

FULL PAPERS

TEACHING THE TEACHERS OF TEACHERS OF TEACHERS

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ABSTRACT

Nigeria, like many other countries, is currently in the process of curriculum reform to make the school curriculum more responsive to the changing needs of a 21st-century knowledge economy. This entails re-thinking not only **what** is taught, but also **how** it is taught. It is almost axiomatic that teachers teach the way they themselves were taught. Therefore, if we wish to change practices in the classroom, we first need to change practices in the colleges of education, where teachers are trained, by offering appropriate continuing professional development (CPD) to college lecturers.

The design and development of a CPD programme for college lecturers was therefore the focus of one of the recent initiatives of the Teacher Development Programme (TDP) in consultation with the National Commission for Colleges of Education (NCCE) in Nigeria, which was facilitated by the South African Institute for Distance Education (*Saide*).

In the belief that the programme should practise what it preaches, the design and development of this programme was based on an activity- and resource-based and collaborative hermeneutic model.

The article outlines the process followed and the outputs achieved, and may provide a useful example for others contemplating the development of a similar programme.

Keywords: *Continuing professional development (CPD), hermeneutics, activity-based learning, resource-based learning, collaborative learning, modelling*



INTRODUCTION

Nigeria, like many other countries, is currently in the process of curriculum reform to make the school curriculum more responsive to the changing needs of a 21st-century knowledge economy. This entails re-thinking not only **what** is taught, but also **how** it is taught. It is almost axiomatic that teachers teach the way they themselves were taught. Therefore, if we wish to change practices in the classroom, we first need to change practices in the colleges of education where teachers are trained, by offering appropriate continuing professional development (CPD) to college lecturers.

The design and development of a CPD programme for college lecturers was therefore the focus of one of the recent initiatives of the Teacher Development Programme (TDP) in consultation with the National Commission for Colleges of Education (NCCE) in Nigeria, which was facilitated by the South African Institute for Distance Education (*Saide*¹). Although it was a programme design and development, rather than a research initiative, the process involved a typical action-research cycle, as articulated by Lewin (1946; 1948), which involves planning, acting, observing and reflecting or revising. The CPD programme detailed in this article deliberately adopted the term “teacher educators” rather than “college lecturers” to flag the proposed change in pedagogic approach it sought to influence.

The article outlines the process followed and the outputs achieved, and may provide a useful example for others contemplating the development of a similar programme.

PROBLEM STATEMENT AND THEORETICAL FRAMEWORK

In its 2012 Curriculum Implementation Framework, Nigeria’s NCCE sets out the key changes that the reform process seeks to bring about with regard to the curriculum for the training of teachers (NCCE, 2012). It identifies the need for a shift in emphasis from what is taught to what is learned (NCCE, 2012:11) and also recognises that it is not only content that is learned, but also skills and attitudes (NCCE, 2012:112). This requires a restructuring of the teacher education curriculum to reflect the identified specialised teaching areas and programmes as follows: Early Childhood Care and Education (ECCE), Primary Education (PED),

¹ *Saide* prefers use of the name *Saide* rather than the acronym or full name as the scope of its work now goes beyond distance education provision.

Junior Secondary Education (JSE), Adult and Non-formal Education (ANFE), and Special Needs Education (SPED). These recommendations arose from a series of workshops and discussions involving the NCCE and the Teacher Education in Sub-Saharan Africa (TESSA)-initiative. In the Framework, it is noted that the move from a content-based to a competency-based learning approach will have implications for the ways in which education courses are conceptualised, what learning materials will be appropriate, what teaching methods should be employed, how teaching practice is mediated, how methods courses are presented and how assessment is designed and implemented (NCCE, 2012:15).

The problem and response

The problem to be addressed then, was how to ensure that the curriculum reform would be implemented by teacher educators who had not been directly involved in the reform process and who might feel threatened by and/or resistant to the kinds of changes required. Moreover, it was clear that the scope of change was such that professional development would need to be introduced as an ongoing activity and not as a once-off event.

The TDP, which is supported by UKAID, sought to respond to the reform challenge for teacher educators by creating an initial CPD programme that would provide a start to engaging constructively with the reform agenda. However, it also sought to turn the design, development, implementation and review of this initial CPD programme into a model process that might subsequently be used, with amendments based on learning from experience, for the design, development and implementation of subsequent, more in-depth CPD interventions. *Saide* was commissioned to facilitate the design and development of the initial CPD programme.

Theoretical framework

The approach taken to the work with Nigerian teacher educators was framed within a qualitative interpretivist paradigm and stemmed from a belief that teachers and teacher educators have curriculum agency – teachers do not simply enact a curriculum; they partly create it through the practical decisions they make in their different contexts of teaching. *Saide* believes there is no single right way to teach, and there are always some differences between the ways in which the curriculum is planned, mediated and experienced (Carl, 2009; Mays, 2015; Slattery, 2006; Woolfolk, 2007).



The design and development of a CPD programme that is aimed at developing the capacity of teacher educators to mediate the new curriculum reform approaches needed to reflect these understandings, and so a series of workshops was proposed following a hermeneutic cycle of enquiry (Gadamer, 2004; Danner, 1995; Kissack, 1995), and action-research-type processes, in which each workshop would reflect and build on what had gone before and be modified in light of the discussions on that experience. Hermeneutics seemed an appropriate theoretical lens because it is concerned with a process of continual interpretation and re-interpretation of texts and contexts in pursuit of increasingly enhanced understandings (Stanford, 2005; Kinsella, 2006). This kind of iterative process is consistent with what the literature recommends about programme design and development, particularly in the kind of open and distance and e-learning (ODeL) mode that seemed most appropriate for CPD.

Short literature review on programme development

It is noted that the provision of appropriately designed learning materials is critical for all kinds of resource-based learning that might be classified under the broad description of ODeL and that these materials need to incorporate a range of media and approaches to cater for a wide variety of learning purposes and learning styles (COL, 2005; Dede, Dieterle, Clarke, Ketelhut & Nelson, 2007; Lockwood, 1992; Randell, 2006).

However, good materials are a necessary but insufficient requirement for successful learning: it is equally important in all modes of provision to encourage students to be actively engaged in the learning process (CHE, 2007; Moll, 2003) and to provide a wide range of support strategies during that process (Mills, 2003; Subotzky & Prinsloo, 2011).

It is also necessary that assessment should support the learning process in an integrated way rather than being seen as something that happens only at the end of the process (Coats, 1988; Beets, 2014). The importance of formative feedback on assignments, in particular, has long been recognised in the distance education literature as an essential component of effective programme design and implementation (Freeman & Lewis, 1998; Morgan & O'Reilly, 1999; Mothata, Van Niekerk & Mays, 2003; Raggatt, 1994; Rowntree, 1987; Rowntree, 1990).

Decisions made about what to include and how to mediate engagement with the selected content need to be informed by the understanding that the target learners are full-time working adults with considerable experience, which can be both a source of value (in that teacher educators can learn from one another's experience and feedback and they have the opportunity to try out possible new approaches immediately in practice) and a potential barrier (in that extensive experience of working in particular ways can result in reticence, and even active resistance, to exploring alternative approaches) (Gravett, 2005; Illeris 2008; Merriam, Caffarella & Baumgartner, 2007; Nwokeochu, 2014; Rogers, 2002).

In the kind of blended ODeL model that seems most appropriate for the Nigerian college context, the traditional concerns of distance education (access, scale and affordability) need to be balanced by the new possibilities of online facilities to augment face-to-face learning and support (cooperative and collaborative learning, tracking progress through the use of learning analytics, and improved quality through interventions designed to close the feedback loop from performance to practice so that understanding of what does and does not seem to work are used to improve the programme in subsequent iterations) (Garrison & Vaughan, 2008; Cleveland-Innes & Garrison, 2010).

It is necessary to integrate cognitive, social and teaching presence in the design of such a learning programme – for example, by providing a coherent knowledge structure, developing a community of inquiry and providing a variety of support mechanisms (Anderson & Elloumi, 2004; Anderson, 2008). The inclusion of more cooperative and collaborative approaches allows for the development of “wisdom communities”, in which participants can continue to learn from and build on one another's professional experience, even after the formal programme has ended (Gunawardena, Ortegano-Layne, Carabajal, Frechette, Lindemann & Jennings, 2006).

Hence, there is a need for an integrated design process to develop appropriate learning programmes (Welch & Reed, 2005; CHE, 2014; Louw, 2007; Koper & Tattersall, 2005; RSA, 2014) and to think systemically about the fit or lack of fit between learning and teaching needs, and institutional structures and processes on the one hand, and the aspirations and *habitas* of institutions, academics and learners on the other (Moore & Kearsley, 1996; Moore & Kearsley, 2012; Prinsloo, 2009). One way to manage this is to make use of a structured integrated programme and course design process as illustrated in the *Saide's* course design guide (*Saide*, 2015).



PROCESS AND OUTPUTS

In the end, five workshops were run over a seven-month period (programme design, course design, materials development, materials review and training of master facilitators), following the kind of cyclical key-steps approach suggested by the experience of the National Association of Distance Education Organisations of South Africa (Nadeosa) and *Saide* (Welch & Reed, 2005; *Saide*, 2015).

During the course of November 2014, the TDP and *Saide* discussed the design and logistics for an initial workshop that would cover the following issues:

- Curriculum design
- Course design
- Materials development
- Open educational resources
- Forward planning

The workshop was to be followed by a supported materials development process. The outputs by the end of the workshop were the following:

- A CPD programme outline and implementation plan
- Outlines for each of the constituent modules
- Draft materials for each of the constituent modules, including assessment tasks, print-based materials and digital materials
- Guidelines for sustaining such curriculum and materials design and development processes

It was agreed that, in light of the context and target audience, a blended ODeL approach would be followed, using a mix of resource-based, independent learning, face-to-face contact and group discussions and work-integrated learning with ongoing support and monitoring by email and mobile phone communication.

In the belief that the programme should practise what it preached, the design and development of this programme was based on an activity- and resource-based and collaborative model. Design and development focused first on the design and development of introductory, developmental and consolidating activities that would provide evidence of achievement of purpose and outcomes. Then resources were sourced, adapted or created to enable these activities to be completed. Participants worked in specialist teams, but opportunities were created for inter-team review and

feedback to help ensure a coherent programme experience, but also to foster the cross-pollination of effective ideas and approaches. By modelling such an approach through a series of interlinked development workshops, it was hoped that the teacher educators involved would feel sufficiently capacitated to model these approaches to their peers, who would, in turn, model these approaches to their teacher students, who, in turn, would, hopefully, adopt such practices in their classrooms.

The CPD development process was launched in an initial workshop in November 2014 and involved 50 teacher educators drawn from six colleges of education from three states in Nigeria: Kano, Katsina and Zamfara.

The first key message of the workshop was that curriculum design required a holistic and integrated approach that considered the complex interaction of internal and external stakeholder expectations, student needs and expectations, the identification and development of appropriate content and learning resources, learning and learner support, an appropriate assessment strategy and appropriate supporting human, physical and information and communication technology (ICT) infrastructure.

The key output for the first session was a draft programme overview geared towards bridging the gap between what teacher educators could be assumed to already know and be able to do, and what was expected of them as a result of the recent education reforms and the emerging understanding of skills needed in 21st-century societies.

The second key message of the first workshop was that the design of individual courses needed to be aligned to the design of the curriculum as a whole, and needed to follow similar iterative and collaborative development processes. All learning resources, whether print-based or in digital format, were to take issues such as the following into consideration in the design and formative evaluation processes:

- Introduction and orientation
- Selection and coherence of content
- View of knowledge
- Presentation of content and interactivity
- Activities, feedback and assessment
- Language
- Layout and accessibility



However, how these guidelines were interpreted in practice depended on the level, context and purpose of the different courses. Particular attention needed to be given to ensuring there was coherence, sequencing and progression, from in-course self-assessment activities to formative assignment activities and summative activities that provided evidence appropriate to the stated exit-level outcomes or objectives; and also that formative feedback (and feed forward) comments should be provided at each key stage in the learning journey.

It was further noted that introductory course units needed to play multiple roles. In addition to providing an orientation to underpinning foundational disciplinary knowledge, initial course units also needed to help students provide a scaffolded engagement with the features of the chosen learning style and mode of provision.

The key output for the second session of the first workshop was the development of draft module outlines related to each of the key areas of the programme outline.

The focus of the third session of the first workshop was the design of appropriate activities and feedback to encourage students' active engagement with the learning process. Participants had the opportunity to engage with examples of a wide range of different kinds of activities developed for other programmes in teacher education, such as the TESSA materials and the South African Advanced Certificate in Education in School Management and Leadership (which are available as open educational resources (OER)).

Working teams in the following areas (derived from a brainstorming process) were then given time to update their draft module outlines, now including key topics and learning activities:

- Early Childhood Care and Education Primary Education
- Junior Secondary Education
- Adult and Non-formal Education
- Special Needs and Inclusive Education
- Technical and Vocational Education and Training
- Professional Development and Quality Assurance
- Educational Technology
- Teaching and Learning Methods
- Learning Resources

Session 4 then focused on the possibilities of using OER to support the materials-development process and explored the following questions:

- What are OER?
- Where can we find them?
- How can we evaluate OER?
- How can we adapt OER?
- How can we publish OER?

A comprehensive set of resources (833 MB) was provided to support this workshop and included resources that could be drawn upon throughout the subsequent curriculum and materials-development process. The TDP, in general, and workshop participants, in particular, were recommended to release their own CPD materials under an open licence to allow others to learn from and use the resources developed.

Session 5 involved a recapping of key issues and initial forward planning from a project, team and individual perspective.

Following the first workshop, which provided a big picture overview, designated teams needed to work on finalising the outline for the programme as a whole, as well as the outlines for its constituent modules. This was then followed by a second workshop that explored the implementation model for the proposed programme, unpacked the module design in more detail and revisited the plan and criteria for subsequent materials development. The outline for the second workshop was as follows:

- Day 1: Reviewing the curriculum design for the programme and its constituent modules, including technology integration
- Day 2: Developing a curriculum implementation framework
- Day 3: Developing detailed module and theme maps based on activity- and resource-based approaches
- Day 4: Developing activity-based materials
- Day 5: Reflection, collaborative feedback and forward planning

The key outputs of the second workshop were a revised programme outline, as well as updated constituent module outlines, a flexible implementation model and key activities (introductory, developmental and consolidating) for at least two of the subthemes explored in each module.



After this workshop, the programme was seen to comprise four generic modules (learning and teaching methods, educational technology, learning resources and inclusive education) and one elective specialist module (chosen from Early Childhood Care and Education/Primary Education, Junior Secondary Education, Adult and Non-formal Education or Technical and Vocational Education and Training). These decisions were arrived at through a collaborative discussion process during the workshops, as nothing had been decided prior to the start of the engagement.

Following the second workshop, which provided development teams with clear module maps, designated teams needed to work on finalising the constituent theme maps for their respective modules, and then to develop the materials for at least the first sub-theme. This was followed by a third workshop in January that collaboratively explored issues of level, presentation, language and design, as well as exploring and revisiting the plan and criteria for subsequent materials development.

The third workshop followed in March. It provided development teams with insights into and examples of the development of activity-based independent learning materials (both in print and for sharing via mobile technology). Module teams then worked on their draft materials to a first complete draft stage. They continued to get feedback during this process from *Saide* as needed through emailed comments on draft materials. All the draft materials were then shared via Dropbox.

The fourth workshop in May considered the feedback received and the lessons learned, provided space for supported revision and explored implications for the future review and updating of the curriculum, the materials and the implementation model.

Once the first draft materials had been completed, they were reviewed by representative “typical” students for accessibility and relevance, and by designated discipline experts for content and level. They were also taken through a language and third-party copyright clearance process. It was this fifth version of the programme and its constituent materials that was piloted in the latter part of 2015 and the early part of 2016.

The four design and development workshops were followed by a fifth workshop to train master facilitators.

The CPD programme for the colleges of education sought to achieve at least three things: build the capacity of the teacher educators in developing materials for their

peers, train a core team of master trainers who will sustain the programme, and provide opportunities for teacher educators (on a continuous, regular basis) to update their knowledge of subject matter and pedagogical skills (activity-based, learner-centred pedagogy).

By modelling an activity- and resource-based and learner-centred approach through these five interlinked development workshops, it was hoped that the teacher educators involved would feel sufficiently empowered to model these approaches similarly to their peers, who would, in turn, model these approaches to their teacher students, and then hopefully adopt such practices in their classrooms.

As will be noted, each subsequent workshop built on what had gone before, allowing for both top-down and bottom-up design and development approaches. Discussion and work also continued between the face-to-face workshops in direct contact within institutional development teams and via email and Dropbox to facilitate collaboration between colleges, as participants were spread geographically. In addition, a concerted effort was made to solicit feedback on the draft curriculum and materials from potential participants and discipline experts, who were not part of the original design and development process.

The programme was being piloted at the time of writing. The supporting materials developed during the process comprised the following:

- Programme outline
- Implementation model
- Orientation PowerPoint
- Module 1: Overview of the NCCE-TDP CPD programme for teacher educators
- Induction PowerPoint
- Module 2: Orientation to teaching and learning methods
- Module 3: Introduction to learning resources
- Module 4: Introduction to supporting learners with special educational needs
- Module 5: Introduction to educational technology
- Module 6: Introduction to Early Childhood Care and Education and Primary Education
- Module 7: Introduction to Junior Secondary Education
- Module 8: Introduction to Technical Vocational Education and Training
- Module 9: Introduction to Adult and Non-formal Education.



The final version of all the materials is intended to be published under an open licence. A more detailed outline of the curriculum design process and outputs is already available as an OET at: <http://www.oerafrica.org/resource/developing-curriculum-and-learning-resources-guidelines-effective-practice>.

OVERVIEW OF THE CPD PROGRAMME

A programme is more than a list of modules. Figure 1 summarises the way in which the programme was organised to make for a coherent learning experience.

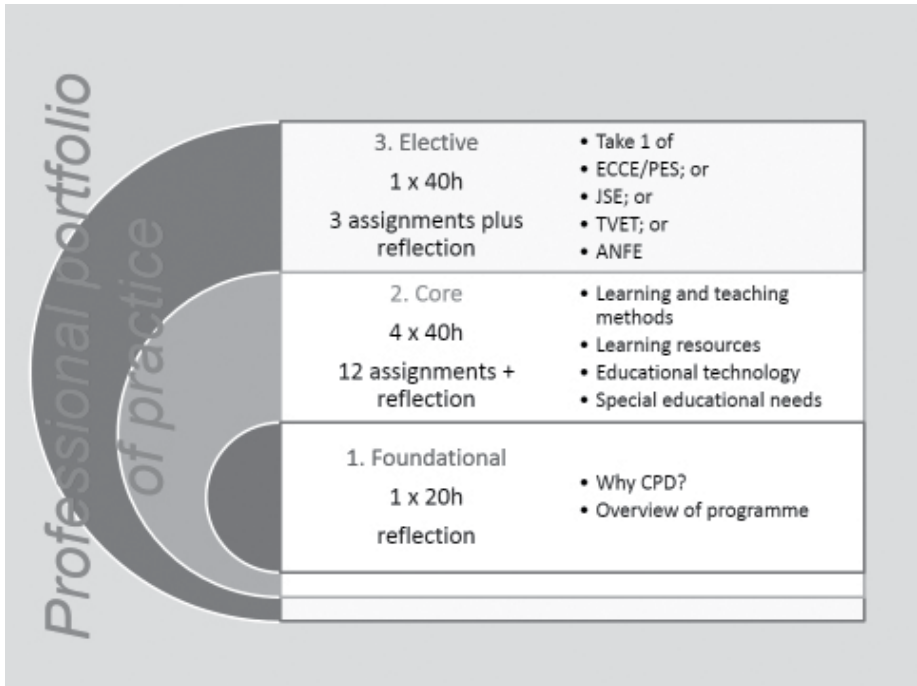


Figure 1: CPD programme overview

In the pilot, all potential participants were invited to an orientation session and took a copy of the Foundational Module 1 with them. This allowed them to make informed decisions about whether to engage with the programme and, if so, which elective to choose. Even those who did not sign up for the full programme thus gained an

orientation to the need for CPD, as well as insight into the key expectations of the curriculum reform.

All those who registered for the programme completed the four core modules and registered for one elective module in which they were guided towards exploring the implications of the four core modules for the ways in which they would teach a particular elective subject.

There were no examinations. Instead, teacher educators completed a number of assignments and reflections that they compiled into an initial portfolio of professional practice, which they could subsequently maintain throughout the rest of their professional careers.

The three formative assignments completed for each of the core and elective modules were designed to provoke reflection on prior learning and experience, promote exploration of new ideas in practice, and consolidate learnings into changed practices. Supporting, regular contact sessions were then designed to provide opportunities to discuss, including contest, the examples and guidelines provided in the materials, as well as the examples that participants themselves developed for their assignments.

Each module was designed to comprise 40 hours of learning (31 hours of self-study and nine hours of contact sessions). The programme of five modules was to be mediated over 20 weeks over two semesters, although in practice different colleges piloted the programme in slightly different ways. The full programme, from orientation through induction to completion, was designed to take 220 hours to complete.

In designing and facilitating the programme, it was important that *Saide* should model the kind of approaches advocated in the curriculum reform process and in the draft programme and its materials. Accordingly, the facilitation process involved the following practices and strategies:

- Collaborative determination of outcomes, agendas, responsibilities and time lines
- Resource-based workshops in which there was a deliberate strategy to move the locus of responsibility from the facilitator to self-determined development teams



- Cooperative peer review processes
- Constructive formative feedback against collaboratively developed criteria

Although participants completed an evaluation after each workshop and the evaluation forms were analysed and written up, it was understood that this was for internal reporting purposes rather than for research purposes, and so is not discussed here. It should be noted, however, that the overall feedback was positive and that weaknesses noted in one workshop or phase were demonstrably addressed in the following workshop or phase, as would be expected in a hermeneutic process that employed action-research-type approaches.

CONCLUSION

If one wishes to bring about positive change in the classroom, one of the things one needs to address is the way in which teachers are trained. This indicates the need for CPD opportunities for teacher educators. However, teacher educators typically become trainers after completing a teacher qualification and then, maybe or maybe not, teaching in a classroom. Subsequent qualifications gained will, in many instances, not prepare teacher educators to develop, facilitate and review a CPD programme for their peers. It is therefore necessary to provide an authentic and integrated CPD experience that explores the full development process, from curriculum design to course design to materials development and review and into tutor training. In such a process, it is important that the trainer of the teacher educators, who will, in turn, train their peers, models the kind of resource- and activity-based approaches called for in the curriculum reform itself. The approach described in this paper sought to illustrate such a process.

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