

Campus THE article

Title: Curating accessible and inclusive learning environments

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Standfirst: Discover how to actively include neurodivergent students attending Higher Education courses. This resource offers practical guidance for educators to foster accessible and inclusive learning environments honouring diverse thinking and learning styles.

Introduction

As an autistic midwifery lecturer, I am committed to advocating for [neurodivergence](#) acceptance. This necessitates a proactive and inclusive approach. Educators will regularly encounter students with unique learning needs requiring adjustments in their teaching approaches and a recent study by [Unite students](#) has shown that over 14% of university applicants identified as neurodivergent, with overlapping variations. However, educators often grapple with the multitude of processes and policies they must adhere to, alongside their heavy administrative workloads. Here, I offer straightforward solutions to create more accessible and inclusive learning environments for students across higher education institutions.

Open communication channels

This resource begins with a fundamental principle: foster open communication with students, particularly with personal tutees. Encourage personal students to share their specific needs when you meet with them in a one-to-one environment by asking them, "Do you have any reasonable adjustments I should consider?" Normalising discussions about disability and neurodivergence helps students feel safe about disclosing their needs and seeking support, rather than struggling alone and potentially abandoning their courses.

Embrace universal design for learning

Traditional academic curricula often lack the necessary adaptations to accommodate neurodivergent students, inadvertently excluding them from active participation. This injustice deprives university courses of diverse perspectives that could enrich the educational experience for all students. Universal design for learning (UDL), a teaching approach accommodating the needs and abilities of all learners and removing unnecessary hurdles in the learning process, serves as a pivotal framework for achieving genuine inclusion. Recognising and accommodating neurodivergence through the application of UDL principles is both a moral and educational imperative and you can focus on three main principles:

- **[Multiple means of engagement](#)**: offering various methods to engage in the learning process such as anonymous Q&A tools (Slido or Mentimeter), online discussion boards and interactive workbooks ensures that neurodivergent students can interact with educational content, enhancing their sense of belonging and participation in the classroom.
- **[Multiple means of representation](#)**: employing a range of educational media such as file formats compatible with text-to speech, video with closed captions and audio explanations of important assessments allows neurodivergent students to access information which suits their unique cognitive preferences, reducing barriers to learning.

- [Multiple means of expression](#): allowing for diverse ways to demonstrate knowledge and skills, provides neurodivergent students with a fair opportunity to showcase their capabilities, untethered by the restrictions of traditional assessments. Examples could include materials that students can interact with at their own pace and tasks that can be presented in writing or through presentations as well as feedback given in different formats.

Streamline module pages

In response to student feedback on module feedback forms in 2021, a decision was made to streamline the module pages within the midwifery curriculum. All modules now adhere to a logically structured template, simplifying navigation and content delivery for students. Each 30-credit module has 10 taught sessions, each with a dedicated space in the module pages containing the resources. Each session contains the following:

- Pre-session checklist: any pre-session reading, videos or activities you wish students to complete. This is kept to a minimum but may help to facilitate a flipped classroom approach for certain sessions. The integrated tools on the VLE can help the lecturer to verify engagement and support students who may be struggling.
- Content: resources used during the session including interactive books and lessons covered below
- Post-session checklist: here you can remind students of key learning points or direct them to further reading should they wish to expand on what they have learned.

Be creative

The midwifery team at Middlesex has adopted a more streamlined and creative approach to the content used in their teaching sessions. They made a deliberate choice to move away from using Microsoft PowerPoint, a platform known for its accessibility challenges when not used correctly. For instance, many presenters often neglect to ensure captions and transcripts are included for embedded videos. Moreover, there's a wide variation in styles, backgrounds, fonts, font colours, and font sizes used in different PowerPoint presentations. This inconsistency in materials generated by each lecturer made it challenging for students to constantly adapt to and learn from new PowerPoint styles, as highlighted in their feedback.

The shift towards incorporating integrated features on the virtual learning environment (VLE) such as "[Books](#)" or "[Lessons](#)" on Moodle offers students the option to access resources through a web browser, along with the convenience of integrated accessibility features. For instance, the system prompts educators to add alt text to images when creating resources, and the text within these resources is compatible with screen readers. Additionally, students can use customisable coloured filters to meet their specific needs, and the resources can also be easily printed for those who prefer taking notes on paper. This standardises the way learning and teaching materials are presented, enhancing the overall quality and readability of these materials across the board.

Furthermore, for lecturers who are comfortable with using integrated VLE tools, some resources can incorporate [interactive elements](#) such as drag-and-drop quizzes or labelling diagrams. This approach makes the content more engaging and interactive for students, who can directly apply the theoretical learning to concrete examples. Educators can improve engagement by actively involving students in the learning process. An example of this is an [award-winning project](#) by Emilie Edwards and Robin Parsons, Middlesex University, featuring branching scenarios teaching midwifery students complex

communication skills. The branching scenario was used in a form of serious gaming, which is an interactive and entertaining software designed with an educational focus. The game allowed students to develop their decision-making skills in a safe environment and to give precise, concise and contextualised feedback. 89% of students surveyed said the game would help them in clinical practice and 84% wanted to use this technology more.

Implement inclusive assessment initiatives

Middlesex University's distinctive pedagogical approach prioritises authentic assessments over exams, a transformation successfully implemented throughout the midwifery curriculum. For each assessment, the marking criteria has been carefully reviewed and refined using plain language, benefiting both students and assessors. These criteria are further broken down in dedicated sessions designed to support students in achieving success in their assessments.

Like many healthcare programmes, the midwifery cohorts at Middlesex University include a significant percentage of neurodivergent students, reaching up to 20%. A recent initiative led by Jo Killingley, the Programme Leader for BSc Midwifery at Middlesex University, has ensured students with identified additional learning needs can access smaller group sessions and receive more personalised support for the objective structured clinical assessment (OSCA), where they can openly discuss their specific learning requirements. Notably, in year one, 97% of the students successfully passed the OSCA modules, with 70% achieving a grade of 70% or higher, and within this high-achieving group, 63% were students with additional learning needs.

Conclusion

This resource underscores the importance of inclusive education and the adoption of universal design for learning principles in higher education institutions. It highlights the need for open communication with students, streamlined module pages, creative resources, and inclusive assessment initiatives, all of which contribute to a more accessible and equitable learning environment. By embracing these strategies, educators can support the diverse needs of their students, fostering a more inclusive and enriching educational experience for all.