

Training Course Team Members and Supporting OER Development: The Instructional Designer's Perspective

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ABSTRACT

This paper describes the author's perspectives on the training and support provided to Course Team Members in Botswana and Zambia during the development of print-based Open Education Resources (OER). These teams produced Grades 11 and 12 OER in Commerce, Human & Social Biology, Geography, Mathematics and Physical Science. The paper discusses the project's contribution to development and transformation of education provision. It also reviews the nature of the assigned tasks, the target audience, the implementation of the tasks and the challenges and lessons learned. The lessons learned regarding timeframes, the importance of in-country support structures like the Country Management Committees and Team leaders, the availability of required resources from the onset and the vital role played by committed team members will hopefully guide implementation of other similar or future projects. The author's central conclusion is that despite the challenges, the training has contributed to the teams' understanding and application of crucial components of open and distance learning and the development of print-based OER. This is evidenced by the progressive improvement in the quality of the draft units, the final completion of all the prescribed units and the positive comments from team members about their competence. The project has also enhanced the consultant's knowledge and skills on print-based OER development and the use of technological platforms like Basecamp to support and communicate with participants.

INTRODUCTION

This paper is based on the instructional design consultancies undertaken in Botswana and Zambia between July 2009 and December 2012 as part of the Commonwealth of Learning's (COL) Open Schooling Initiative. The tasks involved assisting and supporting teams of teachers to develop Open Education Resources (OER) in the subjects assigned to the two countries. The focus of both consultancies was on the development of high quality print-based course materials, and related professional development of teachers. The methods used to train and support the teams included face-to-face residential workshops supplemented by support at a distance through Basecamp (an online project management and collaboration tool), e-mail and teleconferencing.

The two institutions involved in this project were the Botswana College of Open and Distance Learning (BOCODOL) and the Zambia College of Distance Education (ZACODE). These institutions offer secondary education courses and they were assigned the task of developing OER in five subjects. BOCODOL developed OER in two Grade 12 subjects: Geography and Human & Social Biology. ZACODE developed Grade 11 OER in three subjects: Commerce, Mathematics and Physical Science.

The target audience of the consultancies was teachers. These teachers were recruited from fulltime staff members of the two institutions and teachers employed in local secondary schools. In Botswana, staff members from the Curriculum Development Department formed part of the teams. The teams consisted of five members each.

The instructional design responsibilities varied slightly because of the assignments' timeframes. The Botswana assignment was meant to assist the team to complete the work started by someone else. Its focus was, therefore, on assisting the teams to revise and complete the 16 Geography Units and 14 Human & Social Biology Units. The Zambia responsibilities, on the other hand, entailed assistance with the initial development and completion of OER in all three subjects and included the development of Course Blueprints and National Action Plans. Experience from the first consultancy informed the second.

This project's contribution to development and transformation of education, challenges and lessons learned are discussed below.

CONTRIBUTION TO DEVELOPMENT AND TRANSFORMATION

Access to education is generally regarded as crucial to development. Open schooling and open education resources, as envisaged in this project are deemed to expand and improve the quality of schooling through the development of learning content, use of ICTs and collaboration in the implementation of programmes (COL 2008, 2012, 2013). The contribution of this project to development and transformation of education is with regard to:

- Expanding the knowledge and skills of participating teachers and/or other practitioners in the development of OER and the use of available technology
- Increasing the potential expansion of instructional design training and support
- Contributing to the pool of available OER
- Contributing to the development of the capacity of local (African) consultants

Teachers and other practitioners' knowledge and skills development

This project has helped to build the capacity of teachers to develop OER. The combination of experienced open schooling teachers from BOCODOL and ZACODE and local mainstream secondary schools teachers or other practitioners in OER development teams is a useful way of extending instructional design capacity to a wider pool within each country and expanding access to education. The two countries contributed at least 25 OER developers to COL'S envisaged 100 Master Teachers. There were minimal drop-outs and in Zambia replacements were made. By the end of the project all participants had completed all or at least one of their assigned OER.

This project has introduced the teams or consolidated their knowledge of print-based OER. Local teachers and curriculum experts who had limited or no experience developing such materials were able to start the process, go through the difficult stages of drafting, receive feedback that often required substantial revision, learn from their mistakes and eventually complete their units. Though slow and difficult, this process led to progressive improvement in units.

Team leaders played a central role in the completion of the project. They all made a vital contribution to the project with regards to team support, initiation/orientation and follow-up of tasks. Where there were drop-outs, team leaders took over the writing of some of the units assisted by some of the members. They also assumed the responsibility of giving new members initial training before the next workshop. This seems to have worked well because the new recruits were able to catch-up and complete their units according to schedule. As a result, the capacity of the teams was enhanced and the potential to train others has been developed, especially in the case of those team leaders who took on this role. One of team members who joined the project after the drop-out has described the benefits from the project as follows:

This worked wonders for me. At the time I joined ZACODE, I had not received any training in print-based OER. Through the project, I am able to develop OER from initial stage to completion point. The experiences during workshops were more than enough to help out. I learnt more through the interaction with the consultant during workshops than in the team. (Zambia Team Member, personal communication, March 19, 2013)

Exposure to and use of technology in the development of OER is another benefit worth mentioning. The use of Basecamp was particularly valuable. Though for some of the Zambian team members had no experience of computers, using a mouse was a great challenge but it was eventually overcome. By the end of the project despite this and other challenges described below all teams were able to use their laptops to develop units, to download and upload them on Basecamp and send messages. They may not have all used every aspect of Basecamp, but this print-based training has provided a good foundation for the online stage of the project. The team member mentioned above explained what he has learned as follows:

The project has enabled me to use ICT tools efficiently in my work. My knowledge at the time was very basic. Through the project, and due to the project works, I was able to learn others skills in ICT. Today I am able to use such platforms as Moodle, eXe-learning and the like to create a lesson. Other skills such as searching for information on the web have also been improved. Online collaborations, though not as good as at the moment, were also learnt. (Zambia Team Member, personal communication, March 19, 2013)

Expansion of instructional design training

The capacity building model used for the training of course teams in this project is a “training the trainer” model. The model assumes that participants would eventually not only be able to develop quality OER, but would also pass on their knowledge and skills to others within their organisations and/or countries. This would ultimately lead to the development of OER in other subjects and increase the number of OER available in the country. The above positive comments from this project’s participants suggest that these ideals should be achievable.

The composition of teams as described above meant exposure to wider views than is often the case in one institution’s staff developing materials. The local teachers and curriculum experts brought their own knowledge and experience of working face-to-face with learners and with teachers in the development of curricula. These combined with those of the two institutions’ staff presented varied perspectives which were harmonised through debate. The project has developed a sound platform for collaborative development of OER.

The 25 teachers and other practitioners who participated in this project have contributed to COL’s plan of training 100 Master Teachers and growing an international network of educational professionals in developing countries (Ferreira 2010).

Contribution to pool of OER

Through this project 5 OER in Grades 11 and 12 subjects have been developed in the two countries. These OER are contributing to the pool of OER available on COL’s website and in the participating institutions. The experience gained by countries augers well for developing OER in other subjects and in this way progressively increasing the number of OER available to be accessed, shared, used and re-used freely in Africa and internationally. It seems that these OER are being used. In a recent communication one of the Zambian Team Leaders confirmed that the print-based OER have been adopted and are currently being used, a good sign indeed.

We have adopted the materials we have developed and currently I can confirm that we are using them (Zambian Team Leader, personal communication, March 17, 2013)

Contribution to local consultants’ capacity

This project has been using local (African) instructional designers as consultants. It is thus addressing concerns pointed out by Daniel (2010) that OER are often viewed as promoting a form of intellectual neo-colonialism whereby the rich north rams its OER down the throats of the poor south. In the case of the author of this paper, these consultancies have expanded and consolidated her OER and instructional design knowledge and skills and in working in different Southern African countries, an experience which will be eternally treasured. It has introduced me to the benefits and challenges of using Basecamp as platform for communication, sharing, storage and retrieval of information. Together with participants of this project we are able to find ways of dealing with the challenges we faced regarding development of OER, use of technology and relationships among and eventually achieve our plans.

The above described aspects of this project are making valuable contributions to the transformation of education systems in Southern African and development generally. It is, however, important to emphasize that implementation of such a project is not without challenges. Neither should it be treated as a one-time activity. It requires constant review/evaluation and revision to incorporate feedback and improve quality.

CHALLENGES

The challenges experienced were pedagogic and organisational in nature.

Pedagogic challenges

The teams composition discussed above imply that some of the members of the teams, namely those from the two open schooling institutions (BOCODOL and ZACODE) would have had some experience developing open and distance learning materials while those from local schools would have limited experience in this methodology. This unevenness in understanding and experience affected the pace of OER development. Roffey's "Creating Learning Materials for Open and Distance Learning: Document Template" was a very useful tool for guiding new course developers and providing a uniform course structure for units written by different team members.

The second challenge related to the tension between the approved Course Blueprint and the feedback from the mid-term evaluation of the project. The approved Course Blueprint did not provide for the inclusion of the learning and teaching approach that the units should adopt, though the syllabi did mention specific approaches for each subject. The Mid-Term external evaluation (SAIDE 2010) raised this as a major issue and recommended the inclusion of the learning and teaching approach in each unit. The inclusion of these approaches, though a good requirement for quality OER meant that the approaches identified in each unit needed to be practised in the development of the whole unit. This created some tension because in some instances the structure of the unit required substantial changes and there was some reluctance to do this due to workloads and delays in the completion of the units. This hurdle was eventually overcome and though not perfect, the OER incorporated these aspects in some form.

The third challenge related to delays in unit drafting, revision and finalisation including submission of review feedback. One reason for the delays was the unevenness in ODL understanding and materials development experience mentioned above which presented difficulties in consistent application of recommended changes. The face-to-face workshop that was organised to deal with the evaluation recommendations contributed greatly to getting teams' support for the revision of the units.

One other challenge, especially for this consultant, was dealing with unknown content. Mathematics and Physics were completely new subjects which I had very limited knowledge of and no experience in assisting teams with writing such materials. It took time to understand the content and provide helpful feedback on how to improve the units. However, this weakness probably had its strong points. What I did not understand and asked writers to clarify would hopefully improve the course materials and ultimately benefit learners who might have found the original version difficult to understand.

Organisational challenges

There were delays in providing access to laptops, especially in Zambia. When these were eventually provided, delays in providing suitable software to deal with viruses were experienced and it often took a long time for technical problems with laptops to be sorted out.

Internet connectivity presented another challenge. In Botswana team members who worked at BOCODOL had good and reliable access during working hours as corroborated by one of the team members (personal communication, November, 2009):

As for what I experienced in this particular project, I think the number one enemy was time. As a full-time employee of BOCODOL, I could log in at any point in time during the day. But without connectivity at home, it made it impossible to log in outside working hours.

Teachers from local schools experienced some difficulties prior to suitable arrangements being made, but in the end all teachers had internet connectivity. In Zambia, ZACODE often had no internet connection, so the teachers could not use this medium at their workplace. They had to buy airtime from their own resources at high costs. The costs were aggravated by bandwidth problems and the resultant slowness in downloading and uploading units.

Communication and support between the consultant and some of the organisational structures was another challenge. There were no challenges regarding the consultant and COL level of communication and support. Communication and support by Country Coordinators during face-to-face workshops was generally good. However, following the workshops, this type of support could have been improved. In the critical aspect of facilitating the provision of feedback on the units and other documents like work plans from the Country Management Committee, communications were inconsistent. Feedback from the CMC on the units signed off by the consultant would have been useful prior to final editing of the units, but except for the Botswana Coordinator who often made suggestions on progress; no comment was received from other members of the CMC on the uploaded units.

LESSONS LEARNED

The first lesson emerging from participation in this project is the importance of government support in projects of this nature. Where this support is well coordinated, various aspects of the project run smoothly. For example, logistical matters like transport, accommodation and equipment need to be provided on time and according to schedule. The first workshop in Zambia had several challenges relating to these matters and as a result valuable workshop time was lost and what was planned as a ten day workshop turned into eight days. There was great improvement thereafter though for various reasons, some of the challenges relating to laptops continued for some time.

A related lesson is that government support is often demonstrated in official opening and closing ceremonies during workshops. When planning a workshop programme adequate time need to be included on the schedule for such activities. Experience has now taught me to expect the workshop's substantial business to begin after lunch or even afternoon tea on the first day and to end at noon on the last day to accommodate these protocol requirements.

The importance of subject team leaders has already been mentioned above. A lesson emerging from this experience is that team leaders play a crucial role especially where the consultant is at a distance and in a faraway country and also when new members are recruited during the later stages of the project such as after the first workshop. A structured programme of how they can assist their team members, particularly those joining the project late, is worth developing jointly with team leaders who have had this experience.

Developing print-based OER with teams of different materials development experience and of using technology requires more time than was originally envisaged in this project. In retrospect, the timeframes for the project were unrealistic by assuming that such materials can be produced within a period of between three and six months. Such projects need to be evaluated and adjusted to suit local conditions taking into consideration the teams' (especially the local teachers') knowledge and experience of developing OER, the demands of the teams' regular jobs, available ICT s and internet access.

The last lesson from this experience is the role played by COL officials. Successful completion of projects depends on the commitment and efficiency of the initiation and coordinating structure. COL officials involved in this project provided invaluable support to the consultant, the countries and the teams and discharged their responsibilities efficiently and caringly as acknowledged in Ng'ambi (2012), Basecamp comment:

I wish to acknowledge the encouragement we received from Frances Ferreira. Her visits to Zambia and her interaction with the writers was a very good initiative. We appreciated every effort she put into the project in order to keep the project going. She gave us hope both through several emails she dropped into our inboxes and talking to us face-to-face when she visited the college (ZACODE) and during the last workshop we had in Lusaka at Andrews Motel. I also thank her for the initiative she made to arrange teleconference, the platform on which we were able to share our challenges.

CONCLUSION

This project has contributed in various ways to the development of participating countries by expanding access to education and transforming education provision. It has had a fair share of the challenges as discussed above. But the commitment to complete the project by all participants and coordinating structures as well as the resilient support and readiness to address on-going challenges by the main coordinating organisation, COL, provided the requisite motivation for ensuring successful completion of the project despite delays. One can thus conclude that despite the challenges, the assigned units were completed, the products are likely to benefit the countries concerned and the teams have acquired skills that they can use and share with other members within their institutions and countries. The teams and countries' next challenge is to ensure usage of the products of this project and implementation of this project's "training the trainer" model to develop additional OER to meet their needs and already some of the Zambian participants have indicated that this is taking place. On a personal level, these consultancies have expanded and consolidated the consultant's OER knowledge and skills and in working in different Southern African countries, an experience which will be eternally treasured.

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