

Non-Linear Micro-Learning

Self-paced module design for inclusion and engagement.

Please briefly describe the activity undertaken for the case study

When we suddenly shifted to online learning in response to the Covid-19 pandemic I adopted a microlearning approach to pedagogy. I was diagnosed as dyslexic in October 2020, one of the key things about dyslexic learning is that we don't learn in a linear way, we tend to see the bigger picture and work in a non-linear way. I lead 5 modules in the department and have implemented non-linear micro-learning in all of them.

Non-linear micro-learning allows students to engage in all the module content from the very start of the semester. It also allows students to pace their learning and engage in an order that suits them. It acts as an inclusive reasonable adjustment for students with various learning needs as it allows students to see what is going to happen in the entire module and gives them time to digest the content. We cannot assume that students engage with knowledge in the same way.

This also lends itself well to trauma-informed pedagogy as students are aware of any potentially triggering or (re)traumatizing material in advance. This leads to a safe and inclusive classroom where students can meet the learning outcomes whilst skipping any material that is not safe for them to access. I wrote about this for Times Higher Education here: [Online micro-learning can transform the teaching of sensitive topics](#)

How was the activity implemented?

All of the teaching materials are made available on Canvas at the beginning of the semester which reassures students that they can control their learning pace and schedule. The lecture content consisted of 3 or 4 short video clips per week (as opposed to a full 1-hour lecture) punctuated by short activities that the students could undertake such as reading a blog post, watching a video etc, these activities would then be built upon in the next short video clip.

Students were asked to work on weeks 1 and 2 to equip them with the tools they needed to explore the materials for the future weeks. Seminars then followed a chronological order with the students able to explore the content in any order they wished.

Has this activity improved programme provision and student experience, if so, how?

The microlearning approach is a great reasonable adjustment for students with disabilities, perhaps they are dyslexic or have anxiety, allowing them to see materials in advance can help them to pace their learning. It also allowed students to choose the order in which they studied the material and follow their own interests. It also means that students who like to learn in a linear, chronological fashion can also do so by working from weeks 1 – 12 in traditional order.

I found that students came to seminars feeling more confident and prepared having engaged with the content and activities online first. It was clear that students had done a lot of independent learning and reading that allowed for in-depth debates during the seminars.

Students would make links between the different weeks, and it provided a great feedback loop for me about my materials and how they work together. Having a student bring evidence from the week 11 content into an earlier week's debate showed how the concepts we were discussing linked together. It really highlights where the students' interests lie and gives the students responsibility for developing this.

Did you experience any challenges in implementation, if so, how did you overcome these?

The biggest challenge is ensuring that the content is ready in advance for the running of the module. This is a front-loaded approach but once the material is there, the running of the module is very smooth with the preparation already completed.

How does this case study relate to the Hallmarks and Attributes?

The key attribute is confidence. I saw a big increase in students' confidence when coming to seminars armed with information that was linked from other weeks. Students felt proud that they could take responsibility for learning in this way. It also allows students with specific learning disabilities and conditions such as energy-limiting illnesses and fatigue to have confidence that they can succeed and can manage the module within their own health requirements. The focus on inclusion contributes to developing the attribute of Global Citizenship within students and helps to raise awareness of different approaches to studying.

The self-directed nature of the learning activities lends themselves well to Active Learning. The students actively choose their route through the module allowing for diverse and rich discussions in seminars.

How could this case study be transferred to other disciplines?

The flexibility of this way of studying means that it can be transferred to many other disciplines. I have spoken to colleagues in other departments and institutions about this approach. I think the key strength is that you can go in a chronological order if that suits the learner and allow for some elements of self-paced learning that is driven by student choice. It works well with some areas such as case studies and exploring different concepts.

If someone else were to implement the activity within your case study, what advice would you give them?

I think the key bit of advice I would give is that it isn't about just giving them control over the direction of learning but also the speed of learning. We were in lockdown and students

will have had difficulties with illness, digital inequality, and many other issues. Allowing the students to be able to pace their own learning accounted for these differences.

You may also need an awareness that some students may “binge-watch” the videos and be at different sections of the module at any one time; this does, however, make for rich discussion in seminars! It can be scary for lecturers to give up control over the pace and direction of their module content, but it is rewarding and leads to an excellent student experience.

I am happy to speak with colleagues from across the university to talk about innovative teaching and learning strategies.



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