

The influence of ecosystemic factors on black student teachers' perceptions and experience of early childhood education

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Abstract

The low enrolment and pass rate of black students motivated this study to explore how the ecosystemic factors influenced black student teachers' perceptions and experiences of early childhood education (ECE) at a former white university. The study aimed to understand black student teachers' perceptions and experiences of ECE; to provide recommendations to strengthen the ECE programme in order to meet the needs of the black students it serves; and finally to gain insight in order to address the need to recruit and retain black students. Qualitative research methods, such as 'photo voice' (Olivier, Wood and De Lange 2009), narratives and semi-structured interviews were conducted and examined through the theoretical lens of Bronfenbrenner's ecological systems theory. Initial analysis of the data revealed several categories, such as perceptions of career, status and programme; financial implications; support; and current experiences. Thereafter, further interpretation of the data explicated the following themes: 'history', 'it's all about money', 'community', 'cultural relevance' and 'me, myself and others'.

Keywords: black student teachers, ecosystemic factors, early childhood education, experiences, perceptions, former white university, Bronfenbrenner's ecological systems theory

INTRODUCTION

In South Africa, as in many other countries around the world, a short supply of teachers in relation to the numbers of potential learners precludes the provision of education, and particularly, the provision of the South African ideal, quality education for all (Arends and Phurutse 2009). Early childhood education (ECE) is particularly affected by this lack in numbers of teachers. For the purposes of this

article, ECE refers to the education of young children from birth to nine years. We also refer to 'black learners/students' as all the African language speaking students who participated in the current study identified themselves as 'black South Africans'. A serious shortage of well-trained, qualified teachers at ECE level existed before Apartheid was dismantled and has continued to be the case (Sayed 2004, 248). There is a compounding factor to the short supply -- the numbers of children who would ideally benefit from being taught by black teachers, who spoke the children's own language and understood their culture are served by too few black teachers (Robinson, Paccione and Rodriguez 2003, 202). The South African Department of Education (DoE) (Green 2010) has noted that by 2009, 4 147 Foundation Phase teachers were needed annually to meet the growing enrolment of children, yet the expected number of graduates for 2009 was only 1 275. Of these expected graduates, only 168 were black teachers speaking African languages, suggesting that the shortage of and hence the urgent need for black teachers in predominantly black areas are enormous (Green 2010). Similarly, in 2010 a mere 7.92 per cent of the student population in the Early Childhood Education Department at the higher education institution (HEI) under study was black (Faculty of Education 2010) and only 1.5 per cent (2 out of 135) of these students were expected to progress to the final (fourth) year of study (Green 2010). This is despite the fact that HEIs experienced an impressive growth in student numbers since 1994 (Gbadamosi and De Jager 2009) and former white universities experienced a dramatic shift in demographics (Brüssow 2007; Smith 2011).

The low enrolment, small throughput of successful ECE educators and growing population of children in increasingly diverse South African classrooms was the driver behind the article. The study forms part of a European Union-funded project with the main research question being: 'How do HEIs address mother tongue instruction as the language of instruction, construct student teachers' identity and recruit and retain a diverse FP student population?' The latter part is addressed in the study where attention is paid to the ecosystemic factors which may influence black student teachers' perceptions and experiences of ECE. Due to the prescribed length of the article, only an overview of these factors will be presented here.

THEORETICAL FRAMEWORK

According to Allen (2010, 3), Bronfenbrenner's (1994) ecological systems theory is based on the premise that 'all individuals are part of interrelated systems that locate the individual at the centre and move out from the centre to include all systems that affect the individual'. An individual, therefore, does not operate in a vacuum, but is shaped by surrounding circumstances, events, timeframes, and so forth which link with Bronfenbrenner's (1995) hypothesis which states that human development is the product of an interaction among process, person, context and time.

Utilising these systems to understand the perceptions and experiences of black student teachers of ECE appears to be the most appropriate theoretical point of departure for the study since it explains the interaction and mutual relations between

various systems which affect ECE in South Africa. According to Bronfenbrenner (1986), these interactions are reciprocal, with the student influencing the systems and each system having an effect on the student. Furthermore, since the ecological model considers and incorporates factors inherent both within the student as well as the student's educational institution, family and community, it provides a contextual map which aids in understanding the many different factors contributing to the students' perceptions and experiences of ECE, including broader social, cultural, and historical forces (Abrams, Theberge and Karan 2005). As such, the model offers a useful framework for identifying appropriate themes that influence black students' perceptions and experience of ECE. Subsequently, the microsystem, mesosystem, exosystem, macrosystem and chronosystem will be briefly discussed.

LITERATURE ON BRONFENBRENNER'S ECOLOGICAL SYSTEMS THEORY IN THE CONTEXT OF SOUTH AFRICA

Swart and Pettipher (2005) assert that the way in which individuals perceive their circumstances influences the way they respond to their human and physical contexts. Therefore, in considering the approaches that must be taken to build capacity in number and quality within the ECE programme, it is imperative to examine the various systems as they interact in the perceptions and experiences of the black student. Bronfenbrenner's model may graphically be represented in Figure 1.

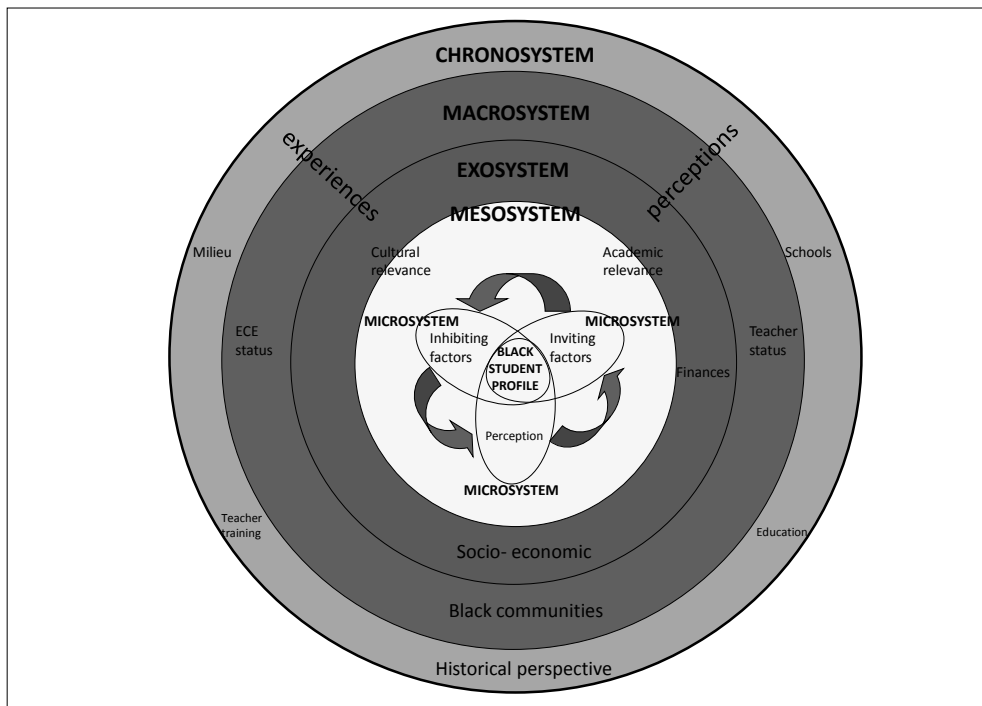


Photo 1: Graphic representation of Bronfenbrenner's ecological theory according to the literature of the study (Adapted from Swart and Pettipher 2005)

Chronosystem

Bronfenbrenner (1994, 40) defines the chronosystem as encompassing developmental time-frames over the life course of an individual in family structure, socio-economic status, employment, place of residence or the degree of pressure and ability in everyday life. In this study, the chronosystem will focus on the historical background of education in South Africa, which may have a contributing impact on black student teachers' perceptions and experiences of specifically ECE.

Historical perspective of education in South Africa

During the Apartheid regime (1948--1994), segregation in terms of education for whites, Indians, blacks and coloureds was enforced via laws and policies. Stevens (1997 in Lemon and Battersby-Lennard 2009) states that differences in the quality of education due to decades of unequal state funding during the Apartheid era are confirmed by the enormous disparities in the types of buildings, equipment, books and teachers available to these children. Per capita spending was still nearly four times as much for whites compared to blacks when Apartheid ended in 1994 with the majority of black schools possessing little beyond the shell of their buildings, whereas many white state schools were comparable with the best in the developed world (Lemon and Battersby-Lennard 2009, 2).

Teacher training followed the same route. Sayed (2004) reports that in the 1960s, many fragmented and disconnected means to teacher education were established as teacher education colleges were racially and ethnically fragmented. 'In 1979, there were no white teachers without a matric-level (Grade 12) qualification, while one third of African teachers (32%) had no matric and not many had degrees' (Christie 1994, 130). In addition, Sayed (2004, 248) posits that for the black population, educational opportunities were extremely limited, with very few blacks completing basic education, and even fewer completing secondary schooling, which resulted in many students enrolling in teacher education programmes in order to obtain higher educational opportunities.

One of the crucial challenges that the post-Apartheid South African democracy faced, was to reconstruct, against many odds, a society and education system that would create excellent conditions for teaching and learning (Masitsa 1995, 111). Yet schools in South Africa, especially black schools, are still characterised by poor Grade 12 results, high absenteeism, pupils being late for classes, and irregular attendance of classes by both teachers and students (Nxumalo 1995, 55). Many of the current black students enter higher education (HE) with an academic background typified by these conditions. In this regard, Mattes (2002) remarks that although 'political Apartheid' has been defeated, 'educational Apartheid' is still present in the lives of many South Africans. In the same vein Abdi (2003, 1) finds that the 'systems of "mislearning" have situationally, or more appropriately, deliberately thwarted the environmentally based social development of indigenous populations' with the result that education is still seen as a location of resistance where the quest for liberation in all spheres continues. A particular view about formal education became deeply

entrenched in the psyche of the black community, which will be discussed under the macrosystem.

Macrosystem

Bronfenbrenner (1994, 40) describes the macrosystem as consisting of the belief systems, bodies of knowledge, material resources, customs, life-styles, opportunity structures, hazards and life course options that are embedded in each of these broader systems. In order to explain the macrosystem in relation to the current study, the relationship between culture and education will be discussed with particular reference to black communities and their regard for the status of ECE and the status of the ECE teacher. 'Culture shapes education while education can serve as a medium to preserve and promote culture' (Chabilall 2010, 8). Accordingly, while a particular culture is recognisable by its unique values, beliefs, climate, ethos, atmosphere, character and tone (Elbot and Fulton 2008, 18), certain characteristics from the community it serves are absorbed by this culture.

In view of the aforementioned and for the purpose of the study, a discussion of the dual relationship between culture (which is represented as the black student teacher) and the various role-players in education that contribute to black student teachers' perceptions and experiences of ECE will be provided.

The status of ECE in black communities

Before the mid-1990s ECE programmes were almost unheard of in black communities (National Planning Commission 2011). The United Nations Children's Fund (UNICEF 2009) mentions that in 2000 only 13 per cent of young children were enrolled in some form of ECE programme and the 'vast majority of young children were not enrolled in ECE programmes and their development and stimulation was left to the discretion and the capacity of their parents and caregivers (UNICEF 2009, 46-47). Since then, the introduction of Grade R for five-year-olds and the expansion of ECE have resulted in a notable increase in learner numbers. Today, about 80 percent of all learners aged five are enrolled in grade R and about half the children below this age receive some form of preschool education (National Planning Commission 2011). Although it has been recognised that ECE has the ability to counteract the many factors which contribute to the poverty and vulnerability of young children in South Africa, such as high rates of unemployment among caregivers, lack of interest and support within families regarding children's education and migrant labour which takes parents away from their children (Ebrahim 2009, 52), children in rural black families are of particular concern as they are likely to adjust poorly to school, experience increased repetition and drop-out early from school (DoE 2001). It is, therefore, crucial that teachers who are dedicated to ECE enter the system to uplift the status of ECE in black communities. The aforementioned begs the question: What can be the reason for the low enrolment rate in ECE programmes in the country?

Ackerman (2006, 101) ascribes the reason to the low professional status of ECE in black communities and offers the following analysis:

ECE teachers' abilities to increase their policy capital and address their status are constrained by the very problem that needs to be addressed. Because of low wages teachers cannot afford the kinds of postsecondary education that could give them both higher status and the knowledge base to articulate why the field needs a skilled, well-paid workforce.

Furthermore, Steyn, Harris and Hartell (2011) found that many black students were influenced in their decisions to pursue careers that are more profitable or at least dissuaded from initially studying ECE due to low regard for the teaching profession by their peers, fellow community members, and particularly their former teachers. Teaching young children is regarded as the work of grandmothers and young girls rather than a professional pursuit worthy of university study, and it moreover receives little respect from students and their families (Steyn et al. 2011).

Being part of a particular culture and belief system, it may be assumed that the perceptions of their communities regarding ECE together with their advantageous political position with regard to other career opportunities that are available to black students, may influence the value that black student teachers attach to this phase. Subsequently, the financial resources, or lack thereof, affect black student teachers' perceptions. Their experience of ECE will be discussed as part of the exosystem.

Exosystem

The exosystem comprises the connections and processes that take place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence processes within the immediate setting in which the developing person lives (Bronfenbrenner 1994, 40). In the current study, the exosystem will refer to the impact of black students' socio-economic status on their choice of whether or not to study ECE, with specific reference to the financial barriers that black student teachers experience in ECE.

Black students' socio-economic status

The literature reviewed on black students' perceptions and experiences consistently exposed financial difficulties as a contributing factor to their negative regard for ECE (Hobson-Horton and Owens 2004; Kamper and Steyn 2012; Steyn and Harris 2011; Steyn et al. 2011). Moreover, potential teaching students seem to be discouraged to study teaching due to the low salaries, low regard for the profession by family and home community, and the attraction of jobs with more status (Steyn and Harris 2011). According to a study done by Breier (2010, 669),

finances play a very important role for those in the lower socio-economic groups, not only in choice of institution and study programme, but also in leading to premature departure after registration, either because of unexpected financial demands or because the student underestimated the full cost of higher education.

Similarly, in their study on recruitment and retention of black students in ECE, Steyn and Harris (2011) found that the limited financial resources of black students meant that they had to learn to balance the funds they might receive from home and the bursaries which were earmarked for tuition, books, accommodation, and food. Black students, therefore, often look for ways to economise by skipping meals, sharing books, or walking long distances to campus to attend classes (Steyn and Harris 2011).

The issue of financial implications, therefore, seems to be a double-edged sword. On the one hand, Kamper and Steyn (2012) postulate that the programme seems to be very expensive, but on the other hand, the low numeration of teachers erodes the status of ECE -- especially in the black communities where success is measured in terms of financial rewards.

Mesosystem

The mesosystem comprises the connections and processes that take place between two or more settings containing the developing person, such as the relations between home and university, and university and workplace (Sekopane 2012). For the purpose of the current study, the mesosystem will constitute the academic and cultural relevance of an institution and how it impacts on the academic adjustment of the black student who emerges from a very particular cultural and academic background. Given the fact that the university and the individual student may represent two different cultures, it may result in universities and students often not sharing the same vision with regard to how education should take place and who should primarily be responsible for their education.

With specific reference to ECE, Basit, McNamara, Roberts, Carrington, Maguire and Woodrow (2007) point out that although the student population in South Africa is becoming increasingly diverse, the teaching profession, and particularly ECE, is still dominated by white females (Basit et al. 2006; Green 2010). Teacher preparation often conserves the abovementioned and Ladson-Billings (2001, 37) aptly remarks that the 'cultural makeup of the teacher education profession is embarrassingly homogenous'. It is, therefore, '[a] challenge for South Africa to implement a programme of teacher education designed to prepare a teaching force to address the needs of its increasingly diverse student body' (Ball 2006, 4). In relation to the mesosystem, the black student teachers targeted in the study interact with this system from a particular academic and cultural background, which in turn influences the choices that they make and the experiences that they encounter in ECE.

Microsystem

Bronfenbrenner (1994, 39) defines the microsystem as

a pattern of activities, social roles and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social and symbolic features that invite, permit or inhibit engagement in sustained, progressively more complex interaction with an activity

in the immediate environment, such as a family, university, peer group and workplace.

In the current study, the microsystem will constitute the black student with emphasis on his/her particular perceptions and experiences as influenced by ecosystemic factors.

Profile of the black student

The black student in South Africa is a product of an education system with a history of atrocities which created a particular profile of the black student. Brüssow (2007) maintains that 72 per cent of the South African student population was black in 2007, yet their throughput rates were lower than those of their white counterparts. The HE participation rate amongst black students was 14.1 per cent while it was 59.1 per cent for white students (Snyman 2012, 501) due to the majority of black students either failing or not completing their university studies. The following question subsequently arises: What may be the reason(s) for the low success rate of black students at HEIs?

Zulu (2008, 43) labels black first year students as being 'underprepared' for university learning due to factors singled out by Griffin and Allen (2006), such as cultural differences, peer influences and socioeconomic status. Similarly Tait, Van Eeden and Tait (2002, 178) describe students from challenged backgrounds as 'ill-prepared' for the demands of studying independently at university level. Steyn and Harris (2011) found that the academic demands of the language were particularly gruelling for black students given the amount of compulsory reading required by modules in their university studies. These factors may inhibit black students in their tertiary studies and may additionally divert their career focus from ECE to a more lucrative field. A study field that is more financially and socially viable may be the logical choice for these black student teachers.

Students' perceptions of education

Perception is a very complex cognitive process that yields a unique picture of the world, a picture that might be quite different from reality (Tait et al. 2002, 177). With regard to the current study, these attitudes, perceptions and expectations could impact on the approach to, and the success of, the studies of black students in ECE.

In a study of student teachers' perceptions, Meier (2010) found that both Apartheid and post-Apartheid experiences contributed to the forming of student teachers' perceptions in South Africa. With regard to Apartheid experiences, Van Zyl (in Meier 2005, 170) comments that 'years of deprivation, segregation and violence effectively destroyed any hope of establishing a viable culture of learning' among black students. Furthermore, the historically inferior education offered by most formerly black schools has continued in the post-Apartheid era, thus leaving the learners with intellectual backlogs compared to their peers in former white schools (Fraser 1995, 43).

Mosia (2010) agrees with Meier (2010, 160) who further claims that

in the new desegregated education system, these perceptions were supported by manifestations of cultural differences, the perceived lack of discipline and learning culture in black schools, educators who are often unmotivated because they lack knowledge and skills, the Africanisation of learning content, and overcrowding in classrooms.

Sedlacek (1999) states that black students' perceptions are also influenced by the way they feel about themselves, which is related to their adjustment and success at former white institutions. In terms of a 'sense of belonging' this aspect of self-concept is concerned with seeing oneself as part of an institution, or at least identifying with it. Hobson-Horton and Owens (2004) also comment that black students do not drop out of university because they do not value education, but rather because they do not identify with the institution they attend.

However, it may be assumed that black students also recognise aspects which may positively influence their retention at HEIs. Gbadamosi and De Jager (2009, 880) highlight various factors that influence the choice to study at a specific HEI, including location, reputation of academic quality, course specifics, geographical location and career opportunities. Their findings are echoed by a study done by Steyn et al. (2011) which indicated that black students choose former white universities because of their reputations as good academic institutions which by implication increases graduates' chances for better job opportunities.

The overview of the various ecosystemic factors that could impact on black students' perceptions and experiences of ECE, presents a deeper understanding of why the enrolment in ECE programmes might be so low. The empirical study which will subsequently be discussed, aspired to delve deeper by involving the students themselves. The aim was to find out what black students had to say about their perceptions and experiences of the ECE programme.

EMPIRICAL INVESTIGATION

Mode of investigation

The study was conducted from a qualitative, case study approach, which aimed to 'provide an in-depth understanding of the world as seen through the eyes of the participants being studied' (Wilmot 2007). We worked through the lens of the interpretive paradigm to make sense of the reality of the study which focussed on black student teachers' subjective perceptions and experiences. All seven of the black students in their fourth year in the ECE programme were invited to participate in the study, and five students took part. The reason for choosing the above-mentioned students was to reflect the exit year of ECE student teachers as they had experience of the first three years of study, which provided them with the rich information needed for the study. In order to adhere to the ethical regulations of the HEI under study,

letters of informed consent were handed to the participants in which it was stated that their participation was voluntary, that they could withdraw at any time should they wish, and that anonymity would be guaranteed. Ethical approval was gained before the empirical part of the study was conducted.

Data collection

With reference to qualitative research, Creswell (2012, 212) posits that the researcher collects multiple types of information in order to answer the question and establish the complexity of the central phenomenon. Against this background, photo voice, narratives and individual interviews were conducted. The data collection consisted of three phases as outlined in Table 1.

Table 1: Phases of data collection

Projection of data collection			
Phase	Data collection strategy	Objective	
Phase 1	Administration	1. Ethical clearance	Permission to conduct research
		2. Contact participants	Establish relationship in higher education institution
		3. Correspondence with participants	Explain nature and intent of study
Phase 2	Facilitate Photo Voice	1. Photo Voice Technique	1. Orientation
		Discussions Preliminary field notes	2. Exhibition
		2. Narratives	3. Wrap-up
Phase 3	Individual interviews	Gather data	
	Analysis	Interpret data	

While implementing the photo voice method during phase two of the data collection, a step by step guide to facilitating a photo voice project was used, as compiled by Olivier et al. (2009). The steps were incorporated into three sessions as follows:

- Session 1: Orientation
Five fourth-year black ECE student teachers were purposively selected in a homogenous sample and requested to participate in the project. It was explained that the research project was based on their perceptions and experiences of ECE within the context of the programme, and their critical role as participants was emphasised. The participants were issued with the following prompt for taking the pictures: *Take pictures that depict and describe how you perceive*

and experience *ECE at the university*. The participants were given three days to take a maximum of 10 photographs, with a free rein, of anything that they associated with the topic at hand. They were sent off to take the pictures and arrangements were made to collect the cameras and simultaneously plan for the next session. The films were developed and the photographs printed.

- Session 2: Exhibition

During the second session, the participants displayed their pictures individually in a boardroom. The discussions with students which followed focussed on their reasons for selecting certain photographs to express their perceptions and experiences of ECE at their university. Each participant was asked to pick one picture which best depicted their perception and/or experience of the ECE, be it positive or negative. They were requested to write a narrative of about 300 words about the selected picture. The participants were asked to submit the narratives within one week.

- Session 3: Wrap-up

The third session involved meeting with the participants where they were given the opportunity to present their written narratives. The participants were given the assurance that they would be allowed to scrutinise the data of the photo voice method, should they wish to do so. The pictures and narratives were subsequently analysed and interpreted.

Data analysis according to participants

In order to protect the anonymity and confidentiality of the participants, their names are not disclosed and they are referred to as participant A, B, C, D and E (see Table 2). The photographs and narratives presented data that was both interesting and of great value in eliciting responses to the ecosystemic factors that influenced participants' perceptions and experiences of ECE. Surprisingly, the duplication of themes that was derived from this data was minimal as each participant chose a different focus to discuss in their narratives. Finally, salient points that were extracted from the individual semi-structured interviews will also be discussed.

Table 2: Background data of participants

Participant	Gender	Race	Home language	Year of study	Age
Participant A	Female	black	isiZulu	4 th year	25 years
Participant B	Female	black	Ndbele	4 th year	20 years
Participant C	Female	black	Sepedi	4 th year	21 years
Participant D	Female	black	Sepedi	4 th year	24 years
Participant E	Female	black	Sepedi	4 th year	20 years

Participant A's perceptions and experiences of ECE, titled 'Career choice'

Narrative: Participant A chose a photograph of a school to portray her perceptions and experiences of ECE. She explained in her narrative that this photograph signified that she was never part of a crèche or pre-primary school, yet her brother was and this developed her interest in ECE. The photograph further illustrated her eventual choice of career (workplace) where she realised that there were few black students in ECE. Her university career developed her passion for working with children and prepared her to become a teacher, hence the choice of the title 'Career choice' for this participant's contribution.

Photo 1: Participant A's perceptions and experiences of ECE, titled 'Career choice'



Interview: Participant A's initial perception of ECE, after having made her career choice, was that it was more inclined to white females:

I started Foundation Phase and I saw only one black girl there and so I was like ok I can be a bit comfortable with it, but I thought oh it's a white course type of thing, you know, because there were not a lot of black students and it was only girls.

Even though she was part of a minority who chose to study ECE, she felt that:

I didn't want to go to a office and I wanted to do something that's gonna make me happy. So it happened that ECE actually fit the shoe.

On the other hand, she went on to explain that although students are exposed to what ECE ideally should be, it seems that within the reality of a country as diverse as

South Africa, teachers are not always equipped with the necessary skills to meet the current demands of diversity and multicultural teaching. For this reason she felt that she was not prepared to teach in former model C and private schools:

With our diverse South Africa, it's actually impossible to teach in one mother tongue unless, where I come from I can actually do that. Yes.

Therefore she would prefer to go back home to teach after completing her degree:

Okay, when I finish my studies, I'm going back home. Yes, to Newcastle.

Participant B's perceptions and experiences of ECE, titled 'Financial statements'

Narrative: The photograph that best depicted Participant B's perceptions and experiences of ECE was that of three different bank notes (R100, R50, R10). According to her narrative, the reason for her choice of photograph was that ECE is more expensive than other phases in terms of the resources needed to complete the many practical assignments. The money also symbolised the perception of receiving a lower salary compared to teaching in another phase. Finally, the photograph represented the financial support that is given to the student by means of a bursary. Therefore, the title 'Financial statements' was most suitable in this case.

Photo 2: Participant B's perceptions and experiences of ECE, titled 'Financial statements'



Interview: Participant B started the interview by mentioning other people's views and opinions of ECE:

Oh, they see a lot of work, but mmm, they think, they think it's easy to do ECE carrying those charts, web cards, pictures and they think it's simple, they think ah I should have done it. But it's not simple. Some friends say ECE doesn't pay, we don't get same salary as a FET teachers. Which is wrong. Ja.

In line with the amount of practical work that needs to be done in ECE together with the financial challenges that most of the black students experience, this participant elaborated:

I think it's because it's the uh, every assignment you have to spend money. Without money, either you fail or you don't get good marks for your assignments.

Yet, she did feel supported to some extent by the bursary she received:

Oh, the bursary, I think the bursary I got it last year and this year. Ja, it helps a lot.

Participant C's perceptions and experiences of ECE, titled 'Teaching and learning'

Narrative: Participant C's photograph was of a man with two children sitting on his lap. According to her narrative, it symbolised an adult's role with children and the importance of play in learning. It moreover reflected her understanding of ECE where play and an informal process of learning develop the whole child. Furthermore, she was of the opinion that the interaction between an adult and a child is what develops a child. The photo was, therefore, suitable for this participant's feedback as was the title, 'Teaching and learning'.

Photo 3: Participant C's perceptions and experiences of ECE, titled 'Teaching and learning'



Interview: In her contribution to the data, Participant C expressed her original disinterest in ECE prior to deciding upon it as her career choice. Her initial understanding of ECE which was influenced by members of the community, is outlined below:

Like old school, like who still does Education and those things, that was my first opinion, who still does Education? I don't know, I just think maybe cos, a long time ago, our parents, it was the main career for our parents, the main one. Nowadays there's Engineering and all that and we're so focussed on money and, instead of passion, the passion and our abilities and skills. We ... are money driven.

Yet, after enrolling in ECE, she had a different perspective and she commented on her experiences thereof, especially on the link between theory and practice, which was also portrayed in her photograph:

Everything that I've learnt, most of the things that we learn in the University are more ... what I'm trying to say, is that sometimes we learn more than the University says we must do like the text books and everything, because when you are in a practical condition. You gain experience and just have to implement some things in your own way, like discipline.

In general, this participant had an extremely positive outlook of ECE, and she viewed it as an opportunity to uplift her community. Her thoughts on her present involvement and choice of future profession are elucidated below:

Bushbuck Ridge yes. I would like to go home. I know most people say why go home? It's so dull and all that ... 'you have to develop the schools, you are the new generations who are going to make a difference. That's why you have to come back here and work for your community'.

Participant D's perceptions and experiences of ECE, titled 'Recycling'

Narrative: Participant D exhibited a photograph of an assignment which required of her to make musical instruments. The picture showed shakers made from bottles filled with corn and bells made from metal bottle tops. Her narrative described the reason for her choice of photograph to depict her perceptions and experiences of ECE as being that of a recycled musical instrument. To explain further, her initial experience of ECE was being amongst many white, female students who could financially afford to complete practical assignments. However, she later felt that, regardless of cost, race or gender, people can always recycle – *use what people have thrown away and create something valuable to children*. She added that her perceptions and experiences ECE have been 'recycled'. In light of the above-mentioned, it was apt to title this participant's views as 'Recycling'.

Photo 4: Participant D's perceptions and experiences of ECE, titled 'Recycling'



Interview: This participant's view of ECE was initially shaped by her community:

I remember from High School when I was going to do Foundation Phase, oh everyone was just laughing at me. And like even now, when people ask me, so people take it for granted, they really, really despise us ... Ag man, teaching kids is just about ABC, it's like nothing, it's for dumb people, or something, I don't know. But, they have a very different perspective about it like, you know. Even at home, they were like oh [participant name], are you really, really going to do that?

Regardless of the above-mentioned view of the community, this participant would like to return to her home community to start her career as she feels that these schools are ill-equipped and she can contribute and implement what she has learned:

I'm thinking of going back home. I'd like to go back home and just implement, I just feel that around here there's everything, like I've been doing my teaching prac in private schools, even the pre-school I was in, so I want to try to go home where there's no resources and try my creativity and see how it goes. So ja, I would love to go back home.

According to her and in agreement with her current experiences, she feels that being an ECE teacher is special:

Wow, it's something special, it's really, really important, it's up there. I mean someone has to teach your kids, someone has to teach my children and I want to teach others. So, to me it's very, very vital. It's one of the most important things.

Participant E's perceptions and experiences of ECE, titled 'Support'

Narrative: Participant E chose a photograph of the bookstore to portray her perceptions and experiences of ECE. She believed that, similar to a bookstore, ECE has given her the support, foundation, knowledge and materials to equip her for her future role as teacher. Her narrative disclosed that she needs technical support (access to and use of a computer), language support (English as her second language), and financial support (resources for assignments, books, etc.). The appropriate title of 'Support' was given to her photograph, because ECE is like a bookstore where she gets everything she needs for support in becoming a teacher.

Photo 5: Participant E's perceptions and experiences of ECE, titled 'Support'



Interview: Initially, Participant E's perceptions of ECE were limited as it was not her first choice of career, but rather a means of financial support:

Okay, at first I wanted to be a Police woman, but then I didn't qualify because of my age. I was too young, I was only sixteen, so I applied at uh ... and then I applied here because it had the bursary. I thought it was too much work to do, dealing with kids but then in a classroom, it's not like working with kids at home, like when they are playing you discipline them and stuff, but then in the classroom it's a different thing.

This participant felt that ECE is regarded as profession with status in her community, as a degree is needed. Both personally and from the community's standpoint, having a degree in ECE is recognised as respectable and important in laying a foundation for the nation.

Oh, okay, for me being involved I feel it is a good thing, I'm proud of myself and then I see it as I do have a status, because it's a degree ECE, the old ones have Diplomas. So I can have a degree, it's a status, especially when I go back to my community, because there isn't any people who have, there's a few who have degrees.

RECOMMENDATIONS

The findings revealed historical, societal, financial, academic, cultural and personal factors. Subsequently, the following recommendations can be made, based on the

literature that was surveyed as well as the data from the empirical study, with the aim to enrich the ECE programme and to recruit and retain black student teachers.

HEIs should orientate and prepare black students for specific programmes (ECE)

Black students are underprepared to meet the demands at an HE level due to inequalities of the past, socio-economic status and an insufficient support structure. Furthermore, academic results cannot be regarded as the crucial predictor of academic success -- non-academic factors should also be considered. These mainly non-cognitive student features include the following: self-concept, motivation, attitude (Sikhwari 2007), student satisfaction (Lourens and Smit 2003), support from families (Dass-Brailsford 2005), approach to studying, cultural expectations, academic literacy, time management skills, psychosocial factors, the peer culture, the quality of teaching, the interaction between students and the academic and social systems of the university, students' belief in their own ability and the student support structures offered by the university (Fraser and Killen 2005, 27).

Considering the abovementioned, it is recommended that specific support mechanisms be put into place to assist students in a process of enculturation so that they become part of the university setting academically, emotionally, culturally and socially.

HEIs should have strategies to recruit and retain black students

It was mentioned repeatedly in the literature, as well as the data, that the recruitment and retention of black student teachers in ECE is critical. Firstly, it is imperative that HEIs examine the methods used to attract these students to ECE. The way in which information is conveyed to black student teachers should be evaluated and improved. Black students need to be informed about ECE before deciding upon a career by marketing actions of the programme. An option of doing so is to address students at schools by showing them a short video on the outline and experience of the ECE programme. Black student teachers also need to be advised whilst studying about the various support options available to assist them on an academic, financial and social level. Such support can be offered in the form of a student help centre, online support or a mentoring programme.

HEIs should address the cultural relevance of the ECE programme

Moreover, once the black student teachers have been recruited into the ECE programme, it is necessary to address the content of the programme. Is the ECE programme culturally relevant to meet the needs of these students? Relating to institutional factors in the ecosystem, 'policy-makers have accepted the view that blacks have a positive and affirming contribution to make to education provision ... to eradicate racism and counter cultural stereotypes' (Basit et al. 2007, 281). Therefore, it is significant to conduct an in-depth examination of the ECE programme at higher

education institutions so that future graduates may make a productive contribution to the teaching force in South Africa.

HEIs should examine the financial support offered to black students in ECE

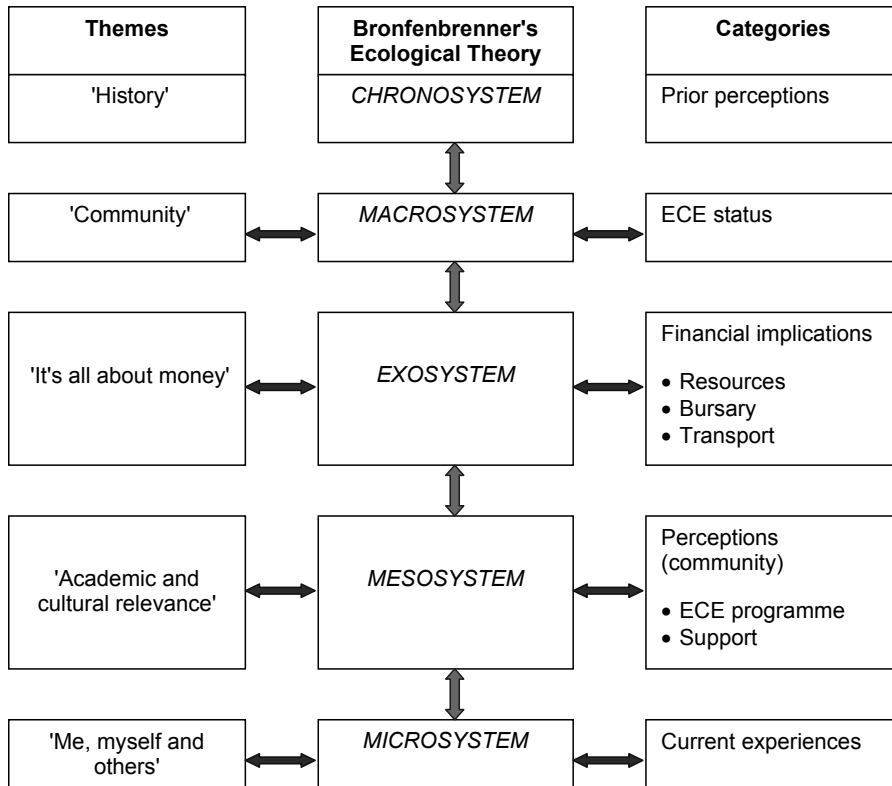
The participants exposed that the ECE programme, more so than the other phases studying education, was particularly expensive. Costs involved were attributed to assignments (where materials were necessary to produce high-quality teaching aids), transport expenses to teaching practice sites (as many of the black student teachers rely on public transport), as well as accommodation (since the majority of black students come from areas without an HEI). In many cases, they receive bursaries to study. Yet, the bursaries pay out late, which leaves them at a disadvantage until they acquire the necessary funds. Similarly, the bursaries only pay for academic fees and do not address the additional expenses of assignments and transport specific to ECE. It, therefore, becomes increasingly significant to examine the ways and means in which these black student teachers are financially assisted.

CONCLUSION

The importance of exploring black student teachers' perceptions and experiences of ECE is undeniable considering the shortage of qualified and well-trained teachers, and more specifically the low enrolment and throughput rate of black student teachers in ECE. From the literature review it became apparent that ECE in South Africa is most seriously affected in township and rural areas (Crosser 2009) where most black student teachers come from. It was, therefore, crucial to understand the ecosystemic factors of Bronfenbrenner's ecological theory from a black student teacher's perspective in order to contextualise the interpretation of data in the study.

The data collected from the participants highlighted various ecosystemic factors that influenced their perceptions and experiences of ECE. Table 3 highlights the relationship of the main findings of the study according to the categories that derived from the data in relation to the ecosystemic factors from Bronfenbrenner's ecological systems theory.

Table 3: Findings according to Bronfenbrenner's ecological systems theory



The chronosystem, which refers to the contextual timeframe, was constituted by a discussion of the history of education in South Africa. This theoretical aspect was linked to the findings which revealed that the black student teachers' perceptions about education, and specifically ECE, can be associated with the educational past of South Africa. Furthermore, the matter that the black community influenced the black student teachers' perceptions of ECE, specifically with regard to the low status afforded to this phase of teaching, was addressed in the macrosystem. The recurring theme of financial implications brought to the fore by the black student teachers, was discussed under the exosystem, a broad system in which the individual does not directly function. The mesosystem which interacts with various structures of the microsystem, examined the cultural and academic relevance of the black student teachers' perceptions and experiences of the ECE programme and the support they received. Finally, the current experiences of the black student teacher were the primary focus of the microsystem, a system that is closest to the individual. In accordance with Bronfenbrenner (Allen 2010), the abovementioned themes, systems and categories are 'interrelated'.

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