Equity of access to schools for classroom-based research in South Africa

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Promoting equal access to schools for researchers wishing to conduct educational research was one of the key tasks embedded in the educational transformation mandate of the new government of South Africa when it came to power in 1994. Drawing on data from five different research projects, this paper evaluates progress made by the democratic government of South Africa towards achieving that goal. Gaining access to schools to conduct classroom-based research was difficult and frustrating to researchers during the apartheid era. This paper finds that the government has succeeded in increasing access to schools and fair treatment of researchers who wish to conduct classroom-based research. This was achieved primarily through the government's non-discriminatory policies and the pressure exerted by the issue of South Africa's poor performance in international learner achievement studies. The paper also finds that South Africa is still struggling to find effective strategies to address this issue.

Introduction

Is there more or less access to South African schools for classroom-based research projects or activities in the democratic era? Classroom-based research in the context of this study refers to the kind of research that is conducted within a classroom environment to gain insights into the nature and status of teaching and learning activities, to contribute to improving classroom practice and learner performance. Gaining access to South African schools to conduct classroom-based research projects or activities such as research studies, learner achievement tests, etc., during the apartheid era was a difficult task, especially for scholars who were viewed to be radical. The apartheid government of South Africa deliberately put bureaucratic hurdles in place to ensure difficult access to schools and classrooms for scholars and researchers (Chisholm, 1992). According to Chisholm (1992), there were 'extraordinary hurdles' to deal with before researchers could gain access to schools and into classrooms for research projects. The reference to a classroom as a 'black box' by scholars such as Black and William (1998) bore some serious relevance to South Africa's situation during the apartheid era. The concept of 'black box' sounds like a dark place, the inside of which is difficult to explain due to its condition of poor or lack of visibility. Access to schools, and by extension to classrooms, for research purposes is described by some scholars as one of the most challenging tasks in research projects (see Rice, Bunker, Kang, Howell & Weaver, 2007; Harrel, Bradley, Dennis, Frauman & Criswell, 2000; Singh & Wassenaar, 2016; Smith, Thrupp & Barret, 2019).

The key question which this paper addresses is how far has the democratic government of South Africa gone to promote access equity to schools for researchers wishing to conduct research in school classrooms or classroom-based research? In doing so, the paper seeks to establish whether there is more or less access to South African schools for a broad range of classroom-based research projects in the post-apartheid era. The paper answers

the key question by analysing data on participation rates by South African learners in three ordinary research studies and two international learner achievement studies, which are discussed in detail later in the paper.

The paper argues that gaining access to schools for purposes of conducting classroom-based research activities has increased remarkably in democratic South Africa, because of the less hostile stance taken by the democratic government towards educational researchers, and the pressure exerted by South African learners' poor performance in international learner achievement studies. This paper is significant and necessary because it addresses the vital matter that relates to researchers gaining access to schools for the crucial task of conducting research activities on teaching and learning processes that take place within classrooms. Once access is granted to schools, key data comes available and government policies and programs can respond to such data. Access to schools for classroom-based research projects also provides insights that can support teaching and learning processes, thus contributing to improving classroom practice and learner performance. This paper contributes to the literature and the debate on matters of access to schools and classrooms for research projects.

Historical barriers to school access for classroom-based research projects in South Africa: The apartheid legacy

The fact that the democratic government of South Africa has inherited an education system riddled with all sorts of challenges is well documented. Several unjust policy decisions such as the introduction of the *Bantu Education Act* in 1954 by the Nationalist Party government, which, amongst others, formalised the poor quality and indoctrinatory type of education for a black child and enforced the use of Afrikaans as a medium of instruction, added fuel to the already burning fire. This culminated, amongst others, in the 1976 Soweto school uprisings, which became not only the turning point of black education but in the words of Mandela (1993), it also heralded the end of centuries-old white rule in South Africa. The levels of resistance against Bantu education, coupled with selective and highly controlled access to schools for researchers, made it extremely difficult, if not impossible, for radical researchers, in particular, to access schools for research purposes.

South Africa saw some important shifts in classroom-based research in the early 1990s through to the post-apartheid era. These aimed towards better understanding the daily teaching and learning processes taking place inside the classroom environment. The need by educational researchers to understand and make sense of the so-called 'classroom black box' within the South African context began to increase. Largely, this came as a result of a shift in focus in the first two decades of democracy in South Africa, from access to education to quality of education (USAID, 2005; O'Sullivan, 2006). This saw the adoption of international achievement studies such as *Monitoring Learning Achievement* (MLA), *Southern Africa Consortium for Monitoring Educational Quality* (SACMEQ), *Trends in International Mathematics and Science Survey* (TIMSS), *Progress in International Reading Literacy Study* (PIRLS) and others.

The emergence of international achievement studies sought, amongst other purposes, to understand how factors such as socioeconomic status, family and community background, quality of educational facilities, quality of teaching and policies on nutrition, health, and safety of learners impact on learner achievement gains. To gain an insight into the extent of the influence of these factors on learner achievement, the focus was then moved into the classroom where the actual teaching and learning activities take place (Silver, 1998). This then led to more focus on learning and teaching activities that happen within a classroom situation not only by educational researchers but also by the general citizenry of South Africa. Consequently, this increased the number of classroom-based studies, which are largely based on the premise that learning is in essence driven by what teachers and pupils do inside classrooms (Black & William, 1998). This led to an increase in access to schools and classrooms by educational researchers in South Africa.

International good practices also influenced post-apartheid South Africa's approach to classroom-based research. As a result, South African researchers became increasingly opened up to international research perspectives. In the US and the UK, the early 1990s coincided with an obsession with learning that is linked to the quality imperative. The demand for classroom-based research in the 1990s increasingly became linked to a demand for performance-based information, which the large-scale studies provided. But this performance-based data was also linked to a series of reforms that sought to control learning more closely. The more learners were shown to underperform, the more pressure there was for 'reform' to happen in schools - generally along lines already established by organisations responsible for the running of the international achievement studies.

Democratic South Africa opened up space for more meaningful and effective approaches to classroom-based research. The new African National Congress-led government embarked on processes of access, equity, and redress in education. Conducting research in schools took the macro-approach format, with the focus shifting to researching classroom-based issues concerning other issues or factors in schools that have an impact on learning and teaching processes. New educational policies pointing to major changes in classrooms were developed and implemented, which led, amongst others, to the re-composition of South African schools and their classrooms, i.e. de-racialisation and ethnic mixing of learners and so on. The multiplicity of research strategies such as observations, surveys, video recording, testing of learners, and general large-scale research projects emerged locally largely because of the influence of the international community.

Participation in international achievement studies became inevitable for South African schools and their learners. Initiatives to prepare South African learners to compete with other learners both locally and internationally were developed. These initiatives included the *National Systematic Evaluation*, which assesses competency in numeracy, literacy and life skills in grades 3, 6 and 9; the HSRC's *National Education Quality Initiative* (NEQI); *Monitoring Learning Achievement* (MLA); Joint Education Trust Services' program on improving education quality, for instance, the report of the President's Education Initiative (PEI), *Getting Learning Right*; and *Equity in the Classroom* (EIC) which aims at improving educational leadership and practices to improve classroom-equity and quality (Department of Education, 2002).

In line with the notable shifts in the education sector following the dawn of democracy in 1994, educational research in general and school-based research in particular also made some significant shifts towards understanding the learning and teaching processes within a classroom of a democratic South Africa. This is demonstrated by areas being researched, modalities of research, expanded methodologies employed in research (Chisholm, 2002), data collection instruments being used such as recording technological devices and data analysis instruments. In addition to international achievement studies, a high number of local studies have also been conducted within a classroom situation. A diverse range of research methods such as testing both teachers and learners, lesson observations, lesson filming, and questionnaires have been used for data collection purposes in some of these studies (Carnoy & Chisholm, 2008; Carnoy, Chisholm & Chilisa 2012; Taylor & Moyane, 2005). While the shift towards more classroom-based research is commendable, resolving the numerous teaching and learning challenges revealed by school-based research to date is the new challenge that the government of South Africa is grappling with.

Scholarly debate on access to schools for research activities in classrooms

Learning is driven by what teachers and learners do in classrooms (Black & Wiliam, 1998). For that reason, gaining access to schools to conduct classroom-based research projects becomes crucial for leading to a better understanding of the nature and quality of teaching and learning activities that take place within a classroom situation. The necessity to access schools to conduct classroom-based research is well documented in the literature and it cannot be over-emphasised (Ulla, 2018; Barwell et al., 2018; Odhiambo, 2010). Classroom-based research provides teachers with an opportunity to self-evaluate their teaching practices (Hong & Lawrence, 2011). It equips teachers and other educational practitioners with the skills necessary to identify problems and to know how to systematically address them (Hine, 2013). It improves teachers' life-long learning and continuing professional development (Ulla et al, 2017). Classroom-based research also assists teachers to make a change in their pedagogical practices intended to make a positive impact on teaching and learning processes (Mahani & Molki, 2012). Furthermore, classroom-based research provides data-based evidence on the effectiveness of different teaching methods (Kostoulas & Lammerer, 2015). Access to schools for classroom-based research also enables researchers to gain an understanding of how learners learn particular subjects, e.g. mathematics, and the practices of classroom mathematics that support learners in their learning processes (Barwell et al., 2018).

The literature clearly shows that gaining access to an institution or organisation for purposes of conducting research remains a challenge for many researchers (Singh & Wassenaar, 2016; Smith et al., 2019, Goff, 2020). Gaining access to South African schools for purposes of conducting research activities was also a difficult task for educational researchers during the apartheid era and it remains the same to a certain extent. Khuzwayo (2005) argued that apartheid education was not open to critique or opposing views. In essence, there was some sort of ideological control by the apartheid regime. There was very little classroom-based research during the apartheid era (Chisholm, 1992; Hoadley, 2012). Literature indicates that there was some sort of a 'research vacuum' during this period (Khuzwayo, 2005). The reason was that classroom-based research was

largely conducted by privileged institutions, but also because the struggle against Bantu education gained momentum during that period, to such an extent that the environment was not conducive for researchers to try to access schools, in particular black schools. The struggle against apartheid education took the centre stage then. Hoadley (2012) argued that the legacy of apartheid contributed to generating some hostility towards educational researchers by education departments and school management, and resistance by teachers. This contributed to making access to classrooms for research work difficult for educational researchers.

In essence, the apartheid government acted as a gatekeeper against some educational researchers who were seen to be radical and critical of apartheid education. Singh and Wassenaar (2016) described a gatekeeper as someone who controls access to an institution or an organisation, such as a school principal, managing director or administrator. While all institutions and organisations have an autonomous right to permit or deny access to their information, space and personnel, as argued by Singh and Wassenaar (2016), it is the selective treatment of researchers that poses a threat to research in general; and this was the case during the apartheid era in South Africa. Oates and Riaz (2016) argued that difficulties in gaining access to research sites have the potential to sabotage research projects.

Nevertheless, the second half of the first decade through to the second decade of the post-apartheid South Africa has seen a massive improvement, not only in terms of increased participation in international achievement studies, but also in terms of methodological rigour, including the use of modern technological devices to record teaching and learning activities within a classroom situation – which was extremely difficult, if not impossible, to do during the apartheid era. A high number of local studies have also been conducted within a classroom situation. A diverse range of research methods such as testing both teachers and learners, lesson observations, lesson filming, and questionnaires have been used for data collection purposes in some of these studies (Carnoy & Chisholm, 2008; Carnoy, Chisholm & Chilisa 2012; Taylor and Moyane, 2005; Howie et al., 2017; Human Sciences Research Council, 2020).

Also, the Department of Basic Education (DBE) in South Africa and its provincial departments have developed fair access requirements that apply to all researchers and research organisations intending to conduct research in South African public schools. The purpose of the guidelines is to inform researchers how to lodge applications to conduct research in the schooling system of the province; to set out criteria for the approval of research requests; and to inform potential researchers of the restrictions when conducting research within the schooling system of the province (Gauteng Department of Education, *undated*).

From the literature several challenges emerge that researchers have to deal with in their attempt to access schools to conduct classroom-based research. These include limited time or busy schedules of teachers and learners, and connected to that, their academic workloads as well as research fatigue experienced by teachers and learners (Oates, 2016; Smith et al., 2019). In reference to the challenge of research fatigue, Smith et al. (2019:57)

argued that "increasing apathy and indifference toward engagement can be driven by increased exposure to, and participation in research". Other constraints to accessing schools for classroom-based research are lack of social capital in the research field, staff absence and technology failure (Oates, 2016).

Methods

This paper draws qualitative data from five different research projects, namely the Human Sciences Research Council (HSRC)-Stanford University study on student academic performance in South Africa (2008); the Stanford University-University of Botswana study on low achievement trap – comparing schooling in Botswana and South Africa (2011); my PhD research project (Baloyi, 2011), the HSRC reports on South Africa's achievement in TIMSS from 1995 to 2015 and general reports on South Africa's participation in PIRLS between 2006 and 2016. In short, the article draws its data from two types of research projects or activities, namely three national research studies and two international learner achievement studies.

The first three studies were chosen because they provide information about teaching and learning activities that take place in ordinary public school classrooms and also because I coordinated the activities of all three studies and led the fieldwork team in data collection processes. The two learner achievement studies, TIMSS and PIRLS, were chosen because they are the main learner achievement studies that South Africa consistently participates in. They also provide information that includes the participation and performance statistics of South African schools and learners in the two international achievement studies.

Participants and instruments

Teachers and learners are central to the learning and teaching processes within a classroom setting, and for that reason, their perspectives and experiences on classroom interactions are crucial and cannot be ignored (Egeberg, McConney & Price, 2020). The study conducted by the Human Sciences Research Council in partnership with a consortium of South African universities and researchers at the School of Education at Stanford University (Carnoy & Chisholm, 2008) sought to understand learner academic performance in South Africa. It was conducted in a sample of 40 primary schools in Gauteng Province of South Africa. A total of 2600 learners and 50 teachers participated in the project, including several school principals. Data collection for this classroom-based research project included the filming of about 40 mathematics lessons, the completion of a learner questionnaire which included information about their socio-economic situations and that of their schools; administration of mathematics test for learners; the completion of teacher and school principal questionnaires which included information about their mathematics teaching processes, especially content and pedagogical content knowledge issues; the administration of a mathematics test for teachers; and observation of the general school conditions.

The study conducted by Stanford and Botswana universities in partnership with the HSRC compared learning in primary schools in the border region of two neighbouring countries, South Africa and Botswana. The South African part of the study was conducted in 58 of the 60 sample primary schools in the North West Province of South Africa. Data collection in this study included learners completing a questionnaire which obtained information about their socio-economic situations and that of their schools, taking a mathematics test, video recording of mathematics lessons, and observation of the general school conditions. A total of 3800 learners and 62 mathematics teachers took part in this research project.

Data collection for my PhD research project (Baloyi, 2011) was from a sample of four schools: two former model C and two township schools, located within the West Rand District Municipality (WRDM), which is also in the Gauteng Province of South Africa. Purposive sampling was used to select schools. The four schools were selected on the basis that I had previously dealt with them in the main HSRC-Stanford study which I coordinated. Four focus groups of learners, one per sample school, were established. Each group comprised of ten Grade 6 learners, with a 50-50 split on gender representativity. Four mathematics teachers from the four sampled schools were also interviewed for this research project.

TIMSS was first administered in 1995 and thereafter at four year intervals, i.e. 1995, 1999, 2003, 2007, 2011, 2015 and 2019. South Africa participated in all the TIMSS studies except 2007. Participation in TIMSS studies entails learner testing in mathematics and science. South Africa's grades 8 and 9 participate in this study. PIRLS is an international achievement study that focuses on reading literacy. South Africa first participated in PIRLS in 2006, with two grades, 4 and 5, participating in the study.

Data analysis

The datasets generated from the first three studies discussed above were qualitative and thus they were analysed qualitatively. A total of 6,440 learners and 116 mathematics teachers from 102 schools participated in the Human Sciences Research Council (HSRC)-Stanford University study on student academic performance in South Africa (2008); and the Stanford University-University of Botswana study on low achievement trap – comparing schooling in Botswana and South Africa (2011) and my PhD study (Baloyi, 2011). Also, to support access to classrooms to conduct the first two studies, researchers used lesson recording with video cameras.

The development of access requirements by both the national department of basic education and provincial education departments of South Africa gives all researchers an equal opportunity to have access to schools and classrooms to conduct research, provided they adhere to the stipulated guidelines. These requirements apply to all researchers and research organisations intending to conduct research in South African public schools. This is a big shift from the hostile and restrictive stance taken by the apartheid government.

The datasets from the two other studies, which are about performance statistics of South African learners in the TIMSS and PIRLS, were quantitatively analysed for purposes of extracting participation and performance rates of South African learners in the two international achievement studies during the periods under review. In 1995, 4,491 Grade 8 learners from 114 schools participated in the study (TIMSS-SA, 1995). In 1999, 8,147 Grade 8 learners from 194 schools took part in the TIMSS study (TIMSS-SA, 1999). A total of 13,213 learners participated in the 2003 TIMSS study. This number consisted of 8,952 Grade 8 learners from 225 schools and 4,261 Grade 9 learners from 238 schools (TIMSS-SA, 2003). In 2011, a total number of 10,085 Grade 9 learners from 285 schools participated in the study (TIMSS-SA, 2011). Regarding learner participation in the 2015 TIMSS study, 12,514 Grade 9 learners from 292 schools participated in the study (Reddy et al, 2016). There has been a steady increase in the number of South African learners who take part in the TIMSS study since its inception in 1995. In total, 48,450 learners participated in the TIMSS studies between 1995 and 2015.

In terms of performance, South African learners continued to perform poorly in TIMSS 2015 as they did in previous years. In the mathematics test, South African learners scored 372, which was below the international centre point of 500 (Reddy et al, 2016). South Africa came second from the bottom, managing to beat only Saudi Arabia, which was the poorest of all the participating countries with a score of 368. For science, South Africa was the worst-performing country, managing only a score of 358, which again was below the international centre point of 500 (Reddy et al, 2016). However, as far as the participation of South African learners is concerned in TIMMS since its inception in 1995, there has been a remarkable growth in the number of participating learners.

In PIRLS 2006, a total of 16,073 grade 4 and 14,657 grade 5 learners participated in the study. The results showed that grade 4 learners achieved an average score of 253. Grade 5 learners achieved an average score of 302 which was the lowest score of the 45 countries that participated in the study. Both scores were below the fixed international reference average of 500 points (Howie et al., 2006).

A total of 15,744 grade 4 learners and 3,515 grade 5 learners participated in pre-PIRLS and PIRLS 2011 respectively. The results of the study revealed that South African grade 4 learners performed well below the international centre point, despite the fact they wrote an easier assessment. Overall, the grade 4 learners performed at a lower level compared to their counterparts in other participating countries. The grade 5 learners also performed below the international centre point, at about 80 points below the fixed international reference average of 500 points (Howie et al, 2011).

About PIRLS 2016, a total of 12,810 grade 4 learners were assessed in reading literacy. The results of the study showed that 78% of the learners could not read for meaning at the end of Grade 4 (Howie et al., 2017). In short, 8 out of 10 learners could not read for meaning. In addition to that, South Africa was the worst-performing country of the 50 countries that participated in the study (Howie et al., 2017). In total, 62,799 grades 4 and 5 learners have participated in the PIRLS studies between 2006 and 2016.

Findings

The difficulties which educational researchers faced concerning gaining access to South African schools to conduct classroom-based research projects or activities during the apartheid era formed the basis for the conceptualisation of a study of this nature. Consequently, the article sought to address this main question: is there more or less access to South African schools for a broad range of classroom-based research projects in the post-apartheid context? The key results outlined below answer that question.

There is in the post-apartheid South Africa much more increased access into schools and classrooms, in particular for research purposes, for all researchers than it was the case in apartheid South Africa. While South Africa did not participate in international learner achievement studies or create equal access to schools for all researchers during the apartheid era, data show that democratic South Africa has created fair and equal access to school premises for research purposes, for all researchers. The increasing number of educational research studies that take place within school premises and in classrooms in particular, and the increasing participation in international learner achievement studies such as TIMSS and PIRLS as demonstrated by data analysed above, affirm this result. In total, 6,440 learners and 116 mathematics teachers from 102 schools participated in the Human Sciences Research Council (HSRC) - Stanford University study (2008); Stanford University - University of Botswana study (2011), and my PhD study (Baloyi, 2011). A total of 1,123 schools participated in the TIMSS studies between 1995 and 2015.

An increasing number of learners and teachers participated in classroom-based research projects including normal research studies and international achievement studies such as TIMSS and PIRLS. In total, 48,450 grades 8 and 9 learners participated in the TIMSS studies between 1995 and 2015, while a total of 62,799 grades 4 and 5 learners participated in the PIRLS studies between 2006 and 2016.

There is an increased acceptance of intimidating data recording instruments such as lesson filming in democratic South Africa. Video cameras were used to record 40 teaching lessons for the Human Sciences Research Council (HSRC) - Stanford University study (2008) and the Stanford University - University of Botswana study (2011). Despite their intimidating effect on learners and teachers when introduced in class, video cameras were accepted by both teachers and learners in the two studies, in addition to researchers gaining access to classrooms.

The democratic government of South Africa appears to have taken a less hostile or friendly stance towards educational researchers. The development of fair access requirements which provides an equal opportunity to all researchers to access schools to conduct research affirms this outcome. It also shows a positive and welcoming gesture by the government to educational researchers who seek to access schools to conduct research.

Also, data reveal that the democratic government of South Africa is struggling to effectively address persistent poor performance by South African learners in international learner achievement studies such as TIMSS and PIRLS. As demonstrated by the data above, in TIMSS 2015, South African

grade 9 learners scored 372 in mathematics, which was below the international centre point of 500. In science, the same cohort of learners only managed a score of 358, which was also below the international centre point of 500. South Africa was ranked the worst performing country of all the countries that participated in the study. Regarding performance in the 2016 PIRLS study, South Africa was ranked last in the world. The results of the study showed that 78% of the learners could not read for meaning at the end of Grade 4.

Discussion

The findings presented above demonstrate a clear trend of improving access to schools for classroom-based research projects in South Africa. Apart from typically revealing substantial differences in the average level of learner performance across countries regardless of the subject area, learner achievement studies also have created and rekindled the spirit of competition in learner performance between provinces and schools in South Africa. This seems to have led to schools being less hostile and welcoming to classroom-based research projects, thus improving cooperation between teachers and educational researchers in South Africa.

The new set of fair and reasonable access requirements developed by the democratic government of South Africa seems to have contributed to the improved access to South African schools and classrooms, in particular for purposes of conducting research projects. This suggests that the access requirements improved and equalised access opportunities for all researchers intending to conduct research in South African classrooms, irrespective of affiliation to a particular school of thought or an individual's views and position on government's handling of educational matters.

The continued poor performance by South African learners in international achievement studies, in particular TIMSS and PIRLS, as revealed by the results above, appears to be putting tremendous pressure on South Africa to work harder to improve the poor results. The low achievement scores in TIMSS and PIRLS clearly show the challenge of poor competencies in mathematics, science, and reading amongst South African learners, which the South African government must address with some sense of urgency. Nevertheless, the data indicate that more South African schools, teachers, and learners, in particular, continue to participate in classroom-based research studies, which shed some needed light on learning and teaching activities that take place in South African classrooms.

The results also suggest that there is some improving level of acceptance of the use of video cameras to film lessons in some of the studies conducted in South African classrooms. This is a significant shift by the democratic government because this would never have been allowed to happen during the apartheid era. Lesson filming is understandably intimidating to some teachers; its introduction by researchers and acceptance by South African teachers who are known for their militancy and stiff resistance to lesson observations, suggest that there is improving cooperation between researchers and schools in South Africa than was the case during the apartheid era.

Apart from the five studies analysed for this article, other notable studies have been conducted in South African classrooms without any hiccups. These include studies that relate to the teaching of mathematics in multilingual classrooms in South Africa, which have been conducted by Setati (2002, 2008), Setati and Planas (2012), and Setati and Moshkovich (2013). Hoadley (2012) also reviewed classroom-based studies. The successful conduct of these studies also confirmed the increased access to South African schools and classrooms in particular, by educational researchers for research purposes. This would have been a difficult task for researchers to carry out during the apartheid era.

It then becomes important to encourage teachers to become active participants in classroom-based research projects which have the potential to improve their own pedagogical content knowledge and teaching performance. This could in turn benefit their learners, and help provide persuasive evidence to government, education authorities, school leadership, and parents concerning the contribution that classroom-based research can make. In addition to involving teachers in classroom-based research, results of research projects and recommended intervention strategies should also be shared with teachers and where possible, with learners as well, so that they can feel that their contributions towards improved classroom practices are listened to and valued.

Implications

The improved access to schools for classroom-based research projects in democratic South Africa implies that light is turning brighter in the South African classroom black box. In other words, the black box of the South African schools and their classrooms has progressively been turned into a lightbox, illuminating many teaching and learning challenges that need to be addressed for the South African education system to be completely transformed and educational quality attained. Whereas access to schools did not happen so easily in apartheid times, it is happening now. In general, the results reinforce the need for more resources and more support for schools and teachers to assist learners. Today, more is known about what happens in South African schools and their classrooms than was the case in the apartheid era. Several factors that account for poor learner performance and poor educational quality, in general, are increasingly being exposed (Hoadley, 2012). It is therefore important for the democratic government of South Africa to ensure that these factors are acted upon to ensure improved performance of the schooling system as a whole. This means that policy development should now deliberately focus on addressing the challenge of poor learner performance which South Africa is currently facing.

The generally poor performance by South African learners in international learner achievement studies also has implications for teaching and learning practice. The fact that 78% of South African learners could not read for meaning at the end of Grade 4 as revealed by the PIRLS 2016, should be a worrying development to the government. This calls for better and more effective teaching and learning processes in democratic South Africa.

While improved access by researchers into classrooms for research purposes is highly appreciated and commendable, there is a need to manage that space with caution. Too much access into classrooms will lead to over flooding of the classroom space by researchers, which has the potential to disrupt academic programs of schools and in particular, the teaching and learning processes. The government of South Africa should ensure that there is a balance between access to classrooms for research purposes and the right of learners to uninterrupted teaching and learning processes. Classroom-based research could also be advanced by expanding the number of researchers, for instance, by recruiting teachers from a number of schools to work in research teams. Each participating teacher gets some credit towards a higher level qualification, all administer the same research activity, e.g. surveys, interviews, experimental trialing of a technological, pedagogical or content innovation, etc. Data obtained collectively by these research teams from larger and diverse samples may be sufficient for obtaining an influential and important research outcome. Another progressive idea could be embedding a research orientation aspect in initial teacher education courses, to prepare teachers to participate in classroom-based research.

The results of the study also have implications for oversight by relevant parliamentary committees such as the Portfolio Committees on Basic Education and Higher Education and Training. There is a need for these committees to intensify their oversight programs to ensure that all the teaching and learning challenges that are consistently revealed by classroom-based research are acted upon and addressed by the Department of Basic Education and its provincial departments. The committees should also ensure that the working relations between schools and educational researchers are supported and nurtured for classroom-based research to be conducted with ease and within a conducive environment.

Conclusion

The analysed data and the subsequent results indicate that gaining access into schools for purposes of conducting classroom-based research activities has increased remarkably in democratic South Africa, because of the less hostile stance taken by the democratic government towards educational researchers, and the pressure exerted by South Africa's participation in international learner achievement studies. The results provide a clear answer to the key question of the study, which sought to establish whether there is improved access to South African schools for a broad range of classroom-based research projects in the post-apartheid context. And the answer to the key question is that there is indeed more access to South African schools for classroom-based research projects than was the case during apartheid South Africa.

While accessing schools for classroom-based research projects is no longer that much of a challenge in post-apartheid South Africa, addressing a myriad of challenges revealed by classroom-based research is one of the tough challenges faced by teachers, educational leaders and government. It is this challenge that needs attention by the South African government, sooner rather than later.

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Please cite as: Baloyi, H. (2021). Equity of access to schools for classroom-based research in South Africa. *Issues in Educational Research*, 31(2), 371-386. http://www.iier.org.au/iier31/baloyi.pdf