Action research project: Making Moodle more inclusive

Amy Urry, Senior Digital Learning Coordinator, CSM

Research question:

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

Colour and images

Spacers

Proper headings

Contextual information

▶ Your course

▼ Part 1

Part 1 Teaching area

In this section, you will find your curriculum area content. Th
information and teaching resources you will need for your s
information. During part 1, you will need to check this area r
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.

Action research cycle:

Development of Moodle pages during past two years →
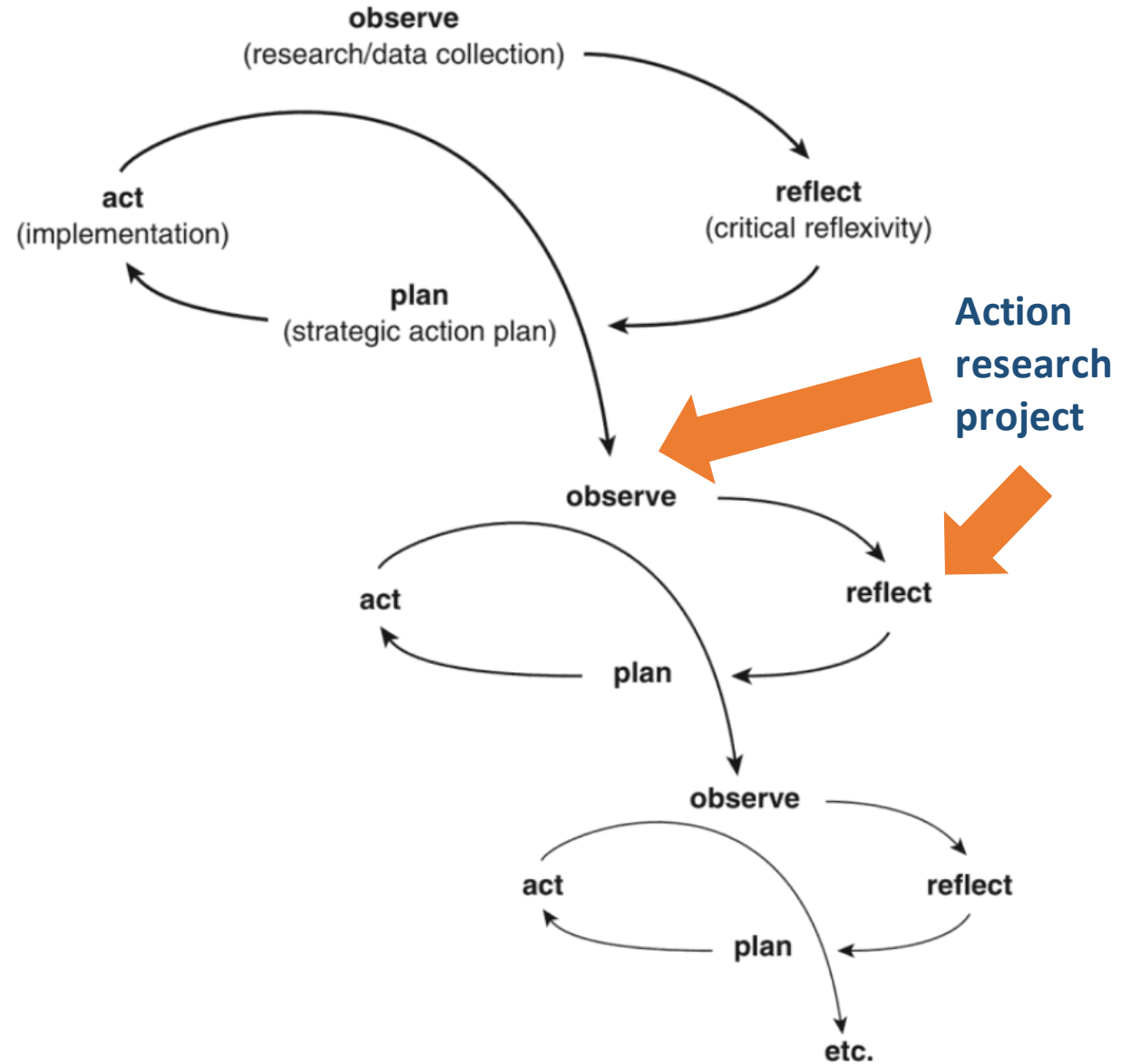
observe
(research/data collection)

reflect
(critical reflexivity)

act
(implementation)

plan
(strategic action plan)

Action research project →

observe

act

reflect

plan

observe

act

reflect

plan

etc.

O'Leary's cycles of research cited in Koshi, Koshi, and 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.
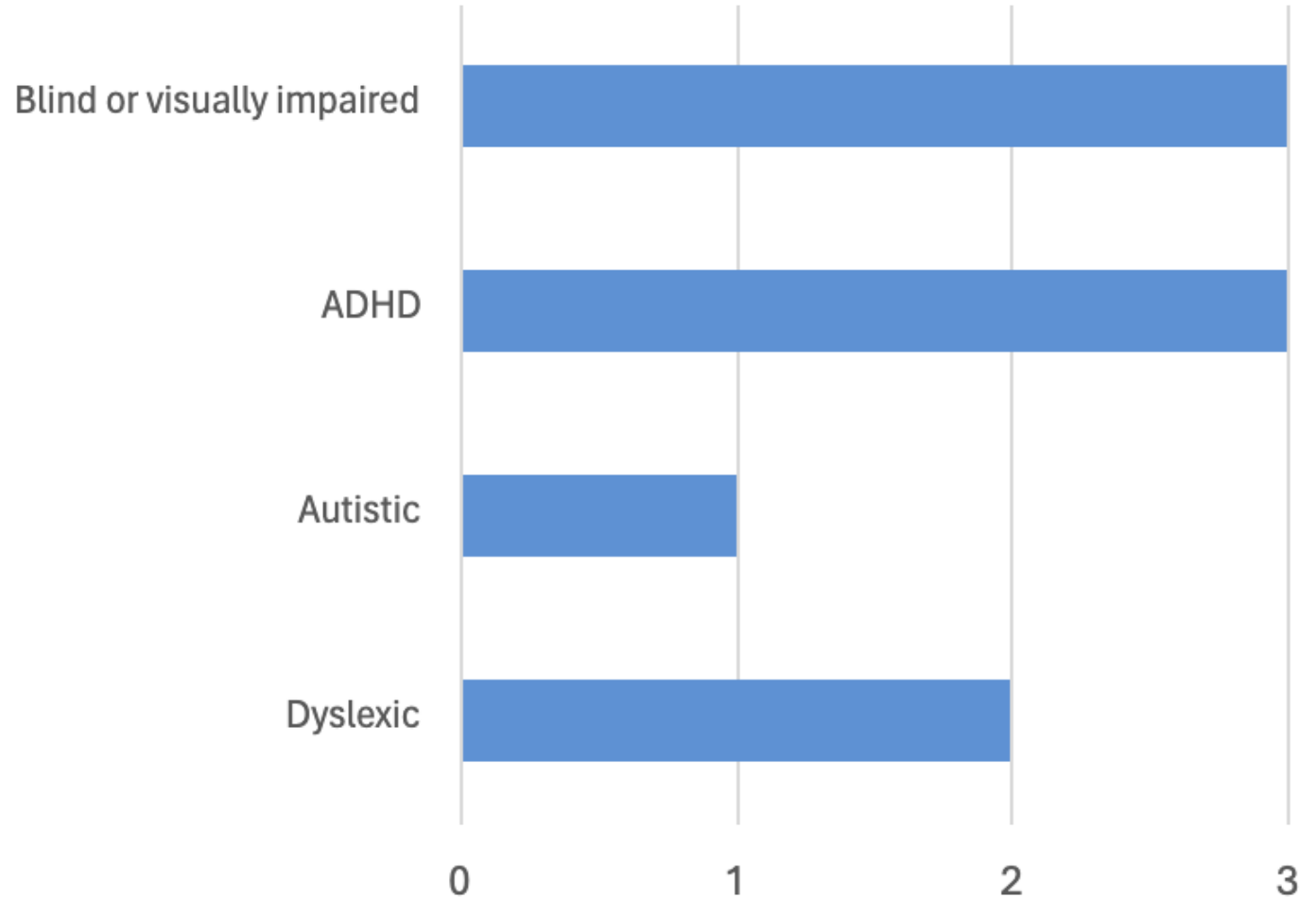
Blog: more detail on recruiting participants.

What happened?

- **Methods:** Online questionnaire, semi-structured interviews, drawings.

- **Approach:** participant-centred – Standpoint Theory and Intentionally 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.	○	○	○	○
I can find what I need fairly quickly.	○	○	○	○

What could be **improved** on Moodle?

Are you aware of the accessibility tool 'ReciteMe' on Moodle?

What could we do to **support** your use of Moodle?

Is using Moodle on your **phone** easy?

Would **lecture recordings** with **captions** help support your learning?

Does your **neurodivergence or disability** affect the way you receive or access course information?

What are the m... **frustrating** or m... things about M...

Is Moodle an important part of how you study, or just a small thing?

How well does Moodle work with any **assistive technology** you use? E.g. a screen reader.

How do you feel about **images and colour** on Moodle?

Blog: Research methods selection/design and UX and neurodiversity and disability

Can you draw your experience of Moodle?
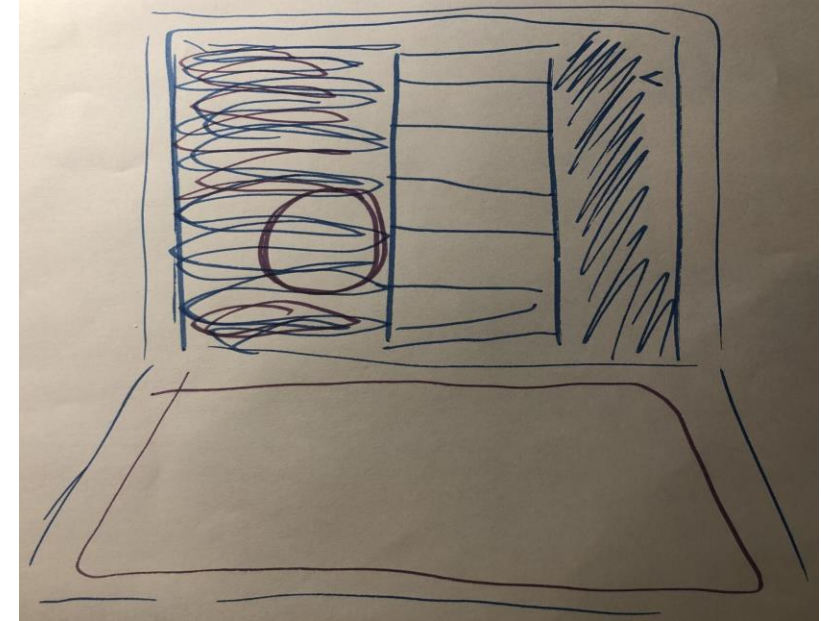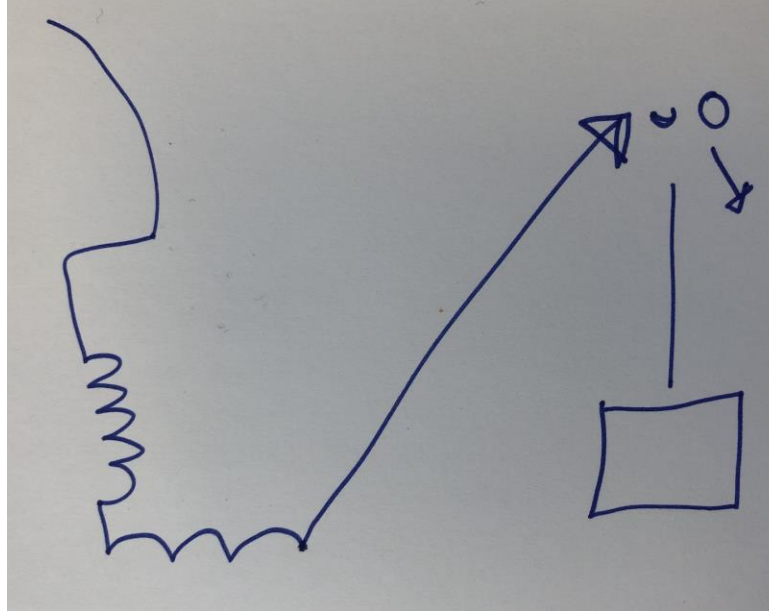
'It's like walking through like a kind of cloudy park like a misty park during like those crappy fall days where it's like sometimes there's a little bit of visibility and I sort of know where I'm going and sometimes I'm trying to find something but I don't really know what it is, and everything is kind 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.

(Braun and Clarke, no date)
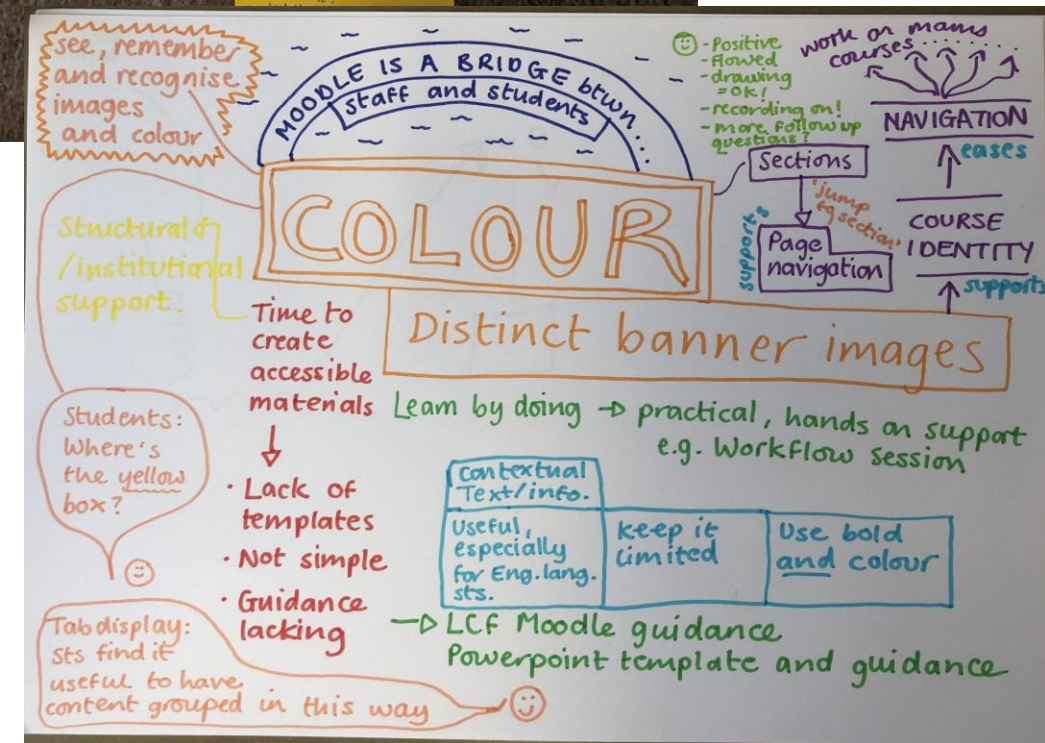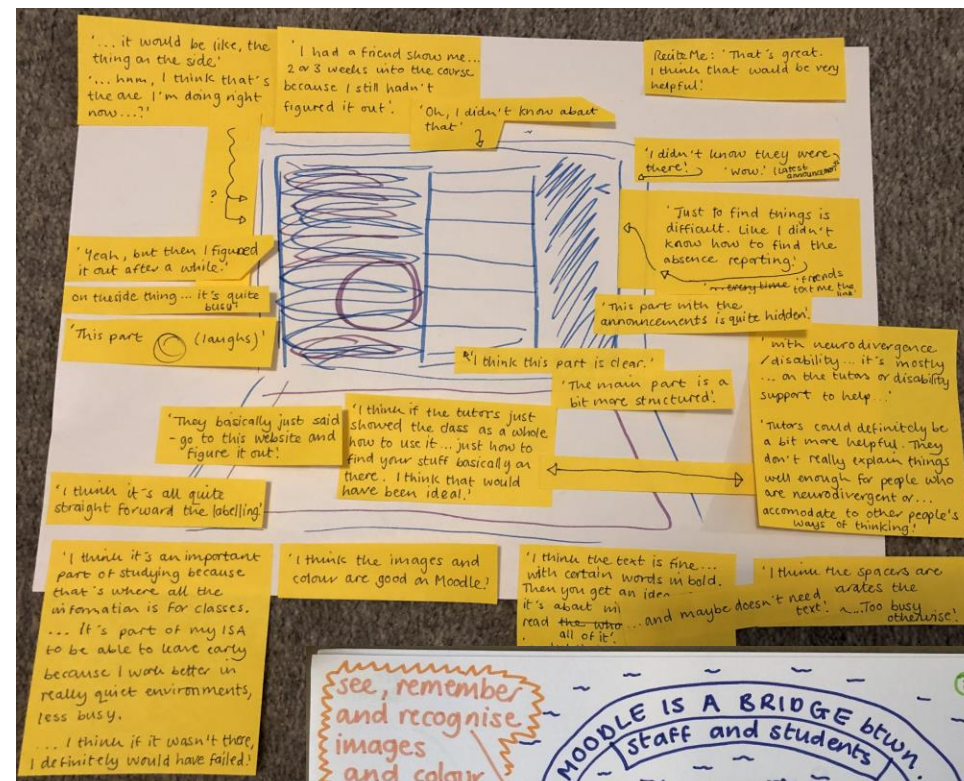
Thematic analysis: **Coding and categorising**

Accessing presentations mostly outside of class.

Moodle: purpose

Never used Moodle on my phone.

Use on phone

I think the images and colour are good on Moodle.

Use of images

I think it's a bit confusing because there's so much information on Moodle and that makes it a little hard to navigate sometimes. But I don't know how that would be improved because I think all the information on there is necessary.

Amount of information

I think this part (main part) is clear but on the side bar it's quite busy.

Appearance

Contextual information: text is fine when certain words are in bold to get an idea what it's about. But other things are pretty self explanatory and don't need text. e.g. timetable.

Contextual info: presentati...

The spacers are good, separates the information, it would be too busy otherwise.

Spacers and headings

With neurodivergence, it's mostly on the tutors or the disability tutors to help support students to navigate Moodle or figure that out.

Support from staff

'The tutors could definitely be a bit more helpful with that. They don't really explain things clearly enough for people who are neurodivergent or... accommodate maybe other people's way of thinking.'

Support from staff

Showing information on Moodle would be a lot more helpful. Doing it regularly through the course, not just at the start.

Support from staff

'I think it's an important part of studying because that's where all the information is for classes and I usually leave class early because I work better in really quiet environments less busy, so I just find what I missed from class on there. I think if that wasn't there I definitely would have failed.'

Moodle: Importance

Information is reliably there.
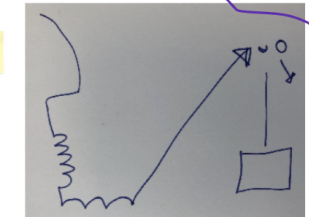
Content: usefulness

Things that staff could do:

Support from staff

ReciteMe

Things that would improve Moodle:

Captions and re...

Suggestio...

Use on phone

Deciding on themes
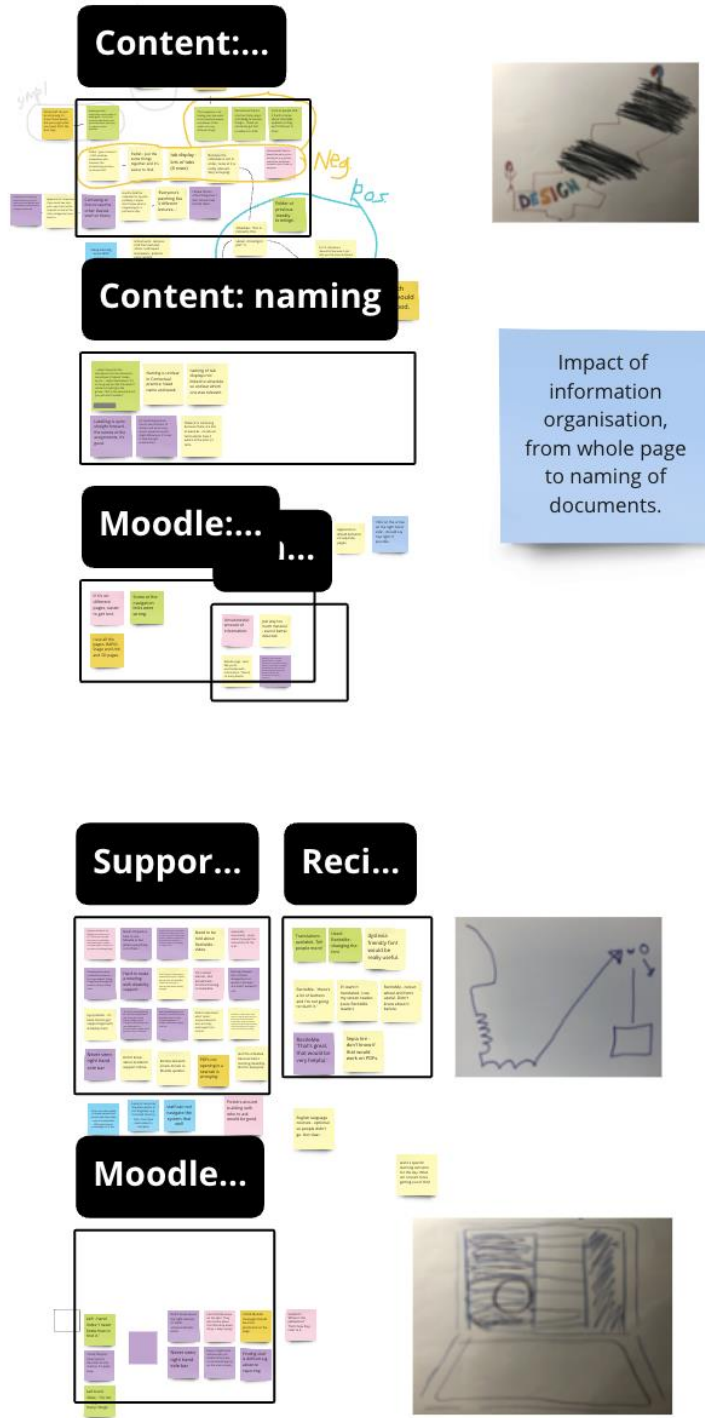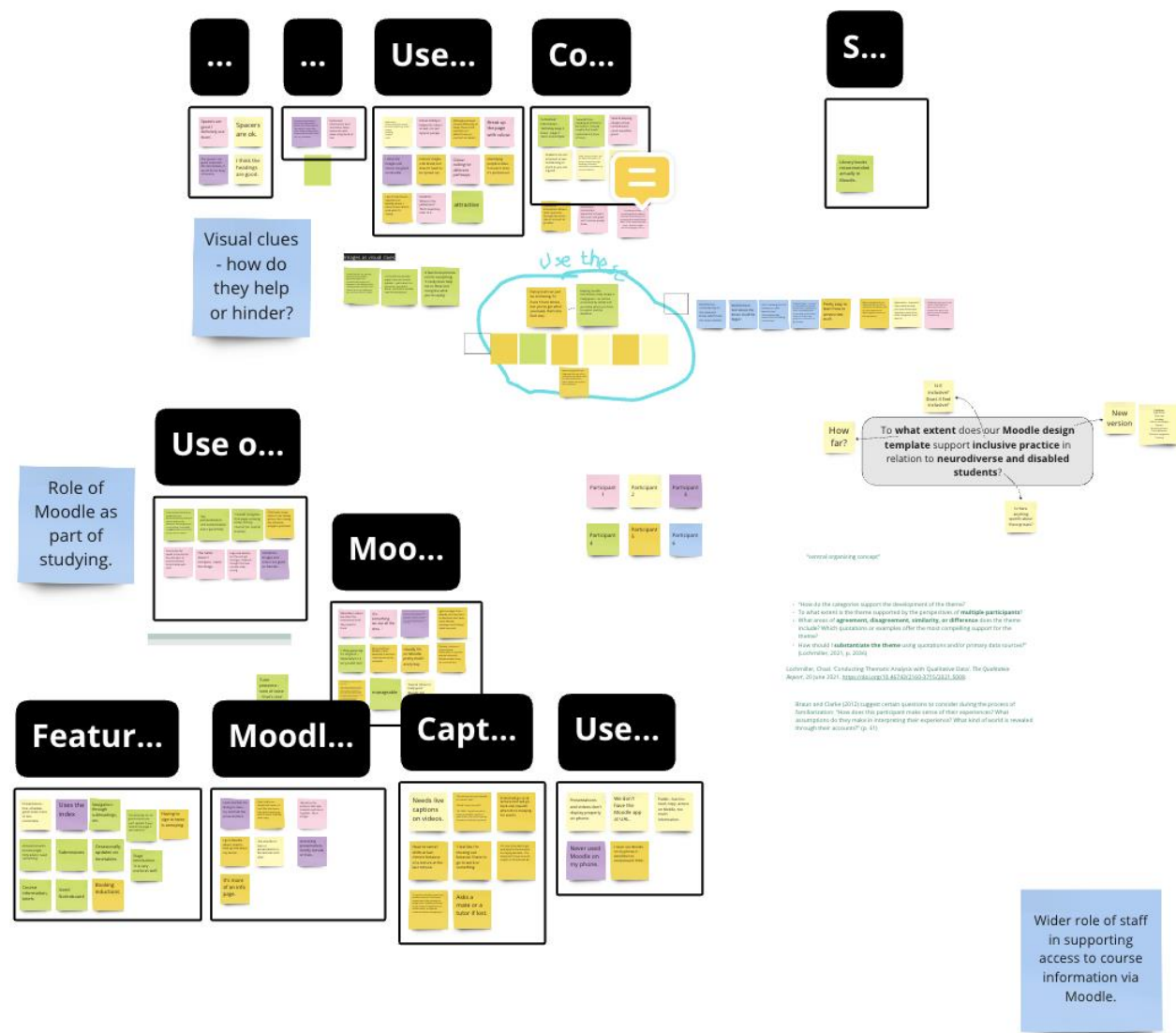
Blog: Trying out thematic analysis

Project findings: 4 Themes

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

'Moodle is the platform that links students and tutors together... like a bridge'. Participant 1

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

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. Presentation matters: clean, clear and 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, or lack of, makes a significant 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

observe
(research/data collection)

reflect
(critical reflexivity)

act
(implementation)

plan
(strategic action plan)

Action research project

observe

reflect

act

plan

Development of CSM Moodle template.

Changemaker project
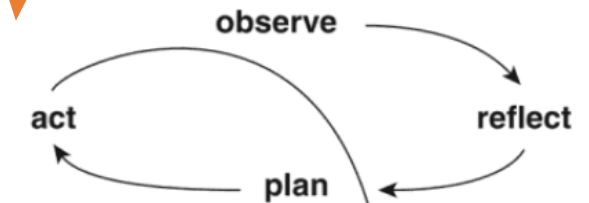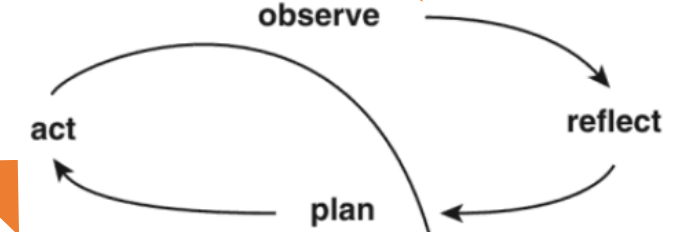
observe

act

reflect

plan

etc.

O'Leary's cycles of research cited in Koshi, Koshi, and Waterman, (2011) *Action Research in Healthcare*

Blog: Looking back on ARP

Bibliography:

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

Braun, V., and Clarke V. (no date) 'Understanding TA', *Thematic Analysis* Available at: https://www.thematicanalysis.net/understanding-ta/ (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: https://doi.org/10.1002/9781119171386.ch19. (Accessed 22 November 2023)

Lonsdale, M., Qin X., Chen Y., Green H., Algethami M., and Xu J. 'The Power of Information Design in Enhancing the Organization of Information and Course Material in an Online Virtual Learning Environment (VLE)'. *Information Design Journal* 27, no. 3 (31 December 2022): 235–77