

A case study of a teacher professional development programme for rural teachers

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Introduction

Since 1994, the South African school education system has experienced many curriculum waves. Several universities have configured their curriculum to suit the needs of the country as it moves through these curriculum waves. Many universities developed Advanced Certificate in Education (ACE) programmes in various specializations to help teachers prepare for the demands of the new curriculum. Teachers join the ACE programmes expecting that their acceptance into the programme will start the process of them turning the dreams into reality. They have dreams of improving their qualifications, or re-skilling themselves so that they are more relevant to the education system. A further incentive for the teachers is that the programmes have been funded by the Education department, thus removing from them the financial burden of covering the costs of the programme.

However for many teachers these dreams are shattered early in their journey and they drop out without completing the programme. Most full time undergraduate students in South Africa who drop out of their studies, do so because of an inability to pay for their fees and living costs. The high drop-out rate of students enrolled in various programmes offered by higher education (HE) institutions in South Africa has been a concern for many years. For instance, South Africa's graduation rate of 15% is one of the lowest in the world, according to the National Plan for Higher Education compiled by the Department of Education (DOE) in 2001. In 2005 the DOE reported that of the 120 000 students who enrolled in HE in 2000, 36 000 (30%) dropped out in their first year of study. A further 24 000 (20%) dropped out during their second and third years. Of the remaining 60 000, 22% graduated within the specified three years duration for a generic Bachelor's degree (Letseka & Maile, 2005).

In this case of funded ACE programmes, the teachers' studies are funded, so they do not have the financial burden of paying for their fees. However the dropout rate for the ACE programmes has not been investigated since it was introduced in 2000. We felt that it was important for us to investigate why teachers drop out of such funded programmes. We engaged in a preliminary drop out analysis of the ACE programmes, and it emerged that the ACE (Mathematics, Science and Technology) programmes offered by the University of Zululand (UNIZULU), a historically black university¹ had a very low drop out rate. This ACE (MST) programme, is offered to teachers from rural areas north of the province of KZN, who teach in the General Education and Training (GET) phase.

The purpose of this small scale study was to explore the effectiveness of the programme, with particular reference to the low drop out rate. The research question guiding this study is : 1. What are some factors that contribute to the low drop out rate?

History of ACE programmes in South Africa

Prior to the introduction of ACE, a similar programme known as Further Diploma in Education (FDE) existed. The FDE was the state's first major intervention to re-skill or upgrade teachers from their initial qualification in teaching. Teachers with a three-year teaching diploma were eligible to enroll. The FDE was introduced in the late 1980's and early 1990s by the old distance education college of education such as the South African College of Education as a way of upgrading teachers to a qualified teacher status. With the introduction of the NSE (Norms and Standards for Educators; DoE, 2000) framework, the FDE was renamed the ACE. The ACE's purposes were similar to those of the FDE and it soon became the multi-purpose qualification for teacher upgrading, re-skilling and access to higher level programmes. During the review process instituted by the Council for Higher Education (CHE) in 2006, it became clear that there were 69 different kinds of ACE's in the country and that over 290 specializations were being offered (CHE, 2010).

Profile of the ACE (MST) at the University of Zululand

The three ACE programmes offered at the University of Zululand (UNIZULU) are a dual combination: Maths/Science; Science/Technology & Maths/Technology. These programmes were designed to deepen the knowledge of Senior Phase educators in the three areas; Mathematics, Science and Technology. The contact sessions were delivered on weekends or during block sessions during school holidays to cater for the needs of the teachers who came from rural areas situated far away from the campus.

The study

The design of this study was a naturalistic, qualitative, interpretive case study. A naturalistic inquiry was used as it has an emphasis on interpretive dimensions where the goal of the researcher is to understand reality (Cohen, Manion & Morrison, 2007). In this case we wanted to understand the experiences of the ACE teachers to find out why they persevered in their studies. A qualitative case study approach provided the opportunity to concentrate on a specific instance or situation (Cohen *et al.*, 2007), namely the particular ACE programme. Data for this study was generated from the student's examinations results (from the university archives), an interview with the programme coordinator, questionnaires to 8 past students and a focus group interview with the same students. These 8 students were selected because they have continued with their studies after completing the ACE programme.

Results

In this section we first report on the throughput rate for these ACE students, before discussing some factors accounting for the high perseverance rate. Thereafter we share some suggestions made by the teachers on how the programme could be improved.

Throughput rate.

The original group consisted of 234 students which was reduced to 217 after the students who were registered for another qualification were excluded. Of these 181 (83%) students graduated within the minimum time of 2 years while 50 (23%) are still in the system. There were six students who dropped out three of whom passed away. This is a very high throughput rate as compared to another ACE programme which had a 50% graduation rate in minimum time rising to 60% over a 3 year period (Bansilal, 2010). When compared to the reported 22% throughput rate for the undergraduate students reported by Moketsi and Maile (2005), the 83% graduation rate in minimum time is impressive.

Factors which contributed to the high throughput rate

Residential Nature of Contact Sessions

The coordinators of the programme decided to run the lectures in block sessions during holidays or weekends. Students (who are practicing teachers) were transported from their local areas to a hotel close to the university. They were accommodated during the sessions and were also transported to the university for the lectures. The reasoning behind this arrangement was that since the teachers on the programme were from rural areas, public transport was notoriously unreliable and the teachers would have spent much of their time just travelling to the lectures. Although regular, day-long or shorter sessions would have been preferable to avoid mental fatigue, the residential block sessions were selected as the mode of delivery to alleviate the transport and isolation problems of the students.

This decision seems to have paid off in many positive ways, some of which were identified by the coordinators as well as the teachers. We outline two of the benefits below.

Contact sessions were intensive learning opportunities for the teachers:

Because of the residential nature of the sessions, lectures and tutorials were spread out throughout the day from 8 in the morning to 7 in the night. All eight respondents indicated that the intensity of the contact sessions helped them to succeed in their studies. The planning of the sessions was such that the teachers made optimal use of their available time. In fact the teachers indicated that as adults, they had family duties and these often interfered with their studies. By taking them away from their everyday situations, studying was made easier because they did not have to worry about their family responsibilities while they attended the sessions. The teachers spoke about the value of working in groups. After dinner, they would meet in groups and go over the work that they learnt. Ambiguities and misunderstanding of content was often cleared up by colleagues during these informal evening discussions.

The student representatives were able to meet often to discuss issues of concern across the different classes as well as to disseminate information to people in the classes.

The teachers were comfortable during their contact sessions

This theme may seem to be out of place in a study of an academic programme. However the coordinator and the teachers both stressed that the comfortable accommodation served as inspiration for the teachers to work harder. Because they did not have to stress about arranging or

paying for their own accommodation, all their efforts could be concentrated on their studies. The coordinator commented that the teachers were very appreciative that the university provided the accommodation for them.

Student support

The analysis of the data also revealed many different support mechanisms which improved the students' experiences. We discuss five of these:

Academic Support

The coordinator stressed that at least 50% of the people who taught on the programme, were full time university staff because of the stipulations of the Council for Higher Education (CHE). This meant that the teachers were taught by experienced and well qualified staff, who were available for consultations during the block sessions. The participants were positive about the academic support offered by the staff and named particular lecturers who made a big impact on them.

The teachers also felt good that the university considered them as important by ensuring that the teaching was done mainly by permanent academic staff.

Attitudes of staff

The drop out study by Letseka and Maile (2005) revealed that some of the reasons for students dropping out was linked to the institutional culture of the HEI's which did not make them feel at ease. They spoke about students' problems being dismissed as 'someone else's problem'. In this case the teachers spoke about the warmth and respect they experienced during their studies which made them feel at home and comfortable. One teacher was impressed at the personal attention they got when the "coordinator sat with all [the teachers] who were going to be involved [in the programme].

One student said that in his first year, they found that certain staff had an "attitude" towards them and they found it very hard to work under those circumstances. However after approaching the lecturer as a group, he was willing to hear their concerns and thereafter they had no problems. This solution helped them to become more confident as well.

The teachers considered this approach to the problem as a learning curve. One student stated that "so if ever there are any problems, we can come to the lecturer and then we can try and discuss the problem". These comments suggest that the students felt welcome and respected at the institution.

Tutorial Support

One innovation of this programme was the use of full-time young university students as student tutors in the afternoons. As mentioned earlier, the programme ran until 7p.m. This was because the formal lectures lasted until 4pm, and thereafter the student tutors were available to work with the teachers in an informal basis, by helping them to work through particular concepts, practice exercises and tasks. The teachers were very pleased with this support. One teacher commented that the students "explain everything". She felt that the students' explanations were so good that they should "come to our area to teach". This additional facet of support was seen as a

reason for the high pass rate in the modules because teachers were given the opportunity of working through the materials while having students available for their assistance.

Financial support

The teachers were appreciative of the government's commitment to improving their skills by funding their studies. The teachers are mature students who have their own families and funding for their studies is not prioritized in the hierarchy of their family needs, so this was a welcome opportunity of many. In the words of one teacher: "When entering this course, I am fully capacitated, we are bread winners, we are having children who need to go to university and it is not easy for me to pay for my child at university and also to pay myself and upgrade myself" This comment captures the students' gratitude about being offered a funded opportunity to upgrade herself. The other benefits of free transport, accommodation and food made the teachers even more determined to make the most of the opportunity.

Classroom support visits

The programme had a classroom support component, where lecturers visited the teachers at their schools and watched them teach and thereafter held individual discussions about their practices. All the teachers found this aspect very helpful and useful. Although one teacher said that she was nervous initially when she knew the lecturer was going to watch her teach, but the lecturer was friendly and helpful and "there just to help you improve". They found the discussion after the lessons useful. Some mentioned that the discussions helped them to concretise the outcomes that they were expected to plan for, and to explore alternate strategies.

Relevance of curriculum and materials

The teachers found the curriculum relevant and all expressed the opinion that the programme had changed the way they teach. They learnt alternative teaching strategies. Two teachers mentioned that the section they struggled with was drawings in technology and this was addressed by the programme. Another spoke glowingly about how the lecturer for science "gave us tips on the designing material in how she was doing it". The teachers also mentioned that what they learnt was relevant to their teaching and they found the materials and some activities useful in their classrooms.

Flexibility of programme

The university policy for such funded joint programmes was that money generated from such programmes would be used for the programmes only. Thus the university deducted a minimal percentage for administration fees. This left the planning and administration of the programme to the departments. The coordinator emphasized that this approach reduced the bureaucratic load as well. The department was able to plan the delivery of the programme around the needs of their students. They had the freedom to allocate the funds in an optimal manner and chose to organise the transport and accommodation for the students, a decision that led to much of the success. In addition sufficient staff were employed to manage particular aspects of the programme such as transport and accommodation, administration coordinator and an academic coordinator. This meant that the academics were freed up to concentrate on the academic delivery of the programme.

An additional advantage of the institutional arrangement was that the coordinators worked directly and closely with the national department of education who sponsored the programme. The department representative met often with lecturers and teachers. Complaints from teachers were taken up quickly and resolved together. The department representative was also pleased with the attention given by the programme coordinators to the teachers' needs.

Suggestions for improvement

There were some suggestions for improvement. The administration was noted as an area of concern because a few teachers spoke about late release of assessment marks. One teacher mentioned that the mark he received was initially a pass and then the next day it was reported as a fail. The teachers were also frustrated about the pacing of the examinations especially when they had more than one examination scheduled on one day.

Concluding remarks

In this paper we looked at the throughput rate of an inservice qualification programme (designed for rural Senior Phase Mathematics, Science and Technology teachers) administered by the University of Zululand. We then analysed students' responses to a questionnaire and a focus group interview to identify possible factors which contributed to the high throughput rate. This data was supplemented by an interview with the programme coordinator. One of the aims of the study is to contribute to knowledge about successful practices in designing inservice programmes for teachers. The study identified three main factors which accounted for the teachers' satisfaction with the programme —the residential contact sessions, the student support and the freedom given to the programme coordinators to meet the teachers' needs.

Although accommodation for in-service teachers is an expensive programme investment, the teachers' responses indicate that this facet of the programme helped them to get more work done without being distracted by their family duties. The evening discussions with their peers also contributed positively to their learning experiences. The teachers and coordinator also commented that the financial support via the bursaries, the welcoming attitudes of the institution, the tutorial support as well as the classroom visits were all beneficial to them.

However the success of the whole programme cannot just be judged on the basis of the successful delivery and high throughput rate. A crucial indicator of the success is the degree to which the teachers are able to improve the teaching and learning of mathematics in their classrooms. It is important to investigate whether the programme translates to sustained improvement in classroom practice. This is one of the focuses of the current research project which aims to investigate the impact of various ACE programmes on the teaching and learning in KZN.

References:

- Bansilal, S (2010). A throughput analysis of the ACE (Mathematical Literacy) programme. Unpublished report presented to the Deputy Dean, Faculty of Education, UKZN
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.
- Council for Higher Education (2010). Report of the National Review of Academic and Professional Programmes in Education . *HE Monitor, No 11*
- Letseka, M & Maile, S (2005). High University drop-out rates: a threat to SA's future. HSRC Policy Brief March 2005.