

PROFESSIONAL DEVELOPMENT AS A PERSONAL TRANSFORMATION: TEACHERS' NEW PERSPECTIVES

Matseliso L. Mokhele

ABSTRACT

The present research originates from the view that, for the redesign of continuing professional development (CPD), it would be important to understand the teachers on the kinds of professional development programmes that they feel are promising. Much of the literature emphasizes the importance of involving teachers in defining their needs and developing opportunities for their own professional development. This paper is part of the larger quantity of study that explored teacher's perspectives on CPD. I explore the views of teachers who participated in a CPD programme, specifically to find out how the programme personally transformed their practices, if at all. To collect the data, I employed qualitative semi-structured interviews with the participants several times during the data collection process. The participants were provided with informed consent and demonstrated their willingness to participate in the study. Based on the data collected, I conclude that teachers should not only be involved in the planning of the CPD programmes, but that the programmes be aligned with their personal circumstances and motivations. Only if the CPD programmes have personal meaning for the teachers will they have the potential to be transformative and life changing.

Keywords: continuing professional development, personal transformation, professional development, professional development programmes, teachers' perspectives

INTRODUCTION

These are changing times for many education systems around the world, and the new millennium has, for many societies, offered opportunities for serious and promising educational reforms. One of the key elements in most of these reforms is the CPD of teachers. The pressures on schools to improve their standards of achievement are unlikely to recede in the next few years (Harris and Muijs, 2003). However, the real challenge facing most schools is no longer how to improve, but rather, how to sustain their improvement (Harris and Muijs, 2003). Johnson and Donaldson (2007) contend that the emphasis on standards and accountability has placed extraordinary demands on schools to improve instructional outcomes. In addition, reform requires that teachers learn new roles and ways of teaching that translate into long-term developmental processes which require them to focus on changing their own practices. Similarly, in the wake of Apartheid, South Africa's most urgent and difficult project is to reconstruct all spheres of public life so as to establish conditions which enable a flourishing and peaceful democracy. To meet all of these demands, the professional

development of teachers is now recognised as vital to enhancing the quality of teaching and learning in schools. Like all other professionals, teachers need to stay informed about new knowledge and technologies.

Many education systems worldwide have undergone a number of major reforms over the last two decades or more (Pretorius, 2004) and a paradigm shift regarding the professional development of teachers has been gaining momentum. As a result of the complexities of teaching and learning within a climate of increasing accountability, this reform moves professional development beyond merely giving teachers new knowledge and skills (Vescio, Ross, and Adams, 2008).

MPUMALANGA SECONDARY SCIENCE INITIATIVE (MSSI) PROJECT

According to the Introduction to the Mpumalanga Secondary Science Initiative (MSSI) guidebook (2000), the MSSI was a project which assisted teachers to work in a classroom confidently through enhancing their teaching ability. More specifically, the initiative sought to equip the teachers with the skills and knowledge necessary for teaching Curriculum 2005 (C2005) and to improve their conceptual understanding of mathematics and science. This project was conducted by the Mpumalanga Department of Education between 1999 to 2008; with the last two years of the project solely dedicated to study visits to Japan by groups of educators from South Africa. These visits were part of a science and mathematics education project that was funded by the Japanese International Co-operation Agency (JICA). Its major purpose according to Nagao, 2006 was to establish a school-based in-service training system for teachers in Grade 8 and 9 in the Mpumalanga province in collaboration with the Mpumalanga Department of Education and the University of Pretoria. Thus the continuing professional development of teachers was to be conducted in collaboration with the Japan International Cooperation and the University of Pretoria, and sought to apply a cascade model of training (Nagao, 2006). It also sought to develop a province-wide in-service training system for Mathematics and Science teachers so that the initiative could be sustained (MSSI guidebook – brief introduction, 2000)

THEORETICAL FRAMEWORK

My research begins with the idea that teachers are the key actors in continuing professional development and should be directly involved in educational reforms. As a result, this paper is carried out using critical theory. Critical theory challenges the biased nature of all knowledge, specifically knowledge that is transmitted via dominant institutions such as schools and the media (Morrel, 2009). The goal of critical theory, according to Popkewitz (in Peca, 2000:6) is to change the world rather than describe it. To engage in the dialectical process causes an increased awareness of reality and from this, change may occur. Such change is not seen as serendipitous, but rather as leading to the emancipation of humankind because the dialectical process enables human beings to distinguish between the real and the ideal, and move toward the ideal.

The present study looks specifically at the views of teachers and which professional development model they believe is best at improving their classroom practices. I am particularly interested in how teachers' opinions can influence educational research and

policy. Teachers are also key figures in education, and as intellectuals, they deserve to have some influence in addressing oppressive conditions in classrooms as well as schools (Giroux, 2003). Critical theory is therefore important in framing this research because those most affected (the teachers) should be involved in framing the problems and evaluating the various proposals for addressing them. In addition, teachers' opinions should be considered as they are involved in the teaching and learning process, rather than for interventions to rely solely on the perspectives and analyses of the developers of professional development programmes. Critical theory is therefore relevant because it "refuses to identify freedom with any institutional arrangement or fixed systems of thought, it questions the hidden assumptions and purposes of competing theories and existing forms of practice Bronner" (2011: 1).

RESEARCH METHODOLOGY

As stated previously, this paper looks at the Mpumalanga Secondary Science Initiative (MSSI) project as a case of continuing professional development in South Africa. The study was designed as a case study meant to elicit the views of teachers who participated in the MSSI project. I opted for a qualitative case study design as it "enables the researcher to gain greater insights and understanding of the dynamics of a specific situation" (Creswell et. al. 2010:76). For the purpose of data collection, I used semi-structured interviews. My interest in the use of semi-structured interviews is that the emphasis is on how the interviewee frames and understands issues and event, that is, what the interviewee views as important in explaining and understanding events, patterns, and forms of behaviour (Bryman 2008). I therefore had conversations and interviews with ten teachers who were involved in the MSSI project. The participating teachers were interviewed several times during the data collection process. The taped-recorded in-depth interviews were further transcribed, coded and categorised into themes. I also followed up with the telephone interviews. For ethical compliance, all teachers who participated in this study signed the informed consent form to demonstrate their willingness to participate in the study.

FINDINGS OF THE STUDY

This section presents findings of this study with regard to the professional development programme Mpumalanga Secondary Science Initiative (MSSI) in the eyes of one of the participating teachers, Mrs. Lizzi (to be referred to as Lizzi throughout this paper). Lizzi's story is discussed in order to gain an understanding of her views on the project MSSI as a continuing professional development programme for teachers more specifically in shaping their identities.

Lizzy's Background

Lizzi has been teaching for the past 16 years and has mostly been teaching General Science and Biology at the grade 8 and 9 levels. She is currently teaching Natural Sciences and Geography, and teaches these two subjects in grades 9, 10 and 11.

Lizzi has been teaching at her current school for her entire teaching career. When asked about how she feels about teaching at her current school, Lizzi responded that it was enjoyable, although she lamented the challenge of learners who were no longer "ready to learn" as captured verbatim below:

It is enjoyable to teach in this school though maybe we are having some challenges due to the kind of learners that we are working with. Seemingly learners of nowadays are not prepared to work, that's why the teachers are pulling very, very tough, because teaching is about teaching and learning but in my school its only teaching that takes place, it's a real problem and it also affects our results.

As much as Lizzi mentioned that she enjoys teaching, her responses drew attention to the challenges of linking teaching with learning. For her, teaching is a purposeful activity that is designed to foster learning. Without such learning, it would be difficult to talk about successful classroom practice. She therefore shared the challenge confronting teachers who seek to link their teaching to students' learning and stated that it becomes "very, very tough". It is important to note how this conversation with Lizzi helps one to understand a teacher's perspective in terms of their needs for the professional development intervention. It is clear therefore, that for any professional development intervention to be useful in Lizzi view, it has to create a link between teaching and student learning. This is an interesting method of formulating the teachers' professional development needs, or targets at her school, as most professional development programmes tend to focus on teaching alone and do not link this with student learning.

Participation in the Mpumalanga Secondary Science Initiative (MSSI) project

Lizzi was one of the fortunate teachers who participated in the MSSI project since its inception. She was the only teacher selected from her school to participate in the project. I asked. Lizzi how she was selected to participate in the project.

Her response was that the MSSI project selected Mathematics and Science teachers, specifically in grades 8, 9, and 10:

I was teaching mathematics and science in grade 8 and 9 and the MSSI focused on mathematics and science teachers in grades 8, 9, and 10

Lizzi's participation in the MSSI project was a major transformational experience. The project allowed Lizzi opportunities to transform her career as a science teacher by developing her skills in the physical sciences. According to her, the project turned her into a more expert science teacher, which she was not before her participation in the project:

It helped me so much because I have not majored in (physical) science at the college, but I had done Biology and Geography. When I got to this school, I was asked to teach natural science and I struggled, but due to the MSSI programme I managed to do it.

As this was a major (and possibly unintended) outcome of the intervention, I was interested in finding out exactly how the MSSI project helped Lizzi to teach science. During the conversation, I asked her exactly that¹:

I did not know even how to use the apparatus as well as to do many of the science experiments. You see in the MSSI project, we mostly focused on doing science experiments,

¹ It is important to note that Lizzi uses the term "science" mostly to refer to the physical science component of the subject which she had no background in during her teacher training programme. Sometimes, though, she also uses the term to mean "natural sciences" which she currently teaches.

so now I do have the confidence and I do enjoy doing the science practical's because science is more on practical.

From the foregoing quotation, it is evident that her participation in the project not only transformed her into a science teacher, but it also gave her the confidence to do what she was previously unable to do. It is interesting to realise that teachers do not only see professional development programmes as a platform to improve just their content knowledge and pedagogical content knowledge, but they also see it as a tool for their development as well as personal transformation. In this case, we see a teacher who did not train in science, but who, during and after her participation in the professional development project, becomes and feels like a well-rounded science teacher. The investment in the professional development programme thus acquired a new personal meaning for this participant.

Lizzi also noted how the MSSSI project enabled her to work collaboratively with the teachers from different schools in the area:

We worked together as a group; we did mostly practical to be able to prepare learners to know what they are doing. Learners say mathematics and science are difficult but through practical they begin to like the subjects. Again, you can take me to any school from here to White Haize. I know my colleagues because of the clusters, and we share each other's experiences, you don't think you are the only one with the problem in your school. You know what other schools are experiencing and you share together.

In the conversation with Lizzi, it was discovered that she was also a cluster leader and had been elected by the other teachers in her cluster for this leadership role. In her explanation of how she was elected, she said:

I would not really be able to say how they did it, as it was in the cluster meeting and somebody just nominated my name, I think maybe it was because I was one of the people that had joined and participated in the project from its beginning.

Lizzi was very modest about her election as cluster leader. She did not put too much thought into it other than that the other teachers may have valued her sense of commitment and experience as she was one of the few teachers in her cluster who was involved with the MSSSI project from its inception. Given her modesty about her leadership, it was intriguing to explore what her specific role as a cluster leader was and how she exercised this leadership role. For Lizzi, the training she received as a cluster leader helped her to lead her colleagues. During their training as cluster leaders, the MSSSI teachers were given materials to share with their colleagues back in the clusters:

They (trainers) used to give us some materials whereby we would have to duplicate the materials and to supply the teachers and train the teachers so that they go to their various schools and give the information to their learners.

Clearly the MSSSI not only enabled Lizzi to become a better teacher and a science teacher, but it also enabled her to become a teacher (cluster) leader. This role as teacher leader did not necessary come naturally to Lizzi as she noted that it was the guideline from the training – in the form of teaching materials – that helped her to fulfil the role. She was able to take back to her cluster whatever was covered during the cluster leaders' training workshops. Asked about

how she interacted with her cluster, Lizzi responded that she would allocate the topics to be dealt with different teachers in the group for them to present on different days:

You see, I was training them, but we were also supposed to share, as I said that I have not specialised in science, I am a biology teacher, I studied biology, I also needed their views and their knowledge.

When she was asked about working with teachers from different schools (collective participation), she responded that they all supported one another:

Okay, we were sharing ideas. As I have said for me to gain the knowledge of Science, it was because of the other teachers, the teachers come with different ways of teaching certain topics some were easier than the others.

It is also clear that one aspect of the project that made Lizzi a better science teacher was being able to work with other teachers (in the clusters). The value of these collaborations was emphasised throughout the conversation; they helped to transform her into a “new science teacher” which she was not before the professional development intervention. While this transformation might appear minor and perhaps even less spectacular to an experienced observer, it is important to note how critical it was for her and specifically how she kept revisiting the theme in different parts of her story about the MSSSI project.

Lizzi also concluded that her participation in the project totally changed her attitude towards teaching science which she initially thought was the most difficult subject to deal with:

This programme helped me a lot, hence I said I knew nothing about science, and then by attending the workshops and participation in the clusters I gained more knowledge and confidence on how to teach science. My attitude is changed I used to think science was the most difficult subject.

Lizzi also believes that sharing knowledge in clusters is an excellent idea. She noted that in order to succeed, one needs to involve oneself with other people and work with other people:

The sharing of knowledge, the person cannot say I know everything, and as we share, the more we grow.

The Mpumalanga Secondary Science Initiative and its relevance to classroom

In this research, I also wanted to determine whether the activities involved in the MSSSI had any relevance to Lizzi’s teaching. I therefore asked whether she found such activities to be relevant or not in her classroom. Her response was positive, and she stated that in the project (MSSSI), they did many of the science experiments which she had to perform for her pupils:

It helped a lot, most of the time we did some experiments in this project in both the workshops and cluster meetings. You see when you do only theory and you don’t do practical, learners will never know. When you teach experiments the learners do practical work and so they will not only hear but to see, touch, and it’s not easy for the learner to forget.

The value of the practical work done during the MSSSI workshops for her teaching is

underscored in her statement. Other MSSSI activities that Mrs. Lizzi participated in and found to be relevant in her classroom included the focus on the science curriculum and how to improvise especially in rural schools. In her examples, Lizzi said the following:

There was a time whereby they taught us about the planets and I was surprised this thing is so easy and how to make the learners to know which planets follows each other. It was very much interesting and I came and practiced it and then I sent the learners to go and do the projects. That's why I am saying sharing knowledge is very much powerful. If I did not attend those workshops I would still rob the learners and teach the biology part and leave out the science part.

Lizzi elaborated further and described improvising in the rural setting:

In my case I used to know that if I want a beaker I must go to the laboratory and get it, I did not know that even what I am having I can use as an improvise. Now I just tell the learners just to bring, say a plastic coke bottle. We cut it into a beaker and we do the activity. You see when they do, they understand better. When I want to put tea as my indicator into acid lemon or vinegar what will happen, then they discover not by teacher telling them; you see practical is very interesting and it makes the learners to understand the subject.

The ability to improvise in the rural South African setting was a very important lesson which Lizzi learned in the professional development intervention. While the issue of improvisation might seem obvious to some, it is not so for the many teachers in rural areas whose major explanation for the poor scientific knowledge of many learners is lack of adequate facilities such as laboratories and equipment. While not trivialising these genuine needs and complaints, it is important to note that the approach, in this case, was to continue in spite of the challenges and limitations of context – a very important goal of the MSSSI project.

Selected Models of Professional Development

Lizzi found the MSSSI workshops to be very useful for her in relation to the structure of the programme. She stated that the workshops were useful in giving the participating teachers all the training necessary to conduct the activities in their classrooms:

In the workshops, they trained us, and then we came back and trained the teachers, we also did the content, as well as the science experiments. As I mentioned, they also gave us the materials and such were used in the classroom.

Along with the workshops, Lizzi also found the cluster meetings to be the best peer support systems that she has ever participated in because they (the teachers) were able to share, in greater detail, the knowledge and skills that they received from the workshops:

So when we come back from the meetings we would get to our clusters and share everything that we learned from the workshops. We equipped each other so that we go back to our various schools to practice what we were equipping each other with.

Lizzi found both the workshops and the clusters to be helpful in this regard. She also viewed the workshops as the places where they (cluster leaders) received the information which they could share in greater detail with the other teachers at the cluster meetings.

Teacher's perceptions

Part of the aim of this research is to understand the teachers' own perspectives of professional development, and in particular, to find out what they think would be the best way to improve their classroom practices. In pursuit of this aim, I therefore asked Lizzi about her opinions on the MSSSI project. She responded by asserting that it was really refreshing, uplifting, and that it reinforced her confidence as a teacher.

Clearly, Lizzi was fairly excited about the MSSSI as a teacher development programme. For her it was an "uplifting" intervention. However, Lizzi also felt that there were other issues which could be considered for improving future teacher professional development programmes. She specifically mentioned such issues as resources, time, and the involvement of other teachers in such trainings:

After workshop, if only they can provide us with the materials, equipments and the chemicals. Also they must include all the teachers, and not just one teacher from each school, they must also do the training regularly.

Lizzi believes that despite the benefits of professional development programmes, it is important for teachers to be trained more regularly. Similarly, she felt that often, teachers do not have adequate resources to conduct science experiments in their schools as many of them teach in rural settings. For teachers to be able to fully implement their learning in the classroom, the issue of resources will always be a critical component to consider in the planning of professional development interventions.

Another critical factor that arose in the conversation with Lizzi is about the selection criteria of teachers who participate in the professional development programmes. In her opinion, it would be important to involve more teachers from all schools instead of just one or two. She is of the opinion that involving many teachers from each school is important for the support of the teachers and for the long-term sustainability of the professional development in each school. In her closing comments, Lizzi was very emphatic about the need for the continuous professional development of teachers and was very positive about the MSSSI or any project with activities similar to what she experienced during the MSSSI:

I enjoyed participating in the MSSSI project really. It improved my knowledge, that's why I can go again. There are a lot of changes taking place and they need a teacher to develop himself or herself. If you stay, you will be left behind.

SUMMARY OF DISCUSSIONS

In his account of why some teachers are able to change their classroom practices by adopting very difficult and challenging approaches to their teaching of Science, Jita (2004) argues for the need to consider the teachers' biographies or identities as a critical factor in this ability. He argues that the teachers' (multiple) identities contribute to determining whether they are able to change their classroom practices and embrace some of the more fundamental changes that are required in many of the curriculum reforms. Based on his research with a group of South African Science teachers who managed to significantly change their classroom

practices to promote student learning, Jita (2004) confirms that “to change their classroom practices, teachers in South Africa and elsewhere will be challenged to (first) reconsider and change who they are as individuals (identities) within existing frameworks of educational practice” (p.25).

If professional development programmes such as the Mpumalanga Secondary Science Initiative (MSSI) programme aim to help teachers to change their classroom practices, then they may need to pay more attention to the issue of teacher identity. In this view, continuing professional development programmes will have a better chance of success if they help to change who the teachers are personally, for example, providing them with life-changing experiences which can become a catalyst for such changes. Unfortunately, many professional development programmes concentrate either on the content or on the teaching methods without considering what the impact on the teachers’ individual personal transformation and growth may be (Van Eekelen, Vermunt and Boshuizen, 2006). Author (2013) further argues that teachers do have opinions and they fully appreciate continuing professional development’s role towards fulfilling their present and anticipated needs.

CONCLUSION

To conclude, this research employed a critical theory perspective to explore what teachers think of the professional development programmes that they have participated in. As discussed earlier, critical theory seeks to empower the oppressed. Teachers are the key actors in continuing professional development and should be involved in the decisions made by the authorities. Teachers are involved in doing the work and should thus be allowed to give their opinions on professional development programmes. Critical theory was quite important in framing this research as the affected teachers were involved in framing the problem and possible solutions.

The important point raised in this paper is how the interviewed teacher’s attitude changed through her participation in the project. Although she had studied Life Sciences at college, by her confession, she was “in no way close to being a Physical Sciences teacher”. Her participation in the Mpumalanga Secondary Science Initiative (MSSI) project, however, enabled her to learn and develop the knowledge, skills and confidence required to teach Physical Sciences. Over the period of her involvement in the MSSI, she believes she was transformed into being a competent Natural Sciences teacher irrespective of her previous qualifications. She finally felt confident that she was able to do all of the activities that were associated with the teaching and learning of Natural Sciences. This is one example of how a professional development programme can begin to reshape a teachers’ identity – changing an insecure Life Sciences teacher into a competent and confident Natural Sciences expert. Through her own active participation in the programme, and the MSSI experiences, this teacher is convinced she will remain a competent Natural Sciences teacher.

REFERENCES

Creswell, J.W., Ebersohn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Nieuwenhuis, J., Pieterse, J., Pano Clark, V.L., and Van der Westhuizen. 2010. *First steps in Research*. Pretoria: Van Schaik Publishers.

- Giroux, H. A. 2003. *The critical Pedagogy reader*: Darder, A., Torres, R.D. Routledge.
- Harris, A. and Muijs, D. 2003. Teacher leadership improvement through empowerment: An overview of literature. *Educational management and Administration* 31 (4): 437-448.
- Jita, L. 2004. Resources of Biography: teacher Identities and Science Teaching. *Perspectives in Education* 22 (4): 11-27.
- Johnson, S.M. and Donaldson, M.L. 2007. Overcoming the obstacles to leadership. *Educational Leadership* 65 (1): 8-13.
- Mokhele, M.L. 2013. Empowering teachers: an alternative model for professional development in South Africa. *Journal of Social Sciences*, 34 (1): 73-81.
- Morrel, E. 2009. Critical research and future of education. *Journal of Adolescence and adult literacy* 53 (2): 96-104.
- MSSI guidebook, 2000 MSSI. 2000. *Brief introduction guide book*. Pretoria.
- Nagao, M. 2006. Challenging times for evaluation of international development assistance. *Evaluation Journal of Australasia* 6 (2): 1-16.
- Peca, K. 2000. *Critical theory in education: philosophical, research, socio- behavioural and organizational assumption*. New Mexico: New Mexico University.
- Pretorius, S.G. 2004. Issues and trends in teacher education in international perspective. *Africa Education Review* 1 (1): 46-64.
- Van Eekelen, I.M. Vermunt, J.D. and Boshuizen, H.P.A. 2006. Exploring teachers' will to learn. *Teaching and Teacher education* 22:408-423.
- Vescio, V., Ross, D. and Adam, A. 2008. A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher education*, 24:80-91

Matseliso L. Mokhele
Faculty of Education, University of Fort Hare
mmokhele@ufh.ac.za