Storytelling: A pedagogical strategy for repurposing OER

Issue at-hand

In the past ten years or more, open provision of course materials has seen significant growth with the Open Education Resources (OER) movement and now Massive Open Online Courses (MOOCs). There are over 3000 open courseware courses available from over 300 universities worldwide. In repositories such as MERLOT, Open Education Consortium (OEC), Connexions, OpenLearn and others, there are hundreds of thousands of pieces of content or materials representing thousands of freely available resources (Ehlers 2011). In Africa, the more visible initiatives include the Teacher Education in Sub-Saharan Africa (TESSA) Project, OER Africa a project of the South African Institute for Distance Education (SAIDE), and African Virtual University (AVU) OER. The use of OER in developing learning resources provides an opportunity to share, use and adapt resources freely without being bogged down with copyright restrictions. However, even if one finds good learning resources, it is still always necessary to adapt the resources to suit the context of use.

What is repurposing?

Various terms have been used to refer to the practice of adapting OER to suit one’s purposes. These include to revise, repurpose, customize etc. We use repurpose here as defined by (OPAL 2012) that, integrating an OER into one’s teaching and learning is called repurposing. It often involves dismantling the original resource and taking what is useful and setting aside the unnecessary. The example in this brief draws from the AVU experience in the development of the Teacher Education OER in Mathematics and Science. The AVU Teacher Education OER modules were developed using open content and open education resources. Resources and readings suggested for the completion of learning activities had to be copyright free, either written originally by the author, or be from open access content.
Policy recommendations (i) in repurposing OER developed in other contexts, incorporating storytelling can make unfamiliar concepts easier to understand; (ii) using familiar stories can infuse culture into learning and help demystify the learning of unfamiliar concepts in mathematics and science.

A strategy of how OER can be repurposed to make them contextually relevant can be drawn from the development of the AVU OER, and the experience of one Mathematics professor who was a module author (Adala, 2017). Module authors were advised to “find a variety of learning activities that will suit a variety of learning styles, within the African context.” One was the aspect of storytelling in which before you introduce the topic, you give a story in form of an activity. You can give a story which is fiction or real but is based on the African context, drawing from familiar African stories and symbols.

One Mathematics professor describes how this process helped him to enrich his modules. He stated that this was a powerful pedagogical tool, which he admitted initially was a challenge, “in fact it was the greatest challenge I have ever faced as somebody who trains Mathematicians.” He notes that introducing problems in this way helps demystify the concept being introduced as the learner receives the concept in a way that is more natural and less mysterious. Using familiar stories helps to introduce students to unfamiliar concepts.

He gave the example of introducing the topic of permutations and combinations in Mathematics. He noted that using these unfamiliar terms may be intimidating and more so to students not fluent in the particular language, in this instance English. To illustrate this point, here is an example where he draws from a story he learnt from his grandparents.

One day a person was carrying a leopard, a goat and potato vines. Do you know how those three are related? A leopard if you give it one minute it will devour the goat and a goat if you give it one minute it will devour the potato vines, so he cannot carry all three and he has to go across with only one of the three. Can you tell us how is he going to do it?

It is about arrangement according to order, isn’t it? Because you will say let me go with the goat first because a leopard and potato vines nothing will happen so take it across first, then come back you can take the leopard, you go with it and then come back with the goat or something like that. So what are you doing? You are talking about arrangements according to order so I give that story before I now come to what we call permutations.

So for a learner who actually grew up the way I did, that concept sinks immediately. He knows we are not talking about strange things. He noted that he did this for every topic in the AVU OER he authored, which he noted was rich in pedagogy because it infuses elements of culture in the learning of Mathematics and Science concepts. However, the professor cautioned taking
into account differences in students’ backgrounds such as those living in rural versus urban settings when choosing stories.

Conclusion

This is an example a useful pedagogical strategy that can be applied to repurposing of OER, to make them contextually relevant and the concepts easier for students to access and understand. This is especially important for the African context, and if the OER being repurposed might have been produced for other contexts as has tended to be the case. The OER movement has grown more rapidly in the Global North, so even as we work on creating OER in the South it is important to find strategies for repurposing the useful resources out there to fit the context of use.

References

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