African Teacher Education Network

Case studies on African OER initiatives in higher education





Introduction

To facilitate broad take-up and use of the concept of open educational resources (OER) in higher education systems across Africa, OER Africa, has, wherever possible, sought to build relationships with existing networks of educational organizations and individuals. The aim is to provide support of different kinds both to the networks and to individual organizations participating in them. One type of support was collaborative networks, of which the African Teacher Education OER Network (ATEN) was one.¹

OER Africa and the Teacher Education in Sub-Saharan Africa (TESSA) project worked together to establish ATEN in 2010 as a way of promoting OER, facilitating dialogue and sharing existing teacher education content as OER. ATEN was a loosely connected group of teacher educators whose aim was to encourage understanding, use, and sharing of OER to support teacher education and development in Africa. Participants in the network were from several countries in West, East, and Southern Africa, viz., Botswana, Ghana, Kenya, Malawi, Mauritius, Mozambique, Nigeria, South Africa, Swaziland, Tanzania, Togo, Uganda, and Zambia, as well as the UK and USA. The initiative was operational for two years from 2010 to 2012.²

This summary is based on desktop research, as well as an interview with the project manager involved in ATEN at the time.

Description of the initiative

In promoting OER, ATEN activities involved:

- Pre-conference workshops on OER, in partnership with organizations such as TESSA, Distance Education and Teachers' Training in Africa (DETA), National Association of Distance Education and Open Learning in South Africa (NADEOSA), and Distance Education Association of Southern Africa (DEASA).
- Searching for funding opportunities to assemble various collaborative teams to develop OER useful to the teacher education community.
- Building a Community of Practice (CoP) with contacts made during conferences to share lessons and experiences.

Skills development was primarily done during the pre-conference workshops on OER. The focus in these workshops was on engaging with OER and using them, and typical topics covered were: What are OER? How do you find OER? How can you adapt OER? How can you evaluate OER? How can you publish OER?

¹ OER Africa. (2014). OER in teacher education: Reflections from the OER Africa teacher education network. Retrieved from https://www.oerafrica.org/system/files/9810/201403-oer-teacher-education-final.pdf?file=1&type=node&id=9810

² OER Africa. Teacher Education. Retrieved from https://www.oerafrica.org/african-teacher-education-network

Some of the key results of the initiative were: 3,4,5

- Launching the OER Africa Teacher Education Space on the OER Africa website, which aimed to be a key online space to find African-produced teacher OER. The website organized OER under
 - the themes of Education Studies, Mathematics, and School Leadership. Most of these OER were actively used by several teacher education institutions. The website also facilitated the creation of Special Interest Groups, with mailing lists covering the following subjects: School Leadership (SLIG), Social Sciences, Mathematics Teacher Education, Science Teacher Education, Early Childhood Development, and Special Needs & Inclusive Education, although there was limited interaction in these specialist forums.



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- Disseminating and sharing lessons learned in setting up the ATEN through the OER Protocol (<u>Guidelines for Publishing Teacher Education OER</u>).
- Around 50 educators listed as members of the network, expanding to 114 members of a listserv.⁶
- Supporting the use and integration of the three modules in the <u>Saide Teacher Education Series</u> (OER CC-BY) into the teacher education curricula of three different institutions.
- Reaching 2,181 students from eight institutions, who used the OER Advanced Certificate in Education (ACE) Mathematics materials in 2011.
- Stimulating an inter-institutional conversation about OER through the Pre-Conference Workshop attached to the Distance Education and Teacher Training in Africa (DETA) 2011 Conference in Maputo.
- Working with Chalimbana University in Zambia on OER creation and integration into distance teacher education programmes as well as with the University of Dar es Salaam and their two affiliated Colleges of Education, Makwawa and Dar-es-Salaam, on e-Learning materials development integrating OER and multimedia.
- Facilitating collaboration between <u>OER4Schools</u> (a project of the University of Cambridge) and University of South Africa (UNISA) to integrate technology into its science and mathematics education programmes in ways that were informed by a pedagogical concern for increased student engagement and interaction.
- Facilitating, with TESSA and University of Cape Coast staff, preparations for a pre-conference workshop in Ghana, as a precursor to the 56th International Conference on Engineering and Technology, that, among other things, sought to establish the interest groups that were seen as likely to form the core of ATEN work in the next period viz., Early Childhood Development (ECD), Science Education, Mathematics, and School Leadership.

³ African Teacher Education OER Network. About African Teacher Education Network. Retrieved from https://dev1.oerafrica.org/african-teacher-education-oer-network-aten/about-african-teacher-education-network

⁴ OER Africa. Teacher Education. Retrieved from https://www.oerafrica.org/african-teacher-education-network

⁵ OER Africa draft Grant report to Hewlett Foundation

⁶ A listserv is a method of communicating with a group of people via email.

Strengths and achievements

The main strength of the initiative was that many teachers became aware of the concept of OER, and some became champions advocating for OER to supplement or complement the prescribed textbooks. The strategy adopted was appropriate at that time and recognised that 'just-in-time' learning was the most successful approach (i.e., when teachers have a need and when training is provided to address the need).

By and large, you only get buy-in when teachers have an immediate need for something. If they have a challenge and OER helps them with that, then they will engage.⁷

At the time when ATEN was active, teachers were not familiar with OER and did not see them as part of their job as they taught using textbooks approved by their Ministries of Education. Nevertheless, the initiative did reach hundreds of teachers. Specifically, the project manager noted that ATEN had an impact on the few people that became champions. Thus, the initiative was considered effective particularly given the period and context within which it ran (considering the requirements to use ministry resources, limited internet connectivity, and a lack of ICT skills among teachers).

Feedback from teachers engaged in the programme was always positive. The practical engagements helped them think about their own pedagogy. The discussions were not only about content and OER, but also about pedagogy in a practical way, so there was an important underpinning pedagogical aspect in engagements to think outside of teaching from texts given by the ministry.

With the outbreak of COVID-19, not all teachers have textbooks and there is increasing interest in finding other resources. Whilst not specifically related to ATEN, the skills developed by the ATEN project manager (who has since left OER Africa) have had a far wider reaching impact on teachers



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⁷ Interview with Tony Mays (ex-ATEN project manager), 10 September 2020.

in other parts of the world. For example, he is using OER Africa's 'Find Open Content' module as one unit in a teacher training programme that is expected to reach 13,000 teachers.

Whilst it is not possible to assess the impact of ATEN as there is no ongoing engagement with the people that were part of the projects, there is an enduring legacy on the OER Africa website as it has guidelines that are relevant and useful, with good examples of materials and use. The project manager commended the OER Africa capacity building courses (Learning Pathways: Open Education Online Tutorials) as they are 'practical and down-to-earth' and provide a 'practical step-by-step way to solve problems' in classrooms. Most teachers require capacity building focused on finding OER, adapting them and a basic understanding of copyright. His experience in working with Ministries of Education in the past year is that some have realised the importance of curriculum based OER repositories, and this is a new audience that could potentially be interested in capacity building focusing on issues such as system requirements to sustain a repository or how to ensure the updating of curricula.

Challenges

Several challenges were faced during the initiative. One was getting buy-in from teachers to use OER. A second was that of internet connectivity and computer skills. A substantial proportion of teachers at that time were not frequent computer users and therefore did not have good ICT skills. Further, many could not afford to pay internet costs. The initiative was unable to solve these specific challenges directly. However, when the preconference workshops were held, organizers would buy extra data so that teachers would have internet connectivity for the purposes of the workshop.

Another challenge was sustaining momentum after the workshops. Teachers would be excited during the workshops, but, once they returned to their work and had to deal with all their other commitments, ATEN took less priority.

In establishing the CoPs, it was difficult to get members to share the workload and send out emails. A roster was implemented, but members did not participate and contribute. In the end, almost all communication rested on one person (the project manager), which was not sustainable.

You need dedicated time to maintain a dedicated CoP. If you are sharing the load, it becomes sustainable. When you are dependent on one person, and this is not their core job, it is less effective.⁸

Lessons learnt

Through its various engagements and preconference workshops, the project allowed for a step-by-step engagement with OER, unpacking what they are and how you can find them. Project team members learnt a systematic process to create active engagement in using OER.

It was recognised early on that teachers were not inclined to work online, and many did not see their role as creating content. Over time, this has changed. The training sessions were very useful and informative but still thousands of teachers have not heard of OER, highlighting that there is a

⁸ Interview with Tony Mays (ex-ATEN project manager), 10 September 2020.

need to train teachers on OER. Implementation of the project could have improved if there was buy-in from the Ministries of Education:

The Ministry says we have a need and they come with that need. The Ministry then galvanises the teachers to come on board. ⁹

Further, every country thinks that its curriculum is unique and wants to create its own content. However, there is much overlap and topics common across countries, and initiatives will be more sustainable if focus is placed on collating content of common topics across countries into one platform. (A current example is the Notesmaster platform on which about 20,000 school level curriculum-based resources are available in the OER library, although one needs to register to access them).

At the time the project was implemented, conferences tended to be face-to-face and thus interaction with teachers was limited in terms of numbers that the conferences physically allow. With the growth of virtual conferences, there is potential to reach a much larger audience as these conferences can accommodate much larger numbers.

Lastly, building a successful CoP requires commitment as well as time dedicated to maintaining the network and sharing lessons. The project would have been more sustainable if a core team of people took turns to lead discussions in the CoP, rather than depending on one person's efforts, as, if the person leaves or is busy, the initiative will not move forward.

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⁹ Interview with Tony Mays (ex-ATEN project manager), 10 September 2020.







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