Action research project: Making Moodle more inclusive

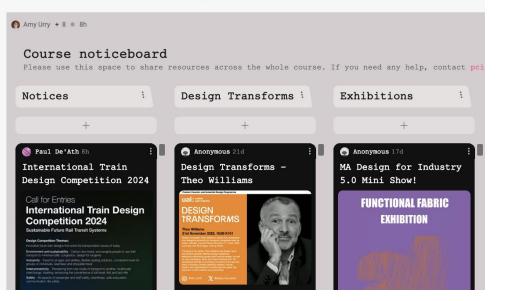
Amy Urry, Senior Digital Learning Coordinator, CSM 23/24 BA (Hons) Product and Industrial Design

Dashboard / Courses / 23/24 BA (Hons) Product and Industrial Design

Open course menu 🔮

| BAPID | Stage 1 | Stage 2 | Stage 3 | |
|----------|------------|--------------------|---------|----------------------------|
| Technica | al studies | Contextual studies | | Sustainable design studies |

Banner image: Georgina Heaton, BA PID, UAL Image library



Research question:

To what extent does our **Moodle design template** support inclusive practice in relation to neurodiverse and disabled students?

- Headings, spacers, bullet points
- Contextual information
- Organisation and consistency
- Colour and images
- Training for staff and guidance for students

Your course

Part 1



Part 1 Teaching area

In this section, you will find your curriculum area content. The information and teaching resources you will need for your se information. During part 1, you will need to check this area re accomplish.

Why does it matter?

- 21% students at CSM declare a disability (nationally 17% population)*
- Social model of disability at UAL.
- Legal requirement: Anticipatory adjustments and WCAG 2.1 AA
- Improved functionality and design will benefit everyone.

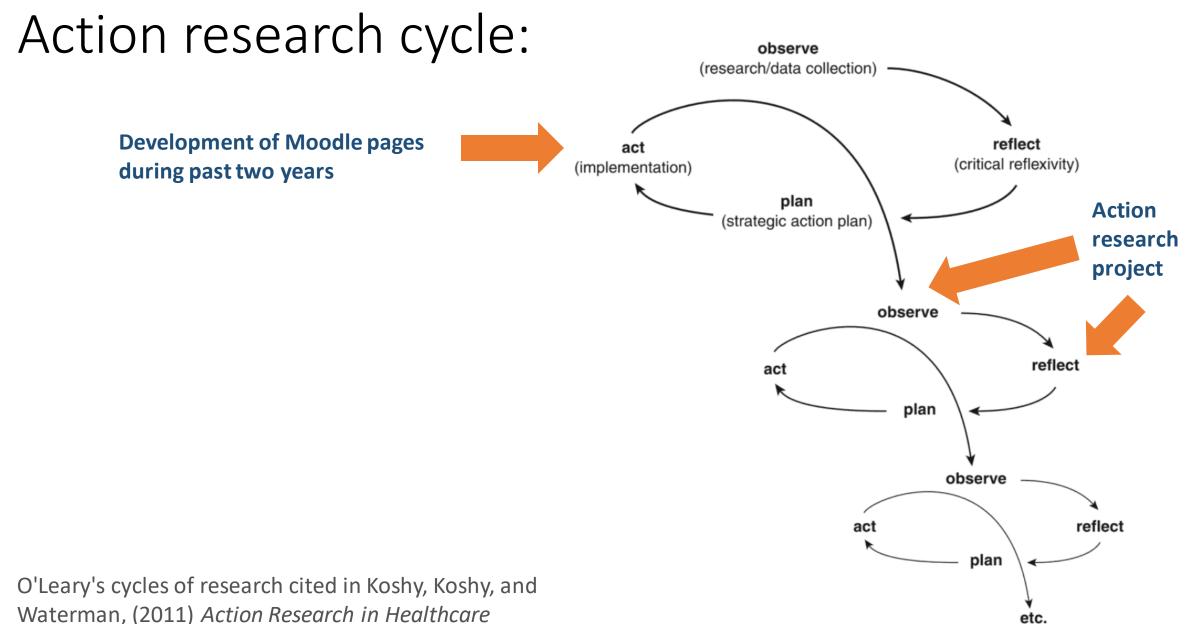


For me:

Unit 1 – Identified need to hear the voices of disabled staff and students directly.

*UAL Dashboards 2023 and Office for National Statistics 2021

Blog: more detail on rationale and context.



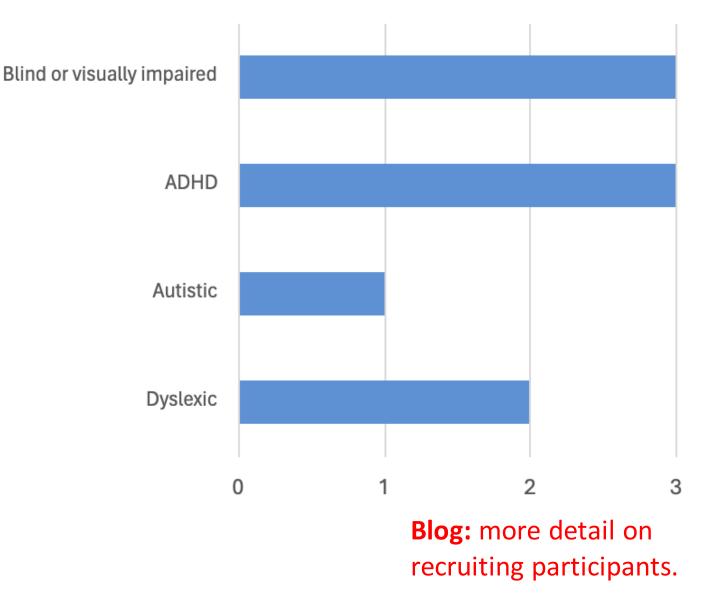
Waterman, (2011) Action Research in Healthcare

Participants:

Volunteered their time to help.

- 2 members of staff
- 4 students
- 2 different courses one Foundation, one BA

The chart shows how they identified, but I was very aware they don't represent these groups and they will also identify in many other ways.



What happened?

- Methods: Online questionnaire, semi-structured interviews, drawings.
- **Approach:** participant-centred Standpoint Theory and Intentional Equitable Hospitality.

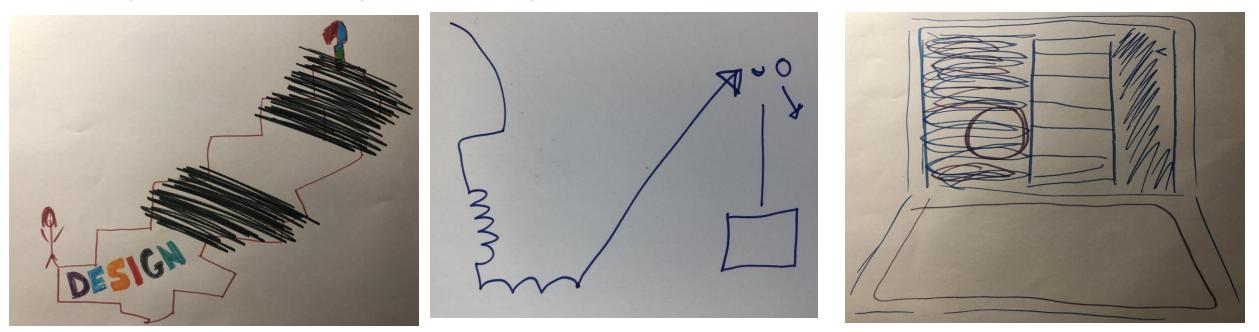
4. Thinking about your course Moodle page(s), to what extent do you agree with these statements?

| | Strongly agree | Agree | Disagree | Strongly disagree |
|---|-------------------|------------|------------|----------------------|
| Moodle is a helpful tool on my course. | \bigcirc | \bigcirc | \bigcirc | \bigcirc |
| l can find what l need fairly quickly. | \bigcirc | \bigcirc | \bigcirc | \bigcirc |



Blog: more detail on research methods choices and design.

Can you draw your experience of Moodle?





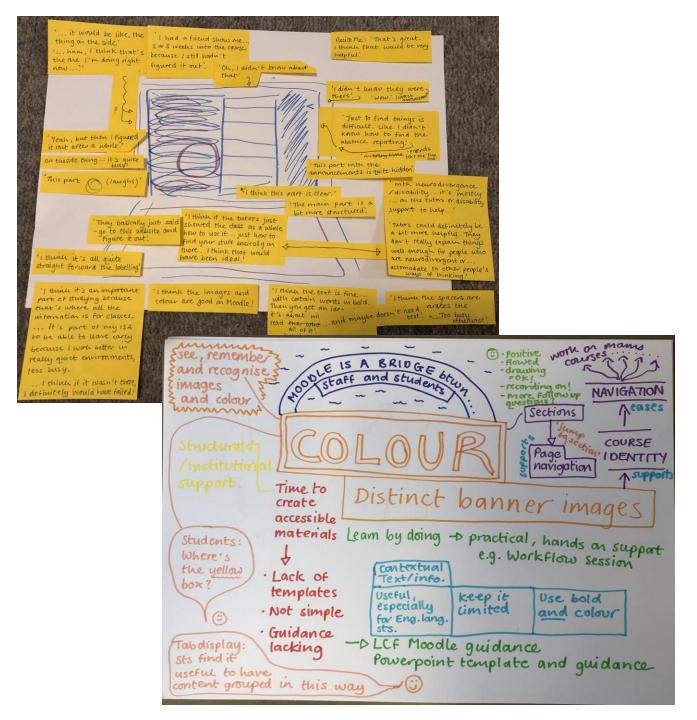
'It's like walking through like a kind of cloudy park like a misty park during like those crappy fall days where it's like sometimes there's a little bit of visibility and I sort of know where I'm going and sometimes I'm trying to find something but I don't really know what it is, and everything is kind of foggy, so it'll take me like 15 mins or so but the park is only so big so I'll get to it at some point.' Excerpt from voice drawing

Thematic analysis

'The purpose of TA is to develop patterns of meaning ('themes') across a dataset that address a research question.

Patterns are generated by the researcher through a rigorous process of data familiarisation, data coding, and theme development and revision.'

(Braun and Clarke, no date)



Participant 4



Participant 5

To what extent does our Moodle design template support inclusive practice in relation to neurodiverse and shabled students?



Participant 6



Hi Amy,

For me the grid design works as a better format. This is because I am using some vision - so I see a picture of people on the welcome page and skip past (what I assume is the general "helio' text) and scroll directly to the coloured boxes which I know usually have the links to where I actually need to go on me page. The text above the boxes could be bigger but it's short enough for me to understand the basic link in each box.

The list form presents as a long block of text with the links not in alphabetical order. Looking at this immediatly had me reaching for a screen reader as I knew it was going to be a marathen to get through. It's a psychological thing, but breaking the page up makes it seem less daunting

With the grid I know that the bright pink box is Staff Only. I couldn't tell you what the Sthlink on the list style page would be and that can be a key factor.

Not having to read and just know that the third box in a 3x3 grid layout for example is your assessment page means that no reading is neccessary.

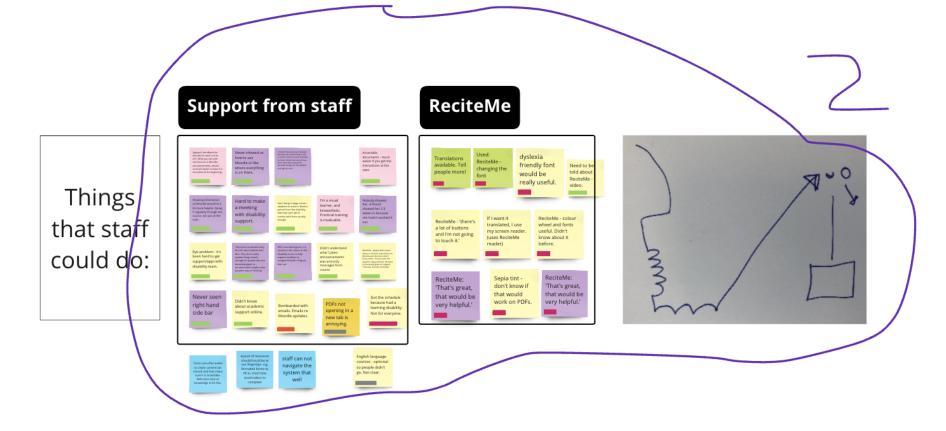
Both work well with the screen reader - It just takes time to get through the welcome text before getting to the navigation section.

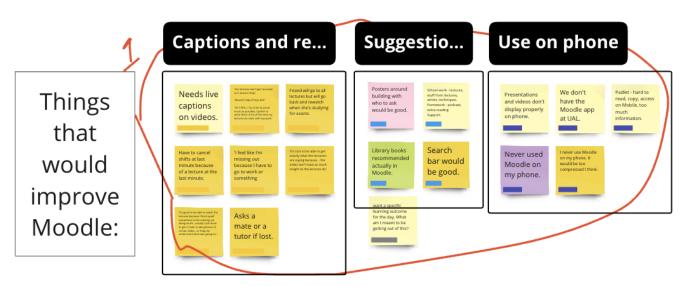
Oh, and on the grid section there win a sentance signing click on the arrow on the right hand side. That to search that side of the screen and managed to find it on the top right. I don't think it's position changes with screen size so would be good to say top right'.

Hope this helps!



Thematic analysis: Coding





Thematic analysis: Categorising and generating themes

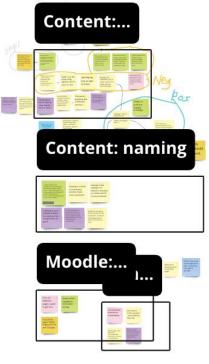
Deciding on themes

S... Со... Use... ••• •••• Annak up Marpage with relate ldenrytente relationeridet Afrikely is Afrikaly And the owner of the owner of the owner Hill aftra (files Visual clues Use the - how do they help or hinder?



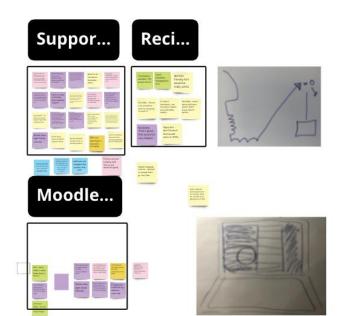
version To what extent does our Moodle design template support inclusive practice in relation to neurodiverse and disabled students

> Wider role of staff in supporting access to course information via Moodle.





Impact of information organisation, from whole page to naming of documents.



Blog: Trying out thematic analysis

Project findings: 4 Themes

1. Moodle plays an important role in learning and teaching.

'I think if that wasn't there I definitely would have failed.' Participant 3

'Moodle is the platform that links students and tutors together... like a bridge'. Participant 1 2. Organisation of content has a critical impact on the user experience.

'Sometimes it just feels like you're overloaded with information. Participant 2

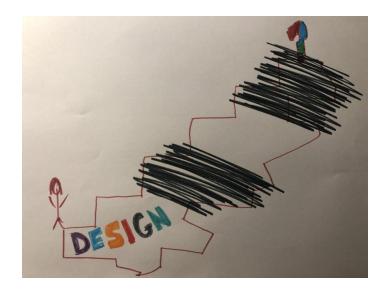
'...the title doesn't relate
to anything in the
group... That is the
document, but you just
don't realise that.'
Participant 4

Project findings continued:

3. Presentationmatters: clean, clearand simple is best.

'I think to have it bare bones, but like you've got what you need, I think that's the best way' Participant 5

'I personally like it where the bold and the colour is introduced because I compute that more than a big chunk of text'. Participant 1 4. Staff guidance, orlack of, makes asignificant difference.



Blog: full analysis and report

Research question: To what extent does our Moodle design template support inclusive practice in relation to neurodiverse and disabled students? **Partially...**

Positive features:

- Moodle is important for participants and provides flexibility.
- Content is reliably available.
- Headings, spacers, bullet points, colour reduce cognitive load.
- Personalisation may be beneficial.
- Usable via a screen reader.

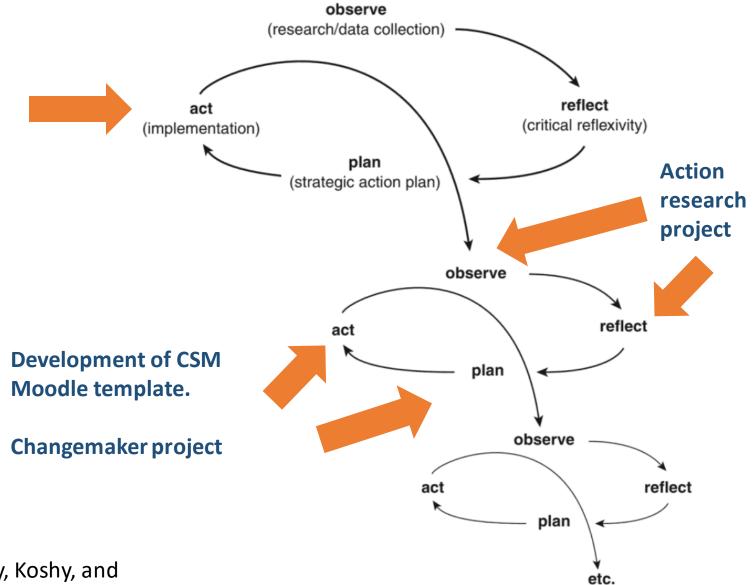
Areas for improvement:

- Clarity and consistency in the naming of documents/signposting.
- Provide lecture recordings.
- Reduce the amount of text.
- Better training and support for staff: ReciteMe, orientation, confidence.
- More use of colour-coding.

Blog: full analysis and report

Next steps:

Development of Moodle pages during past two years



O'Leary's cycles of research cited in Koshy, Koshy, and Waterman, (2017) *Action Research in Healthcare*



Bali, M. (2021) 'Intentionally Equitable Hospitality and Liberating Structures', *Reflecting Allowed – Maha Bali's blog about education*, 5 May, Available at: <u>https://blog.mahabali.me/pedagogy/intentionally-equitable-hospitality-liberating-structures/</u> (Accessed 13 January 2024)

Braun, V., and Clarke V. (no date) 'Understanding TA', *Thematic Analysis* Available at: <u>https://www.thematicanalysis.net/understanding-ta/</u> (Accessed: 11 January 2024)

Koshi E., Koshi V. and Waterman H. (2011) Action research in healthcare SAGE publications Ltd, London

Parson, L (2019) 'Chapter 2: Considering Positionality: The Ethics of Conducting Research with Marginalized Groups' in Strunk and Locke, eds. *Research Methods for Social Justice and Equity in Education*. Cham: Springer International Publishing pp. 15-32

References:

Adams, W. 'Conducting Semi-Structured Interviews' In *Handbook of Practical Program Evaluation*, edited by Kathryn E. Newcomer, Harry P. Hatry, and Joseph S. Wholey, 1st ed., 492–505. Wiley, 2015. Available at: <u>https://doi.org/10.1002/9781119171386.ch19</u>. (Accessed 22 November 2023)

Parson, L (2019) 'Chapter 2: Considering Positionality: The Ethics of Conducting Research with Marginalized Groups' in Strunk and Locke, eds. *Research Methods for Social Justice and Equity in Education*. Cham: Springer International Publishing pp. 15-32