Demographic implications of transiting from segregation to integration: a focus on education issues in Buffalo City, South Africa

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Abstract. The study aims at interrogating the transformation of education in Buffalo City following integration of East London with its black townships. This paper is largely framed from a quantitative paradigm that draws from statistical data in linking population changes with educational patterns in the study area. Census data was used to trace population changes in post-apartheid South Africa, while performance in education was informed by matriculation results. Quantitative data were complemented with key informants' qualitative opinions. The results indicate that the quality of education in former "white" schools is better than that of "township" schools. There are several pull factors that attract township learners to former white schools, albeit with integration challenges. The study concludes that if these challenges are masked to education planners and policy makers, they militate against the envisioned liberalisation of the democratic education system.

Contents:

1. Introduction

One way of assessing the extent of apartheid transformation in South Africa is to look at the country's education sector during the post-apartheid era. Scholarly insights indicate that the shift from apartheid to a democratic South Africa has not been a smooth trajectory (Spinks, 2001; Beall et al., 2002; Donaldson et al., 2013; Parnell and Crankshaw, 2013; Siyongwana and Chanza, 2016). There is evidence in many parts of the country that the then apartheid government created a significant number of displaced settlements, the majority of which remained "hidden" behind the lavish cities and towns (Marais and Ntema, 2013; Siyongwana and Chanza, 2016). This has given rise to settlements that scholars refer to as "hidden urbanites", suggesting that although these communities were geographically urban, in reality they were located away from the functional urban areas. Characterising the urban morphology of the pre-independence era were various forms of inequalities manifesting in socio-economic, political and environmental disparities dividing the "superior" white minority from the "inferior" black majority population. In the interest of luring people to such neglected settlements, the South African government tried to provide services, in the form of health, education and entertainment facilities. These services were intentionally provided to restrict the movement of African blacks to former designated areas and to ensure that there were no African blacks in the former white designated areas and in this case (East London) "curfew laws" were implemented. As much as there were many schools and colleges that were built in Mdantsane by the apartheid government, the education system remained discriminatory and oppressive. The apartheid government implemented the inferior Bantu education system to the marginalised populations of African blacks, coloureds and Indians. This education system was meant to produce manual labourers

and obedient subjects. In addition, the customised education system undermined intellectual and cultural life through intense censorship of books, movies and radio and television programmes as a way of entrenching Western colonialism (Republic of South Africa, Bantu Education Act of 1953). Similarly, in the higher education sector, the Extension of University Education Act of 1959 prevented black students from attending "white" universities (except with government permission) and created separate and unequal institutions based on race. There was also a creeping desire by the student of colour (African black, coloureds and Asians) to explore education in former white designated schools but this drive could not go far because of the resistance of white management in those schools to admitting students of colour.

Significantly, the relaxation of influx control in 1985, which was followed by the repeal of apartheid ideology, notably, the Group Areas Act of (1950) in 1991 resulted in a steady new migration and urbanisation patterns in Mdantsane and East London. The new migration trend allowed both internal urban migration and rural–urban migration. This migration impacted on the population distribution of East London, Duncan Village and Mdantsane as some former white suburbs experienced population growth while Mdantsane shed its population numbers. Attainment of democracy in South Africa marked the beginning of the change that targeted the unsustainability of place due to unemployment, new governmentality, deterioration of education and health services, redefining of boundaries, spatial integration and the people's drive to feel integration. Thus, after 1994, South Africa embarked on a strategy to eradicate the former policy of exclusion of the township that had characterised the apartheid era (Visser and Rogerson, 2014; Marais et al., 2016).

A prominent feature of post-apartheid development interventions was the theme of shifting from segregation to integration. In examining this transition, key questions arise as to how the population

changed in relation to the envisioned socio-economic transformations, particularly in the area of education. The study aims at illuminating, particularly on the policy front, the implications of the segregation–integration transition in education planning in Buffalo city, and has been benchmarked by the pass rate of Grade 12 learners. In order to situate the analysis in context, the paper proceeds by examining the existing scholarship that treats the shift from segregation to integration – in particular, the policies and strategies that have been used to advance the democratic post-apartheid development agenda and their subsequent demographic impact. This review is followed by an outline of the methods used to gather and analyse the research data. The results that follow are discussed with clear highlights of the population and education situation of learners over the transition period. We conclude by giving pointers on key issues that should be considered in order to meaningfully transform the education system of formerly marginalised areas.

2. Historical and scholarly reflections

This section looks at the main events that shape the urban transformation processes. This analysis is intended to inform the segregation–integration drive, which is the focus of this study. In order to show past scholarly contributions in the knowledge of transformation of township settlements, the section also reviews related scholarship.

2.1. The segregation–integration transition

The theoretical foundation of this study is premised on the theory of change of the school system. At the time of attainment of South African democracy, the education system reflected deep imprints of racial segregation, variation of different types of tuition and evaluation systems, disparities in terms of resources across different types of schools, and territorial exclusions that prohibited black learners from accessing certain schools. Concerned about these discriminatory tendencies, the post-apartheid government had to swiftly react to them when it ascended to power. One of the important consid-

erations that the new government undertook was the addressing of the 1976 June 16 riots demands of the fall of racial segregation on learners, a single type of education for all, and the eradication of inequalities in educational resources. The post-apartheid government hoped that by advocating racial integration in schools, leaners would become the catalytic agents of racial change in their communities, and presumably the envisioned transformation would cascade down to the rest of the community members. In proposing the unitary type of education, the post-apartheid government intended to reduce inequalities in terms of resources and standardisation of the curriculum.

In addition, in order to drive the change in education, the government focussed on introducing spatial policies and redefining the boundaries. For example, by amalgamating former white towns to townships or spatially integrating developed regions with less developed areas, the intention was to eliminate spatial injustices and promote racial integration, and to promote equal sharing of services, including educational services. Accordingly, two policies are worth mentioning: one, the South African Constitution, and two, the South African Schools Act (SASA). The 1996 South African Constitution endorsed that education be transformed and democratised in accordance with the values of human dignity, equality, human rights and freedom, non-racism and non-sexism. It guarantees access to basic education for all through the provision that "everyone has the right to basic education". The SASA, Number 84 of 1996, gives learners the right to be admitted to any public school, irrespective of race.

A major product of the repeal of apartheid is evident in the functional integration of all sectors of Buffalo Municipality through the Buffalo Transitional Local Council. Later, in 2001, wall-to-wall municipalities were introduced in South Africa, and Buffalo Metropolitan Municipality (BMM) was created, consisting of East London, King William's Town, Mdantsane, and the surrounding townships. It was envisioned that different segments of BMM would eventually merge through infill. The implementation of these drastic measures on Buffalo City restructuring was reinforced by a diversity of policies. These include: the Development Facilitation Act of 1995 (Act No. 67); the Urban Spatial De-

velopment Framework (USPDF) of 1997; the White Paper on Local Government 1998; the National Development Plan 2012 (NDP); the Spatial Planning and Land Use Management Act (SPLUMA) of 2013; and the Integrated Urban Development Framework (IUDF) of 2014. Essentially, these policies emphasise sustainability in residential communities, integration and desegregation, narrowing spatial injustices, inclusion, and equal access to services provided by the city. For example, The White Paper on local government rightly pointed out that "*spatial integration is encouraged to reduce the costs of transport and service provision, and enable social integration*" (Department of Provincial Affairs and Constitutional Development, 1998: 31). Further, the NDP was to ensure that all South Africans attain a decent standard of living through the elimination of poverty, reduction of inequality and provision of services and facilities, including: housing, water, electricity and sanitation and access to quality education. The Urban Development Framework states in its vision for townships that: "*Rebuilding the townships cannot occur in isolation from integrating strategies. The intention is to move actively away from the segregation of different parts of the city and to ensure equity across the urban landscape, thus offering all urban residents access to opportunities and facilities.*"

In the education sector, the cementing of the segregation–integration transition became evident in April 1994 when the government declared that all existing education departments including those of self-government homelands, were to merge into a unitary system (Lemon, 1995). Consequently, South Africa has witnessed the regrouping of schools as shown in Table 1. The contrast in areas under study is evident in the schools that fall in different categories. Schools in Mdantsane and Duncan Village fall in Quintile 3, while most schools in East London fit in Quintile 5. The focus of this study is to critically examine the extent to which the integration policy associated with the post-apartheid education system has managed to address the previous neglect of township schools by focussing on education services and the performance of learners.

2.2. Scholarly Highlights

Notwithstanding considerable scholarship attention to the socio-economic transformation during the transition from apartheid to post-apartheid, there is limited treatment in the generation of trends that match population changes and education factors in South Africa. Scholarly debates around the issue of transformation of Black African townships during post-apartheid era became volatile starting as early as after the implementation of the Development Facilitation Act of 1995 (Act No. 67) and the trend is still continuing. For example, on the one hand, Crankshaw and Parnel (1996) focused on the transformation of public houses in the townships. Their outcomes indicated a conflict in terms of meeting the intention of the post-apartheid spatial policies of reducing spatial injustices and creating of sustaina-

Table 1. Categorisation of schools in post-apartheid South Africa

Group	Description
Quintile 1	Rural remote schools: difficult to reach the schools, limited resources, threshold of learners from poor families and heavy reliance on government funding.
Quintile 2	Rural and farm schools: difficult to reach the schools, limited resources, threshold of learners from poor families but better than Quintile 1 and heavy reliance on government funding.
Quintile 3	Township and semi-rural schools: can be accessed without difficulty, limited resources, threshold of learners from low and medium income families, reliance on government funding and can charge low school fees.
Quintile 4	Former designated Coloured and Asian schools: easy access, adequate resources, threshold of learners from medium income families, they depend on government funding and can charge moderate school fees.
Quintile 5	Former designated White schools: easy access, fully resourced, threshold of learners of medium and high-income earners, financial support from the government and can charge high school fees from learners.

Source: Adapted by authors from Department of Education, 2010. Amended National Norms and Standards School Funding).

ble settlements. This is because most of the housing projects lacked sustainability and were located at substantial distances from places of employment, thus strengthening the apartheid ideology. Further, Marais and Krige (1999) assessed the population growth and population migration of the Botshabelo hidden urbanites. They indicated that the area had experienced drastic population decline as people were migrating to Bloemfontein. This confirms that following the withdrawal of industrial incentives in the early 1990s, many industries had to close. Like in Mdantsane, this limited employment prospects in Botshabelo. Sadly, these developments happened at a time South Africa, which had joined the global economy, was battling to keep pace with the increasing competition from global economic trends and fell victim to imports from China. In particular, the textile industry, which was the major employer in Botshabelo was seriously affected (Tomlinson and Krige, 2002). Demacon (2010) argues that mall retailing in the townships is not a sound investment as the revenue turnover is relatively poor. However, he acknowledges that township malls do provide services to people and therefore people do not have to travel long distances to get services. Regrettably, the malls have not done much in improving the local economy in providing decent jobs. This observation resonates with Donaldson and Du Plessis (2013) who also endorse that retailing in township malls are doing little to improve the economy of the townships. Siyongwana and Chanza (2016) blame the township malls for eroding small Black African entrepreneurs.

Donaldson et al (2013) had viewed the impact of the post-apartheid policies on townships' transformation in facilitating integration. Their study on the African black middle class, commonly known as 'Black diamonds', presented interesting results regarding these policies' compliance to racial integration and nearness to upmarket city facilities. The results of the research have indicated that as much as the black middle class can afford to integrate in former white suburbs, to some, 'Black diamonds' townships have remained their preferred choice of residence. The study also revealed that most 'Black diamonds' are using the upmarket resources like schooling for their children, shopping and for recreation but during certain hours of the day. This discovery is in line with the demograph-

ic trend observed in Mdantsane that shows the reluctance of some of the middle class residents to leave for the more lucrative East London. Only a few were reported as keen to move out of the township and take residences in affordable 'former White residences'. Marais et al (2016) reflected on how the post-apartheid urban spatial policies had not improved the value of housing assets in Botshabelo. In their study on hidden urbanites in Mdantsane Township, Siyongwana and Chanza (2016) weighed in on general feelings of pseudo socio-economic transformation associated with the post-apartheid South Africa. Only Cloete and Massey (2017), in their study on hidden urbanites of Seshego in Polokwane, attributed some high level of integration to predisposing factors.

Elsewhere, the education sector has seen a significant number of studies that treat the educational inequalities. For example, Rosiek (2019:2) has recently examined the inequalities of the education system in the USA. He bemoaned the resurgence and persistence of racism in the USA schools, describing it as: "…*a disease that was never fully cured, (where) school segregation has come out of remission and returned in a form that is more pervasive and harder to treat.*" Selected scholars studying the segregation in the education system of South Africa include McKeever (2017), Pienaar and Morton Mackay (2014), De Kadt (2009) and Lemon (2004; 1995). Analysing data spanning from the period setting the post-apartheid South Africa, McKeever (2017) revealed quantitative and qualitative distinctiveness in education performance between Black and White populations. His conclusion resonates with the views by Rosiek (2019) and Pienaar and Morton Mackay (2014) that the differences in education services have tended to perpetuate inequality over time in a society that no longer accepts racial discrimination. De Kadt (2009) sees the potential that education provision has in addressing social injustice by creating equal opportunities, facilitating development and strengthening democracy. However, she complained that this potential has not been unleashed in contemporary South Africa because of various reasons that include the skewedness in resource distribution, delays in meaningful implementation of development policies and limited participation in democratic governance. Lemon (2004) proposes a multi-scale intervention in redressing

the education inequalities in South Africa through local initiative, provincial practice and national policy. Thus, it seems that the joint assessment of changes in population and education performance of integrated settlements has not been given a closer assessment. In this study, we use the Buffalo City Metropolitan Municipality that integrates former Black township settlements and a predominantly White settlement to evaluate the demographic implications associated with the segregation–integration transition in the education sector.

3. Research materials and methods

This paper adopts a case study analysis of population and education developments in the Buffalo City. This study is informed by a quantitative–qualitative methodological scheme, which is intended to understand the segregation–integration shift by analysing data on population and education trends. The population data used is largely quantitative, while the quantitative analysis of education changes is backed by qualitative opinions of key stakeholders drawn from the education sector. The study used census data sets of 1996, 2001 and 2011 to

determine changes in population characteristics. These are the only available census data sources in post-apartheid South Africa. Changes in pass rates of learners were analysed using data sets obtained from official provincial education statistics obtained from the Provincial Education Department. Primarily, the trend analysis compared the changes occurring in Mdantsane, Duncan Village and East London (see Fig. 1).

The educational transformation trends were supported by reviewing local reports on school statistics and field observations. The subsquent procedure in the research process involved the collection of primary data through interviews with key informants. This method was intended to understand the views of key informants (mainly educationists) on education services associated with the segregation–integration shift and the general performances of the learners. These key informants were purposively selected and, where necessary, the chain-referral procedure was adopted to identify the key participants. Thus, a total of 26 participants engaged consisted of 1 senior education official in the Eastern Cape's Education Department; 11 educationists (who either once served or currently serve as principals and teachers in Duncan Village, Mdantsane and East London schools); 4 former students who stud-
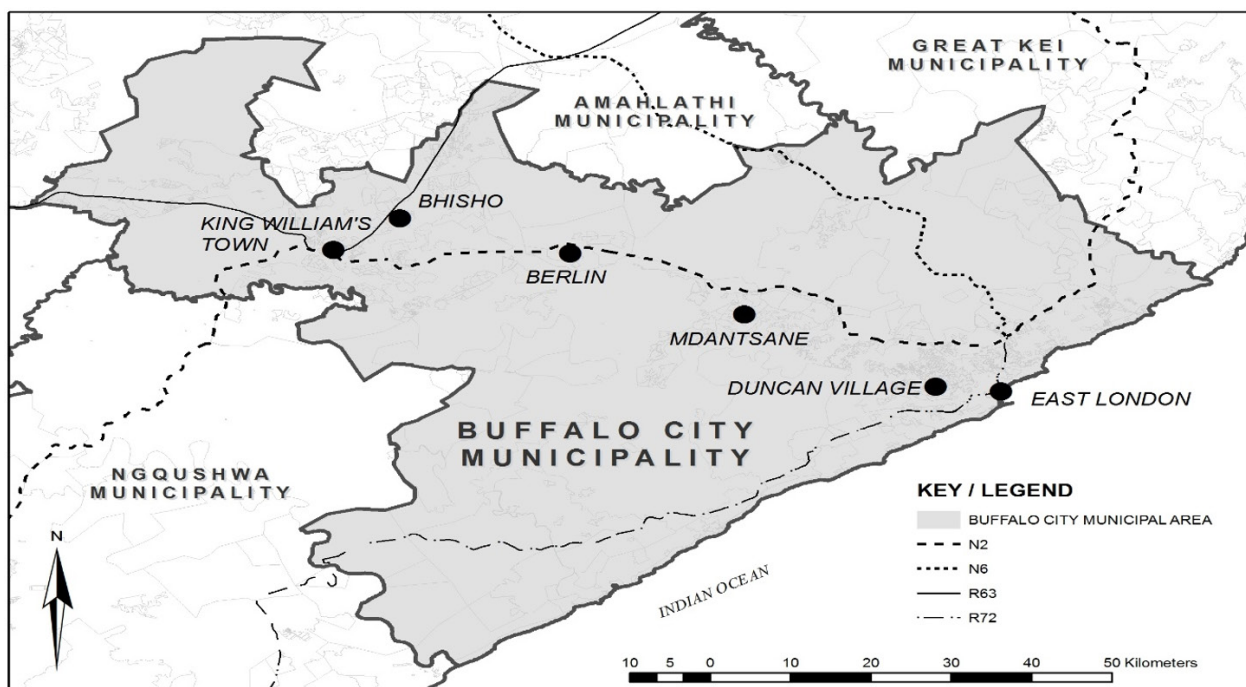

Fig. 1. The study area map (Drawn at NMU GIS lab, M. Nagar)

ied in both Mdantsane and former White schools, 1 Teachers' Union representative, 1 member of the School Governing Body (SGB), 1 Councillor of Mdantsane, 1 Senior statistician (Bhisho), 2 examination data capturers, and 4 Mdantsane and Ducan Village parents. These respondents provided information on pass rate of Grade 12 learners (Matric Level), school enrollment rates, learning environment and their learning experiences, respectively.

The study used a combination of face to face, electronic and telephonic in-depth interviews. Face to face interviews were conducted with respondents in their respective areas which included their homes, work places and neutral venues such as coffee shops between March and April 2019. Where it was difficult to meet the participants, the study engaged the respondents through phone calls and e-mail communication. The respondents were appraised about the purpose of the study and how they would be requested to participate and would email back the completed set of questions. The questions were formulated to gather their experiences and opinions on the education system during apartheid and post-apartheid periods. It was also necessary to show the trend in Matric performances of learners from the statistics obtained from selected schools in the study area. The comparison between the pass rate of learners in East London and Mdantsane were determined through Pearson Chi Square test and the results were used to identify the differences in pass rate (Braun and Clarke, 2006). Analysis outputs of quantitative data were illustrated after utilising the analytic capabilities of Microsoft Excel. Qualitative data obtained was treated through content analysis.

The study attempted to marginalise the gaps in the methodology described here. Although being official data, the census data does not reflect the population changes that happened after the last census of 2011. This means changes that happened over the last eight years are not included. In South Africa, matriculation is the standard level of education attained at Grade 12 where a learner can then move to tertiary education, that is colleges or universities. At Grade 12, a learner sits for National Senior Certificate (NSC) examinations, commonly known as "Matric". The use of matriculation pass rates as an indicator of education performance has been criticised by Carnoy and Chisholm (2008). In some cas-

es matriculation pass rates can be manipulated by, for example, holding weak learners back by discouraging them from writing all Grade 12 subjects but spread over two years, or by advising learners to substitute a difficult subject with an easier one. In addition, a learner can pass Matric with a bachelor category with the total marks being lower than the one who is in the diploma category. The study only circumvented these gaps by triangulating with interviews. To account for repeated measures (measuring the same schools every year), centre number was used as a random variable.

4. Results and Discussion

4.1. Population changes

The question on how the population profiles of Mdantsane, Duncan Village and East London changed and the subsequent impact on the education system can best be addressed by comparing population data between the censuses (1996, 2001 and 2011) as shown in Fig. 2. Buffalo City is the only area showing gains in population, with an annual growth rate of 0.68 between 1996 and 2011. On the contrary, Mdantsane and Duncan Village show losses in population with negative growth rates of 1.04 and 0.68, apiece. As discussed later in the next section, this situation has been seen to impact negatively in the provision of social services, in particular education services that are considered in this paper.

A more illustrative demographic analysis relates to population composition and its attributes. Thus, the scenario depicted in Fig. 2 is further analysed by drawing from the age structure of the population in the studied areas (see Fig. 3).

A look at Fig. 3 depicts a steady increase in aging population for the three areas. The age groups 0–14 years and 15–34 years are declining while that of ages 35–59 years and 60+ years are gaining in numbers. This situation requires careful planning to meet the social demands of the aging people while at the same time exerts challenges for those in school going ages. For Mdantsane, the children category (0–14 years) fell from 30% to 27% be-
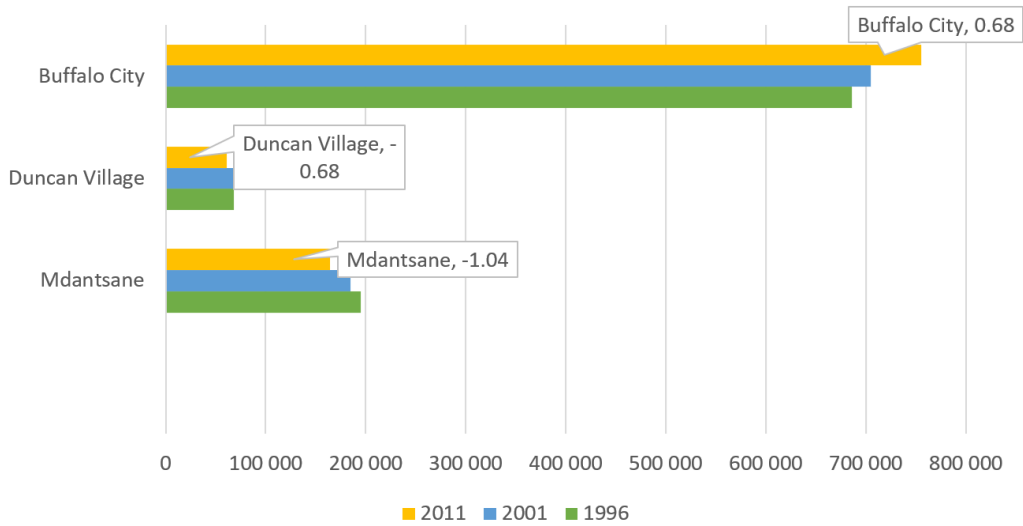
Fig. 2. Population changes in Mdantsane, Duncan Village & Buffalo City, 1996–2011
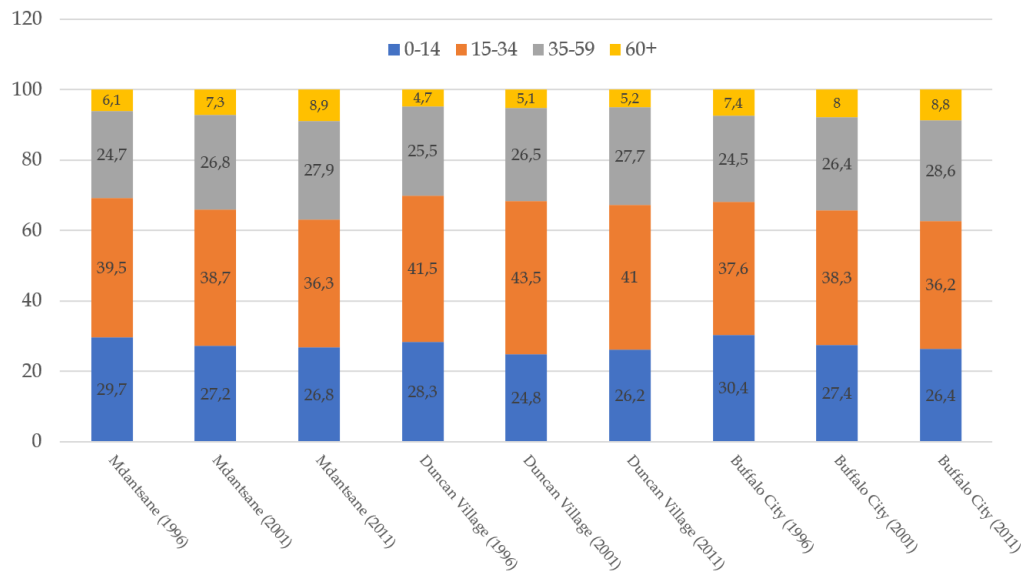Source: StatsSA, 2014

Fig. 3. Changes in age composition of population of Mdantsane, Duncan Village and East London (1996, 2001, 2011)
Source: StatsSA, 2014

tween 1996 and 2011, while that for the youth (15–34 years) also declined from 40% to 36% during the same period. A similar trend can be observed in the other areas.

Figure 4 further analyses the population of school-going ages, considered here as a combination of pre-school children (1–6 years), primary school (7–14 years) and secondary school (15–19 years). While the school-going-age population of East London remains fairly unchanged, only witnessing a steady fall from 98% to 95% between 2001 and 2011, that of Mdantsane and Duncan Village

depicts a different story. The population of Duncan Village remained fairly unchanged between 1996 and 2001 and then fell rapidly from 100% to 84% between 2001 and 2011. That of Mdantsane maintained a rapid decline from 1996 through 2001, reaching 74% in 2011. Thus, Mdantsane and Duncan Village are mostly experiencing a fall in the population size of learners. In a related study to understand the socio-economic situation associated with the post-apartheid transformation in Buffalo City, Siyongwana and Chanza (2016) pointed out the demographic implications of the decline in
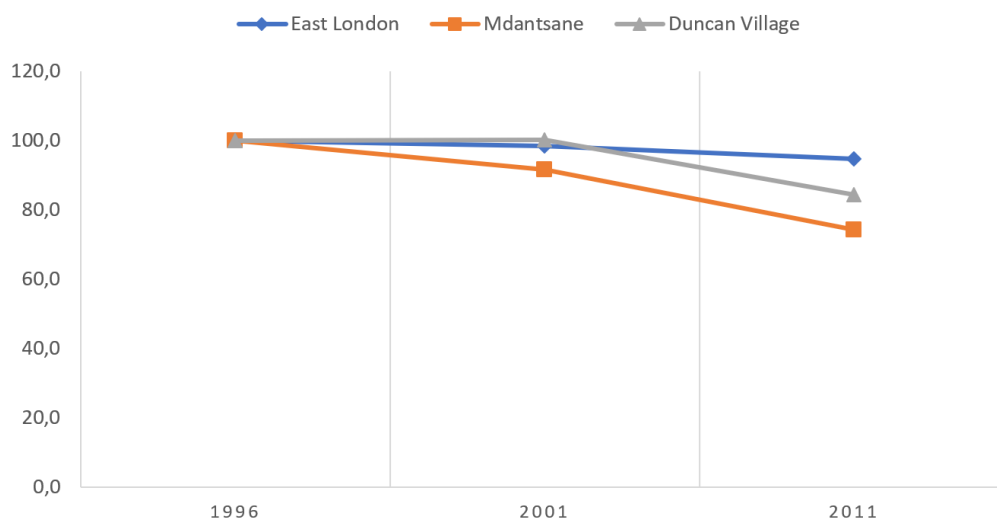
Fig. 4. Population changes of school going ages (1–19 years) in Mdantsane, Duncan Village & East London, 1996, 2001, 2011 (1996 was calculated as 100%)

Source: StatsSA, 2014

the population of children and the youth. The pattern of population decline supports the findings of Marais and Krige (1999) in the study of Botshabelo "*hidden urbanites*" where there was a population decline as the youth move to the cities for decent jobs and education, leaving behind the elderly people who were still entrenched in the township due to their attachment to it. This paper closely looks at the insinuations of such a trend between source and receiving areas in terms of education services and the quality of the education in terms of pass rates.

4.2. Educational trends

The education system in the study areas resembles the population characteristics of Mdantsane, Duncan Village and East London. There is also a close relationship between the education quality and the perceptions of both learners and parents towards the education in the three areas. Figure 5 compares the pass rates of learners that went through the NSC examinations in the three study areas from 2008 to 2017. The National Senior Certificate (NSC) or Matriculation Certificate is also widely used as a barometer of the education system in South Africa. There are three levels of NSC or Matriculation passes, namely; Bachelor's Certificate, Diploma Certificate and Higher Certificate (refer to Table 2).

The mean pass rate for the ten years period under review was higher in East London (74%) and lower in Duncan Village (58%) and Mdantsane (59%) schools. The pass rate ranges were 42 to 79%, 51 to 68% and 67 to 81% for schools in Duncan Village, Mdantsane and East London, respectively. Despite the general low performance of learners in 2009, 2015 and 2017, schools in East London maintained a relatively good pass rate at 69%, 70% and 73% respectively.

The model which explained the highest level of pass rate variation (weight of evidence, w=0.94) included district, year and the interaction between district and year. The next best models were >2 ΔAICs units from the best model. Overall, East London had a significantly higher pass rate (t=2.322, p=0.021). However, as indicated by the significant interaction between district and year (coeff.=-1.60, t=-2.32, p=0.021), during the latter years (2016–2018), the pass rates of Mdantsane and Duncan Village increased more relative to East London. Another pattern that emerged in the analysis is that the pass rates significantly increased for all schools from 2008 to 2018 (coeff.=1.93, t=2.97, p=0.003).

The quality of pass rate reflected in Fig. 6 was statistically analysed (also see Table 2 for the grading of NSC passes or Matric passes). For Diploma passes, there was no significant difference between years and districts. However, variation occurred regarding Bachelor's passes. East London schools have

Table 2: The grading system of Matric passes in South Africa

| Grade	Description
Higher Certificate Pass	The candidate has passed Matric. However, the candidate cannot study further at a University of Technology or University as candidate has passed with low marks. The candidate can get admission to a college for study.
Diploma Pass Certificate	This means that one has passed Matric and can study at a University of Technology straight away, but not a University. With this certificate the candidate cannot enrol for a Bachelor's degree.
Bachelor's Degree Pass Certificate	It is a pass that allows a candidate to get admission to study for a Bachelor's Degree at a university.
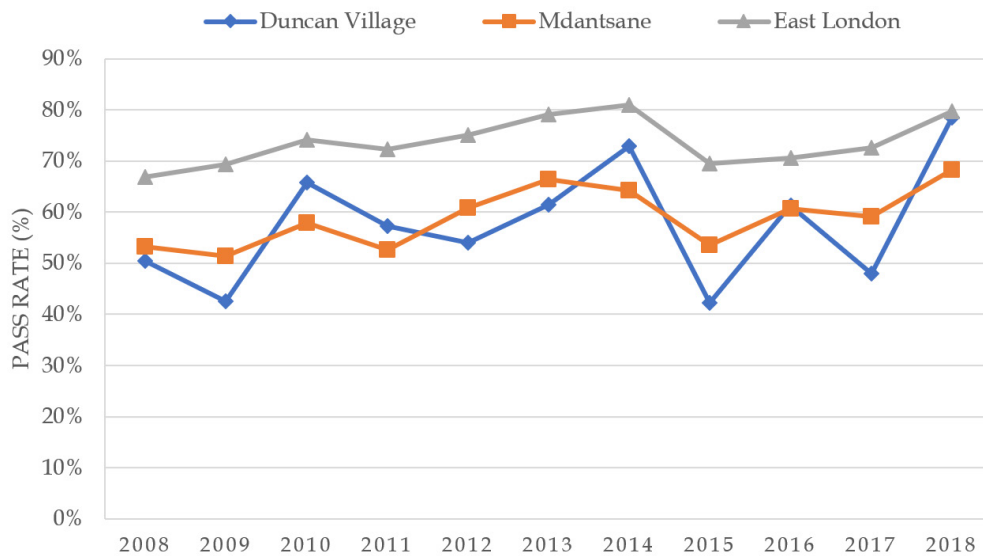
Fig. 5. Matric pass rates of learners in Mdantsane, Duncan Village and East London (2008–2018)
Source: Eastern Cape's Provincial Education Department

a significantly higher number of Bachelor's certificate passes (t=3.19, p=0.001). As indicated by the significant interaction between district and year (coeff.=-1.35, t=-3.19, p=0.002), during the latter years (2017–2018), the proportion of Bachelor's passes of Mdantsane and Duncan Village increased more relative to East London. The proportion of Bachelor certificate passes significantly increased for all schools from 2008 to 2018 (coeff.=2.22, t=5.53, p=0.000). Regarding the pass rates by Higher Certificate passes, these were lower in East London schools. However, as indicated by the significant interaction between district and year (coeff.=1.32, t=2.47, p=0.014), during the latter years (2017–2018), the proportion of Higher Certificate passes of Mdantsane and Duncan Village decreased more relative to East London. Furthermore, the proportion of Higher Certificate passes significantly decreased

for all schools from 2008 to 2018 (coeff.=-2.23, t=-4.40, p=0.000).

Figures 7 and 8 below similarly illustrate the pass rates in Mathematics and Mathematical Literacy to show how the leaners in the three areas performed during the same reference period. When compared, these two subjects can be used to show the quality of education performances where Mathematical Literacy is considered to be relatively easier than Mathematics. The trend in pass rate in the subject of Mathematics reflects that of the general Matric performances, where East London schools outperform those in Duncan Village and Mdantsane. For East London, Mathematics pass rate remained relatively high, ranging from 55% to 70%. Comparatively, schools in Mdantsane and Duncan Village performed poorly, below the 50% pass rate for most of the examination years, with the pass rates in this field reaching 50% only in 2013 and 2014.
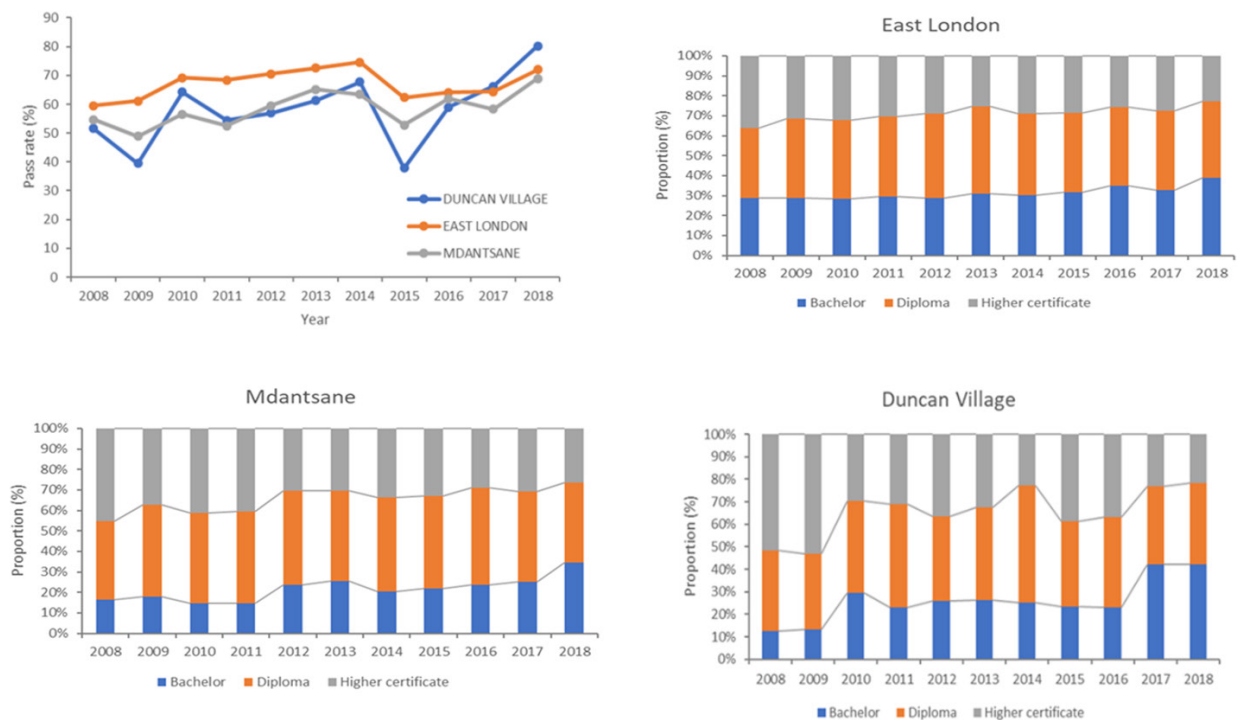
Fig. 6. The quality of Matric pass rates of learners in Mdantsane, Duncan Village and East London classified as Bachelor, Diploma and Higher Certificate passes (2008–2018)
Source: Eastern Cape's Provincial Education Department

For Mathematical Literacy, the pass rates do not reflect a major difference between the schools in the studied districts, despite the dominance of East London schools. The characteristic plunge in the year 2015, which appears to be a challenging examination for all the learners, affected all the areas, and particularly learners in Duncan Village, whose pass rate fell to 47%. That for East London remained relatively high at 69%.

Clearly, schools in East London outperform those in Duncan Village and Mdantsane. To the learners and parents, this gap raises positive perceptions in terms of the quality of education in the former white schools that are largely found in East London. Interview interactions with participants confirmed this attraction of leaners to former white schools. The next section explores the reasons why such a preference was highly appreciated by the parents, teachers union, and learners.

4.3. Educational transformation: pull factors of township learners to former white schools

There are diverse reasons given by parents interviewed to justify the envisaged attraction to schools in East London, including good discipline, fluency in English language, quality results and high pass rate, professionalism of educators; and good school management (see Table 3). Similarly, the learners themselves have varied but vivid explanations of their preferences for East London schools. These views range from political and cultural ideologies, availability of resources and sporting facilities for diversified curricula ranging from Art (drawing), technical (technical drawing) and social science (history) to science and mathematics subjects. Some of these subjects are not offered in township schools. A number of learners were adamant that in former white schools the students get greater exposure to sports and culture, which give them an opportunity for such skills to be identified at an early age where they could be groomed and mentored in the various sporting fields. The learners lament-
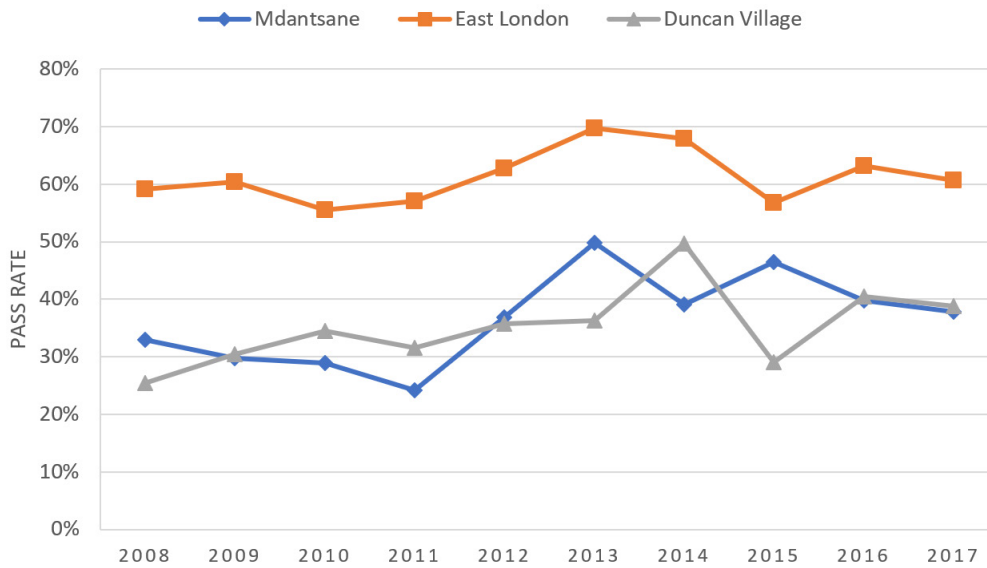
Fig. 7. NSC Maths pass rate of learners in Mdantsane, Duncan Village and East London (2008–2017)
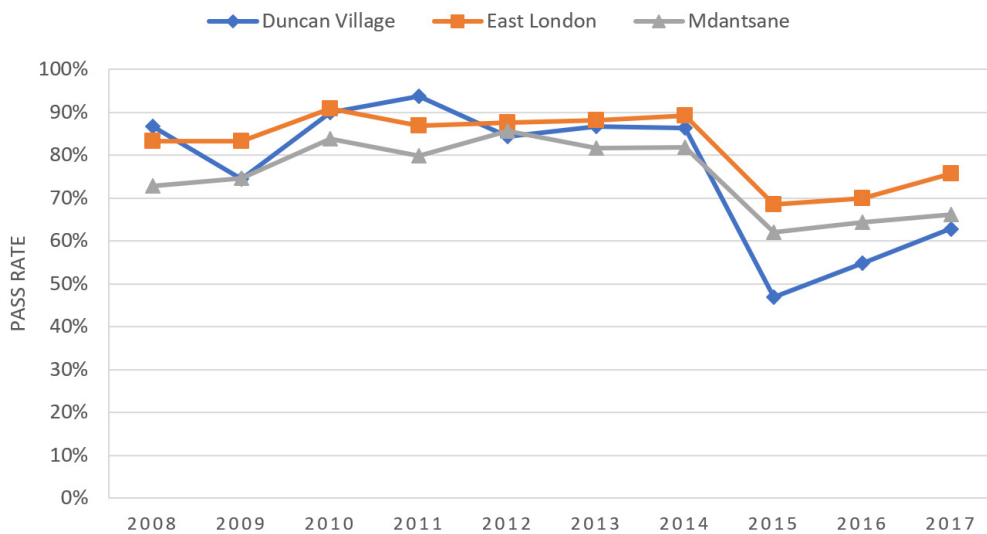Source: Eastern Cape's Provincial Education Department

Fig. 8. NSC Mathematical literacy pass rate of learners in Mdantsane, Duncan Village and East London (2008–2017)
Source: Eastern Cape's Provincial Education Department

ed that these sporting activities are either non-existent or poorly developed in township schools of Mdantsane and Duncan Village. In addition, these schools are well resourced in terms of learning materials, which range from teaching aids, books, furniture, libraries and well-maintained buildings. Regarding cultural thoughts, some learners see East London schools as a place of mixed cultures where one can learn from different backgrounds of learners. There is also a feeling among some of the learners that the post-apartheid dispensation should create opportunities for reaping the fruits of democracy, non-racial and integrated society. This

thinking is best captured by the view of one former student who went through one of the schools in East London as: "*Learning in East London enabled me to fully enjoy the fruits of the new democratic dispensation of racial integration, which our black (African) people for example, Mandela, Sisulu and Tambo fought for*" (Learner respondent, 2019).

Clearly, these results indicate the conducive learning environment in former white schools, which make them more attractive to school-going children from the townships. Earlier, Lemon (1995) expressed that the attainment of democracy in South Africa witnessed paradigm shifts in the ed-

Table 3. Reasons for preferring former white (East London) schools

Reason	Description (respondents' views)
Discipline	Learners are subjected to discipline at their early age.
English language speaking	Learners are attracted to former white schools for fluency and proficiency in English and for better chances of being employable.
Quality results	Parents believe that former white schools produce good results, particularly in mathematics, and increase their children's chance of gaining university entrance and broadening their career choices.
Teacher professionalism	Teachers adhere to educational professionalism expectations, like limited teacher absenteeism, and are always conscious about their work.
School management	Former white schools have good management systems with prompt and easy access to learner's academic record.

Source: authors, 2019

ucational sector, with the declaration of one unitary educational system. The 1996 South African Constitution also endorses the educational transformation in accordance with the values of human dignity, equality, human rights and freedom, non-racism and non-sexism (South African Constitution, 1996). As a consequence of these milestone achievements in the educational system, there was a vibe among the learners of the African (black sector) to get entrance into schools that were formerly reserved for white/coloured communities. Following this endorsement, equal rights for entrance in the schools formerly reserved for white/coloured became strong magnets that pulled black learners to them. However, such a situation is not without negative impacts. Field observations revealed serious environmental impacts in the form of abandoned and deteriorating infrastructure that is now haunting places like Mdantsane. As can be seen in Fig. 9, there are schools that have closed down owing to failure to attract a viable population of leaners.

4.4. Challenges faced by black learners in former white schools

The theory of educational change, particularly of the desegregation in South African schools that was endorsed by South African Constitution of 1996, signalled expectations that a generation of citizens educated in racially desegregated schools would be another government lever to facilitate racial integration. Furthermore, there was hope that learners across the South African landscape would be exposed to the same educational level, and would thus achieve "the same educational status", a condition in which racism would disintegrate enough that communities in racially segregated schools would come to an end (once infiltration of learners into former white schools reached its mature stage). Furthermore, while on the one hand the former white schools have been a great attraction to township learners for a number of reasons as discussed above, on the other hand they have played a very impor-

Fig. 9. School closure (left) and deteriorating school infrastructure (right)

tant catalytic function in improving the standard of education of township learners (Mdantsane and Duncan village). However, these perceived attractions are not without challenges.

This study reveals that black learners face many challenges. Most critical is the issue of language, where in many instances, either English or Afrikaans is used a medium of communication. As soon as the township learners are admitted into former white schools, they are completely divorced from being taught in their mother tongues, making their learning very stressful. A frustrated learner lamenting about geography being taught in Afrikaans vocally remarked, *"For the first three months following my admission in the former white school, I did not understand what my teachers were teaching in class because they were using English as the medium of teaching. My parents had to get a private tutor who would teach me to pass my Grade 12"* (Learner Respondent, 2019). A second obstacle relates to the issue of cultural marginalisation, including the speaking of mother tongue (IsiXhosa), which is not always encouraged in former white schools. The former townships learners are expected to communicate in either English or Afrikaans depending on the history of the school. According to one of the participants, this practice is not without negative consequences for the development of black children. It is argued that such a practice alienates them from their culture, as most of the subjects are not taught in their mother tongues. One former black township learner who attended a formerly designated white school blatantly remarked, *"I cannot write a letter in my mother tongue, that is, IsiXhosa to my mother"* (Learner Respondent, 2019). This implies that Africans in former designated white schools are isolated from their own culture as they are indirectly inculcated to becoming Europeanised to such an extent that they find it difficult to interact with their parents and other township peers. Thus, a fair number of township learners tend to suffer from identity detachment and also get stigmatised through such names as "coconuts". This is translated to mean that the black learners who attend former white schools are black outside and white inside.

Occasionally, because of their dire need to interconnect with their culture and social bonding and in particular the language issue, township learners would cluster together and thus, voluntarily re-seg-

regate themselves. This study also shows that the availability of too much support and resources often does not promote resilience to learners, a skill that is sorely needed in the future – for example, during adulthood. Participants also indicated that in the former white schools, learners had to pay top-up fees for additional resources such as School Governance Body (SGB)-employed teachers, sports uniforms and laboratory. This is antithetical to the South African government policy that advocates no-fee education. However, it should be noted that the former white schools are renowned for ensuring that their schools are well resourced. Hanna-Jones (2016), alluding to beliefs in these schools said, *"White parents show no sign of altering their pattern of getting what they think is best for their own children, even if doing so exacerbates racial inequality."* In worst-case situations, some learners would resort to going back to township schools. This action can slow the pace of integration in former white schools. There is also a feeling that the role of African parents who are the members of the SGBs in the East London schools was not keeping up with the expectations of their members and did very little to protect the interest of African learners in such schools.

The evidence revealed here is clear about the challenges existing in the post-apartheid education regime. To the learners experiencing such challenges, it can be argued that the anticipated benefits of integration may not necessarily outweigh the problems they face. This observation concurs with Rosiek's (2019) findings in his study of segregation in American schools, in which he unreservedly commented that *"No matter what schooling arrangement we implement, the evidence shows that racism will adapt and find ways to assault children."*

5. Conclusion

This study has revealed a number of features that characterise the segregation–integration drive in the education sector, including an enabling policy framework and policies that have shaped the education transformation agenda in South Africa. Notwithstanding the elaborate policy framework guiding the democratisation agenda in the educa-

tion sector, there are emerging challenges that the government and other education stakeholders are facing, as highlighted in this paper. This suggests that the envisioned transformation has remained a complex and vexing issue to the present day.

Summarily, the demographic implications of transforming the education system are in sync with the main post-apartheid transformation challenges that have seen loss in population of township areas as the previously discriminated population groups get attracted to the former white settlements. In the education sector, the former have been associated with deteriorating learning conditions and in the worst cases, the closure of schools owing to low enrolment levels. This study has identified a number of political, educational and environmental pull factors to former white schools. However, there are immense challenges incurred by the black learners, which suggests a segregation in the form of class segregation, as only parents who are financially sound and whose children could swiftly adapt to the new environment are better positioned to enjoy the benefits of integration.

In order to marginalise these challenges and to make integration more meaningful, stakeholders in the education sector should come up with strategies to ease the challenges faced by learners in townships, in turn reducing the overflow of leaners in former white schools. There is also a need to decentralise resources (both infrastructural and human resources) to township schools and regulate the fees structure so that it does not become a deterrent to low-income groups. Finally, it can also be important to consider the inclusion of South African languages in the curriculum of former white, coloured and Asian schools so that the African learners are not divorced from their cultures.

References

Beall, J. Crankshaw, O. and Parnell, S. (2002). Uniting a divided city: Governance and social exclusion in Johannesburg, London: Earthscan.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology,* 3(2): 77-101.

Bwalya, J. (2011). Desegregation and socio-spatial integration in residential suburbs in East London, South Africa (1993-2008), Unpublished PhD Thesis, University of Fort Hare, Alice.

Carnoy, M. and Chisholm, L. (2008). Towards understanding student academic performance in South Africa: A pilot study of Grade 6 mathematics lessons in South Africa. *Report prepared for the Spencer Foundation. Pretoria: HSRC.*

Christopher, A.J. (1995). Regionalisation and ethnicity of South Africa, *Area*, 1(27): 1-11.

Cloete, J.S. and Massey, R.T. (2017). Seshego: unexpected suburb, *South African Geographical Journal*, 99(2), 152-166.

Crankshaw, O. and Parnell, S. (1996). Housing provision and the need for an urbanisation policy for South Africa. *Urban forum,* 7(2): 232-237

De Kadt, J. (2009). Education and Injustice in South Africa. *Education and Injustice*, 26-30. https://hsf.org.za/publications/focus/focus-55-november-2009-images-of-justice/education-and-injustice (accessed 10 May 2019).

Department of Provincial Affairs and Constitutional Development, (1998). White Paper on Local government (Government Gazette, No 18739), Pretoria.

Demacon, (2010). *The impact of township shopping centres. Market research findings and recommendations.* Report to urban land mark. Available at: http://www.urbanlandmark.org.za/downloads/retail_in_townships_2011.pdf (accessed 15 May 201).

Donaldson, R. and Du Plessis, D. (2013). The urban renewal programme as an area-based approach to renew townships: The experience from Kayelitsha's Central Business District, Cape Town. *Habitat International*, 39: 295-301.

Donaldson, R., Mehlomakhulu, T. Darkey, D. Dyssel, M. and Siyongwana, P. (2013). Relocation. To be or not be a black diamond in a South African township? *Habitat International*, 39(July): 114–118.

Department of Education, 2010: Amended National Norms and Standards School Funding. Pretoria: Government Printers.

Hannah-Jones, N. (2016). Choosing a school for my daughter in a segregated city. The New York Times Magazine.

Lemon, A. (1995). Education in Post-apartheid South Africa: some lessons from Zimbabwe. *Comparative Education*, 31(1): 101-114.

Lemon, A. (2004). Redressing School Inequalities in the Eastern Cape, South Africa. *Journal of Southern African Studies*, 30(2): 269-290, DOI: http://doi.org/10.1080/0305707042000215392

Marais, L. and Ntema, L. (2013). The upgrading of an informal settlement in South Africa: Two decades onwards. *Urban Forum*, 24(3): 357–371.

Marais, L. and Krige, S. (1999). Post-apartheid housing policy and initiatives in South Africa. *Urban Forum*, 10(2): 115-136.

Marais, L. Nel, E. and Rogerson, C. (2006). Manufacturing in the former homeland areas of South Africa: the example of Free State Province. *Urban Forum*. DOI: http://doi.org/10.4314/ai.v35i4.22453

Marais, L. Ntema, J. Cloete, J. Rani. K. and Lemka, M. (2016). Reinforcing housing assets in the Wrong Location: The case of Botshabelo. *Urban Forum*. 27(3): 347-362.

McKeever, M. (2017). Educational Inequality in Apartheid South Africa. *American Behavioral Scientist*, 61(1): 114–131.

Mhlekude, Z. (2013). Assessment of the Impact of the Mdantsane Urban Renewal Programme on the Lives and Livelihoods of Beneficiaries (2001-2011): The Case of the Eastern Cape Buffalo City Metropolitan Municipality. *Unpublished Master's Dissertation*. University of Fort Hare, Alice.

Ntema, J. and Von Rooyen, D. (2016). *Journal of Public Administration*, Redressing spatial inequalities and underdevelopment in a former R293 town: the case of Winterveld, South Africa, 1:136-153.

Parnell, S. and Crankshaw, O. (2013). The politics of 'Race' and the transformation of the post-apartheid space economy. *Journal of Housing and the Built Environment*. 28(4): 589–603.

Pienaar, R. and Morton Mckay, T. (2014). Mapping socio-economic status, geographical location and matriculation pass rates in Gauteng, South Africa. *Perspective in education,* 32(1): 101-119.

Republic of South Africa. (1995a). Urban development strategy. Pretoria: Government Printer. Republic of South Africa.

Republic of South Africa. (1995b). Urban development strategy. Pretoria: Government Printer. Republic of South Africa.

Republic of South Africa, Bantu Education Act. (1953). Pretoria: Government printer.

Rosiek, J. (2019). School segregation: A realist's view. *The professional journal for educators,* DOI: http://doi.org/10.1177/0031721719827536

Siyongwana, P.Q. and Chanza, N. (2016). Interrogating the post-apartheid socio-economic transformation in Mdantsane. *GeoJournal*, 04/2016. DOI: http://doi.org/10.1007/s10708-016-9714-2

Spinks, C. (2001). A new apartheid? Urban spatiality, (fear of) crime, and segregation in Cape Town, South Africa. Working Paper 01–20, Development Studies Institute, London School of Economics, 42. http://www.lse.ac.uk/collections/DESTIN/pdf/WP20.pdf (accessed 9 April 2019).

StatsSA, 1996: Statistics South Africa. Pretoria: Government Printer. StatsSA.

StatsSA, 2014: Statistics South Africa. Pretoria: Government Printer. StatsSA.

Tomlinson, R. and Krige, S. (2002). Botshabelo: Coping with the consequences of urban apartheid, *International Journal of Urban and Regional Research*. 21(4): 691-705.

The Development Facilitation Act (Act 67 of 1995): Pretoria: Government Printer. Republic of South Africa.

The National Development Plan, (2012). Republic of South Africa. Pretoria: Government Printers.

The South African Constitution, (1996). Pretoria: Government Printers.

The Spatial Planning and Land Use Management Act (Act 16 of 2013): Pretoria: Department of Rural Development and Land Reforms.

Visser, G. and Rogerson, C.M. (2014). Reflections on 25 years of urban forum. *Urban Forum*, 25(1): 1–11. DOI: http://doi.org/10.1007/s12132-014-9227-3