Universal Design for Learning is a great way to develop online content that addresses to needs of all learners

My brother, Patrick, who is a carpenter, told me once that the Golden Rule of his profession is to 'measure twice, and cut once'. It is the best advice I have ever gotten; and as a lecturer, it is something that I reflect on regularly. It is so important to take sufficient time to prepare because we get one chance to deliver the content to each specific class group, and any mistakes are made very visible. I also love the idea that no matter how much experience a carpenter has, they don't take anything for granted, and they always double-check their perceptions.

Moving teaching online

Educators have had a rough ride over the past few months, we have had to move teaching online with almost no time to prepare; having to change how we deliver content, having to modify classroom activities and having to devise alternative assessments. The most amazing thing about this whole process is how successful it has been; and with only a few exceptions, the transition to online teaching has been relatively successful. The main reason for this success is that our students have been amazingly cooperative; they have worked hand-in-hand with us to move everything online, and they have been patient and understanding with us when issues have occurred. Over the next few months we must repay their courtesy and courage by carefully considering the range of students we will be teaching, and the range of scenarios they will find themselves in.

Students will be facing a range of challenges; some students will have poor internet access, some won't have full-time access to a computer, some will not be able to use the range of technical tools that educators are recommending, some have dyslexia or other Specific Learning Difficulties (SpLD), and some are going to face serious challenges with isolation and motivation. We must therefore begin to reconsider how we design our teaching content to help address their needs in this new teaching world we find ourselves in, and we need to remember to 'measure twice, and cut once'.

Designing online content

When designing online content, I have a general philosophy of '**divide-and-explain**', so once I've decided on what I'm going to teach, I look at how I can 'chunk' the content into smaller units, and then I explore how I can explain (and over-explain) each chunk:

The '**divide' phase** applies to all teaching content; so for example, when you are recording a video, if you realise it's going to be 30 minutes long, you could look at ways of chunking it into four shorter videos, because it might be unrealistic to expect students to pay attention for 30 minutes in one sitting. If you have a PowerPoint presentation that has 40 slides in it, can you check if it is possible to divide it into three smaller presentations? When you are giving out a handout of 10 pages, can you see if there a way to create three or four smaller handouts instead?

This also applies to the content within these documents, it's best to try to avoid long paragraphs (chunk them into smaller paragraphs), and long sentences (break them into smaller sentences). Use bullet points (or numbering) to help chunk content up, and focus on making all content as readable as possible.

The '**explain' phase** is where you look at each chunk (it could be a video, a presentation, a document, etc.) and you look at how well you have explained the key points of the chunk. This might seem to be an obvious step, but part of the process is putting yourself in the students' shoes. What if the student is at home, and sharing a laptop with their parents who are also using it for work? What if they only have a tablet, and don't have a physical keyboard? What if they don't have a software licence for Microsoft Office?

Another tenet of the '**explain**' phase is to make things as clear as possible. So one thing I always recommend is 'add one on', so if you are explaining a concept and you typically use two examples to clarify it, add another one. If you think the students need three case studies to fully grasp something, add one on, and make it four. If there is a concept that you think there is no need to explain, as it is perfectly clear, and you think you only need to state it, just take a minute to spell it out in a bit more detail.

Help make things clear to the students by starting to develop a **glossary document** that lists all of the new terminology that the students will be encountering in the lesson, and to give a one-sentence explanation of each so that the students can refer to when needed.

One final tip in this phase is to consider how to use images and diagrams to support your explanations.

So '**divide-and-explain**' reminds us to think about the quantity of the content and to think about the way in which we deliver it.

Formatting the content

Another point I want to mention is the importance the format of your content, so there are general guidelines that people agree are good ideas (some of these are really helpfully for people with dyslexia, but that work well for all students). This advice includes things such as:

- try to use fonts like Arial, Verdana, Tahoma, and Trebuchet (these are called **sans serif** fonts);
- try to colour the background of your documents with a slight yellow tinge,
- left justify content only (don't evenly justify);
- and where possible try to make all of the text at least font size 14.

I think this is great advice, but a simpler approach is to **make sure all your content is easily modifiable by your students** so that they can configure it in a manner that best suits them. So if all of you content is in PDF format, it's difficult for your students to modify it, but if you make it available to them as PPT, DOC, etc. and encourage them to reformat it, you are empowering them.

One final point

The approaches we have been discussing in this article could be considered under the umbrella term of 'Universal Design for Learning', but instead of introducing this term at the start of the article, and explaining it subsequently, I explained the concept first, and mentioned the term afterwards - this is worth considering.

Resources

[Centre for Excellence in Universal Design (CEUD)](#)

[Center for Applied Special Technology (CAST)](#)

[Damian's Top 10 UDL Tips](#)

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