

Digital Content Creation and Curation



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Theme: Driving Educational Excellence through Digital Transformation
Session 3: Digital Content Creation and Curation

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Title slide

Thank you for the invitation to be a session speaker at the 2nd EdInnovate 2025: Innovations in Education and e-Learning, under the Theme: Driving Educational Excellence through Digital Transformation. My talk introduces Session 3: Digital Content Creation and Curation.

Slide 2: Commonwealth of Learning

I am Director: Education at the Commonwealth of Learning, an intergovernmental agency formed in 1987 by Commonwealth heads of government to promote ODL and TEL.

Slide 3: COL

COL's focus is on using ODL and TEL to expand access to quality education for sustainable development, promoting economic empowerment, social inclusion and environmental conservation.

Slide 4: Overview

There are five main parts to the presentation, each focusing on an aspect of the sub-theme.

Slide 5: SDG Goals

COL's work focuses on SDG 4: Quality Education but, of course, SDG 4 is fundamental to achieving other SDGs including SDG 8, 9 and 17.

Slide 6: Strategies for developing interactive content

COL works frequently with classroom teachers whose experience has been centred on in-person provision according to a set timetable, an authorised curriculum and an approved textbook. It requires a lot of support to help such teachers to begin to develop interactive digital content to support their classroom teaching and/or the branch into blended and online provision for learners unable or unwilling to access in-person education.

We typically need to start with an in-person workshop covering issues such as Curriculum mapping, ODL design, OER, Inclusion (incl gender), Assessment and Learner Support. The photograph shows teachers and Ministry officials in The Gambia in one such workshop.

This initial in-person training will then be followed by further online support and feedback processes, usually over a period of several months.

COL has also developed a number of online courses to support this kind of engagement, one example being the micro-courses available at COLcommons (<https://colcommons.org/>).

Slide 7: Multimedia integration in education materials

COL recently collaborated with UNESCO to develop a report related to UNESCO's "Technology in education: A TOOL ON WHOSE TERMS?" GEM publication based on experiences and case studies from the Pacific. A key finding from this new report is that while the digital divide remains a real challenge, people are often very creative about finding ways to work around the divide and several interesting examples from the Pacific are included in the report.

So, when we are thinking about multimedia integration in educational materials, we need to keep our target learner and teacher audience in mind. In many Commonwealth countries, we need to follow an iterative, hybrid approach. For example, when developing educational materials for open schooling, we first make sure that we cover the entire curriculum in texts and graphics only. This can then be exported as a printable textbook or downloaded at a wifi-enabled centre to low-end devices. For learners with higher-end devices, we then add video/audio files to augment the learning, sometimes packaging these as open textbooks. Again, these could be downloaded at a wifi-enabled centre where personal connectivity is limited. We then add in more interactive H5P elements for learners able to access online. The photograph bottom right shows a training workshop related to this taking place in Botswana.

Slide 8: A contextual example

COL is currently in the process of completing a five-year project in the Pacific. It involves capacity-building in the Pacific, employing ODL and OER, for teacher capacity-building, youth development (especially girls), TVET and data resilience.

Slide 9: Teacher capacity-building

As part of workstreams 1 focused on ERT during the pandemic, and workstream 2.1 capacity-building for teachers, we developed a number of open courses in various aspects of ODFL, building on an initial MOC developed at the start of the pandemic, in response to a request from the Ministry of Education in Fiji. The first course focused on developing OER and was augmented by two guides on Reversioning OER for the Pacific and Integrating OER into teaching.

Slide 10: Platform

The open course platform used was developed by the OER Foundation in New Zealand. It uses an integration of five open-source software programmes. The course content can be accessed in WordPress by anyone at any time without enrolling and teachers can access the course materials and earn digital badges at any time, even when the course is not being actively facilitated.

Slide 11: Facilitating ownership

We then developed a course for lead teachers – and followed up with an online mentoring process – to empower lead teachers to adapt the courses for their own context and re-offer the adapted versions. Some of the courses have been adapted and re-offered in both Kiribati and Samoa but also in India and Nigeria. Some are currently being reversioned by teaching education institutions in Africa.

Slide 12: Open Educational Resources (OER)

COL has long-championed OER.

We offer a micro-course introducing OER, which can be accessed at any time, and which, at the time this presentation was being prepared, had seen 35,160 registrations.

Everything developed by COL is shared under a CCBYSA international licence. Resources created by and for COL are shared on the OER repository COL OAsis. This includes back up files from COL's scopus-registered Journal of Learning for Development. There are over a million downloads of COL resources every year.

We have used this experience also to support our member countries. For example, at the beginning of the pandemic, we created a curated collection of useful OER from around the Commonwealth to support teachers with emergency remote teaching in the Pacific. And then, to encourage local ownership, cloned the collection and made national versions available to each of the nine Commonwealth member countries in the Pacific. We also provided training for those interested to restructure the collection to their own curriculum.

Slide 13: User-generated content and collaborative platforms

Creating a national OER collection is one way to encourage engagement with OER. But there has to be a team of people interested to sustain it and keep adding and updating resources. Recently, we have been having success using Gen Ai to enhance engagement and collaboration. In Samoa, for instance, our partners were concerned about the number of repetitive questions they were fielding about their new Moodle platform, so we worked with them to develop a Bot to help field most of those questions successfully. We subsequently used the same technology to develop a Bot for the University of the South Pacific that included both platform and course content, again very successfully. In both cases, it was possible for users to escalate an enquiry to a human user if the automated responses were inadequate. More recently, we gave experimented with nurturing teacher collaborative engagement with curriculum-based OER using GenAI. In October 2024, a regional workshop in Fiji brought together 40 STEM educators from seven Pacific countries—Fiji, Kiribati, Samoa, Tonga, Papua New Guinea, Solomon Islands, and Vanuatu. This workshop introduced participants to an innovative GPT-powered online service designed to assist educators in generating and refining OER lesson plans. The tool provided a platform for educators to create structured, contextualised teaching materials, while an integrated online community space enabled collaborative review and feedback. During the workshop, educators produced 457 OER, of which over 100 were approved by the Communities of Practice for immediate publication and use.

This has given rise to a new initiative, COL's Teacher-in-the-loop project. The Teacher in the Loop AI approach involves integrating human expertise, particularly that of teachers, into the AI-driven OER adaptation process. By leveraging the strengths of both AI and human intelligence, we can collaboratively create more effective and relevant OER for learners in developing countries.

Slide 14: Evolving pedagogy

How we use technology to collaborate and create and curate OER will always depend on whom we are creating for and what we believe about why and how they learn. The traditional PAH – pedagogy, andragogy, heutagogy continuum is increasingly extending. Recently there is increased interest in continued learning for older people – geragogy, for example. We have also seen calls for more indigenous approaches – such as ubuntu in southern Africa – emphasising the interconnectedness of people – and more generally the emergence of peeragogy, which emphasises peer-based learning and feedback using digital tools. The photograph shows a group of peers sharing ideas about learner and learning support in Papua New Guinea, a discussion that has subsequently moved online with support from a COL consultant in Fiji. Now we need to factor in effective engagement with GenAI, and the idea of cybergogy has been mooted.

Slide 15: Exploiting Synergies

It seems logical to exploit the best synergy between human emotional and empathetic engagement and intuitive responses and the things that GenAI can do any time, anyplace and anywhere.

Slide 16: Bloom's Taxonomy Revisited

As noted by Oregon State University, it is then useful to begin thinking about what is distinctively human and what role can be assigned to GenAI to support the learning process.

Slide 17: Thank you