strongly agree</b>	<b>% Dis Non-Dis</b>	
<b>I have had physical difficulties with writing</b>	<b>29</b>	<b>5</b>
<b>I have had difficulty with literacy skills</b>	<b>54</b>	<b>17</b>
<b>I have had difficulty in taking notes</b>	<b>55</b>	<b>24</b>
<b>I have had difficulties with the amount of time I require to complete assignments</b>	<b>55</b>	<b>39</b>
<b>It's easy to know the standard of work expected</b>	<b>51</b>	<b>43</b>
<b>I have had difficulties with participation in group work</b>	<b>19</b>	<b>29</b>
<b>I have had difficulties with oral presentations</b>	<b>28</b>	<b>33</b>

---

# LTA experiences

---

**Using a catch-all category ‘disabled students’ is problematic.**

**The findings show that for most part disabled students have similar experiences to non-disabled students of learning and assessment. However, disability-related barriers have had a significant impact on their experiences of learning and assessment in a minority of situations.**

---

# LTA experiences

---

**The main beneficiaries of disability legislation may be the *non-disabled* students** because most of the adjustments, such as well-prepared handouts, instructions given in writing as well as verbally, notes put on-line, and variety and flexibility in forms of assessment, are simply good teaching and learning practices which benefit all students.

---

# LTA experiences

---

“One **unintended consequence** of this (disability) legislation is that as departments and institutions introduce more flexible learning and alternative ways of assessment for disabled students, **demand is likely to rise for giving greater flexibility for all students.**

Disability legislation may prove to be a **Trojan horse** and in a decade, the learning experiences of all students may be the subject of greater negotiation” (Healey 2003: 26).

---

---

# THE END

For more pictures of  
Tess see:

[www.mickhealey.co.uk](http://www.mickhealey.co.uk)

---