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Philosophy of ubuntu and collaborative project-based learning in post-apartheid South Africa: A case study of underperforming learners at Hope Saturday school

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Utilising a qualitative case study, we set out to investigate how learners at Hope Saturday School evoked the principles of ubuntu/humanity as they collaborated during project-based learning. The article is part of a broader study in which a mix of semi-structured interviews, focus group interviews, observations, document analysis and field notes were used to capture data. The learner participants were Black, and almost all of them resided in informal settlements, townships, and farming communities. Data were analysed using content analysis. The philosophy of ubuntu was used to underpin this study. The finding of this study shows that values like interdependence, sharing, caring, teamwork, solidarity, unity and helping one another were evoked as learners collaborated in project-based learning. The article concludes that a supportive environment that aids the development of ubuntu values can improve learning experiences of underperforming learners.

Keywords: collaboration; philosophy; project-based learning; South Africa; ubuntu; underperformance

Introduction

The quality of South Africa's schooling system often attracts negative remarks. Every year when the final National Senior Certificateⁱ (NSC) results are released, commentators usually debate about the falling standards of a qualification that is the pinnacle of the South African schooling system. The negative trends of learner performance in disadvantaged communities are noted by the general survey conducted by Statistics South Africa (2016), which highlights that the prospects of African learners progressing through the schooling system are lower than that of other population groups. The obsession with individualistic standardised testing is typical of an education system driven by neoliberalists whose aim is to create a market which restricts access to certain privileges (Connell, 2013). In South Africa, school exit examinations are high stakes and inform decisions taken on who enters higher education institutions and has access to some work opportunities.

The fact that in South Africa, even 26 years after the advent of democracy, there is still reference to disadvantaged schools is testimony to education that is rationed, and therefore, quality education remains a privilege for a select group. This is notwithstanding the fact that South African education policies advance inclusivity, redress and human rights. The unequal education landscape in the schooling sector is further exacerbated by maladministration and poor implementation of policies.

The influence of neoliberalism can also be seen in the way that teachers implement their teaching strategies (Hedegaard-Soerensen & Grumloese, 2020). The challenge that arises is that teachers predominantly focus on whole-class teaching and a narrow-prescribed curriculum. This turns out to be even more problematic because they fall short of focusing on inclusion, differentiation, and learners' needs (Hedegaard-Soerensen & Grumloese, 2020). These systemic restrictions are coupled with challenges in teacher capacity and poor infrastructure. One of the concerns is that the possibility of capable teachers taking autonomous judgment in terms of curriculum and pedagogy in the interest of their learners' needs is undermined by the system with strict curriculum frameworks (Connell, 2013). A serious drawback is that restrictions on curriculum and pedagogy lead to many learners being left with learning deficiencies. Moreover, learners' inability to fulfil the implicit expectations about performance makes them susceptible to exclusion from privileges and rewards associated with achieving certain education standards (Hedegaard-Soerensen & Grumloese, 2020). In addition, learning becomes competitive and individualised rather than an undertaking of the society (Saunders, 2015).

Education underpinned by the neoliberal ideology of classism and competitiveness deviates from the indigenous South African social and cultural contexts, especially in Black communities. Tabulawa (2003) exemplifies education that moves from competitiveness to one that encourages cooperation and learner agency. The interchanges of ubuntu and other indigenous convergences are in stark contrast with an education system that encourages learners to outperform one another. Furthermore, the practice of categorising schools into functional and dysfunctional, and learners into underperformers and high achievers (Connell, 2013) is highly corrosive of what the philosophy of ubuntu advocates. Furthermore, Davies and Bansel (2007) also conclude that neoliberalism removes value from the social good and increases individualism. It is also observed that the main weakness of a system influenced by neoliberal ideology is the failure to advance common interest and self-awareness of the society (Connell, 2013), thus increased individualism is seen as an indicator of freedom (Davies & Bansel, 2007).

Learner-centred methods grounded in social constructivist epistemology are not value-neutral. In his highly cited study, Tabulawa (2003) posits that in African countries such as Namibia, South Africa and Botswana, curriculum reforms advancing learner-centredness are driven by aid agencies based on political and ideological intentions instead of educational ones. Even so, Tabulawa (2003) indicates that learner-centred pedagogies have the potential to instil individual autonomy, open-mindedness and tolerance for other people's perspectives as aligned to a liberal democratic environment.

In this article we present a case of a Saturday school in South Africa that reimagined pedagogy and used project-based learning (PBL) to teach skills related to the country's economic aspirations. It emphasises the importance of advancing the philosophy of ubuntu as a legitimate indigenous knowledge system that can be integrated into pedagogy. Furthermore, we argue that the principles of ubuntu can be used to encourage collaboration in teaching and learning contexts where PBL is used to teach necessary skills. We propose the use of collaborative teaching and learning approaches to improve the learning of different skills sets and to instil cohesion and togetherness in society, as advocated by the ubuntu philosophy.

Exploring the Terrain: Underperformance in South African Schools

Despite the plethora of legislative and regulatory frameworks aimed at redressing and curbing educational inequalities introduced after 1994, many South African schools still face numerous challenges (Bantwini & Feza, 2017). It was revealed that some schools are inundated with a shortage of infrastructure and resources necessary to facilitate the teaching and learning process ((Bantwini & Feza, 2017). Elsewhere, a lack of parental involvement, poor learner discipline and motivation were observed (Jacobs & Richardson, 2016). Studies also show that the availability or scarcity of critical resources in South African schools influence educational outcomes (Visser, Juan & Feza, 2015).

The phenomenon of underperformance in some South African schools has been reported extensively in literature (Makgato & Mji, 2006; Spaul & Kotze, 2015). Findings from research reveal that the majority of South African learners lack skills that allow them to learn the required academic content in schools, especially in previously underprivileged Black communities (Taylor, 2008). This deficiency in learning was also noted by Letseka (2014) who state that in dysfunctional schools, many learners are unable to develop the skills and attributes needed to master reading and mathematics. Moreover, Taylor (2008)

mentions that in former disadvantaged schools, only four learners in a hundred were reading at the expected level. Spaul & Kotze (2015) argue that poor learning abilities can be attributed to a learning deficit acquired in the early years of schooling, which creates a backlog, thus, negatively influencing learning in later years.

The concept of learner underperformance is determined by testing learners and measuring their performance (Reyes & Garcia, 2014). According to Reyes and Garcia (2014) learners who perform below grade averages are seen as underperformers. Similarly, in a study by Walters (2011) learners who could not read or write at an expected level were perceived as underperformers. Underperforming learners in this study refer to learners whose performance in numeracy and literacy fell below the expected grade and age proficiencies. The instruments used to evaluate their performance included written baseline assessments and observations from teachers.

Relating PBL and Collaboration

PBL is defined as a teaching method that engages learners in exploring real-world issues relevant to the topic of a lesson in a collaborative setting to promote active and deep learning (Shafaei & Rahim, 2015). It is widely acknowledged that PBL emphasises the importance of the learner, with some researchers referring to it as a learner-centred approach (Malan, Ndlovu & Engelbrecht, 2014). According to Thomas (2000:3–4) there are five prerequisite criteria for projects to be classified as PBL, namely “projects are central, not peripheral to the curriculum; are driven by questions or problems; involve students in a constructive investigation; are student-driven to some significant degree are realistic, not school-like.” In this study we adopted the definition given by Shafaei and Rahim (2015).

A review of the literature reveals that there are advantages to implementing PBL (Beers, 2011). Bell (2010) found that PBL is sufficient to teach learners 21st-century skills. In addition, these skills might help learners in becoming a productive workforce and members of society (Bell, 2010; Meyer & Wurdinger, 2016). According to Styla and Michalopoulou (2016) learners who participated in various studies confirmed that PBL helped them develop both academic and social skills. Moreover, PBL is believed to have the ability to motivate learners and foster learner courage (Brennan, Hugo & Gu, 2013; Holmes & Hwang, 2016).

Problems associated with PBL were also reported in the literature (Beane, 2016; Kızıkan & Bektaş, 2017). Beane (2016) argues that it is difficult to effectively implement PBL in a system reliant on high-stakes standardised testing. Likewise, Frank and Barzilai (2004) report some

challenges with evaluating each learner's personal contributions during PBL. Kızkapan and Bektaş (2017) believe that PBL is time-consuming and poor planning may lead to incomplete or inferior projects.

Collaboration is one of the key features of PBL. The literature reveals several definitions of collaboration in the context of learning. The term "collaboration" has been applied to situations where learners work together on the same task, instead of engaging in parallel activities of the task (Lai, 2011). Goodsell, Maher, Tinto, Smith and MacGregor (1992) view collaborative learning as an umbrella term for a variety of educational approaches involving joint intellectual effort by learners, or learners and teachers. In this study we used the definition by Pluta, Richards and Mutnick (2013) who define collaboration as any learning activity that involves the coordinated participation of two or more learners for the goal of accomplishing activities that lead to desired learning outcomes. Therefore, in the context of this article, assigning pupils to undertake group work isn't enough for collaborative learning; learners must also engage in meaningful activities aimed at achieving a better social construction of knowledge.

Several studies suggest that there are advantages of employing collaboration in the classroom (Elboj & Niemelä, 2010; Gomez-Lanier, 2018; Lai, 2011). A study by Lai (2011) reports that underperforming learners are likely to benefit through collaboration with their peers. In essence, collaboration provides learners with a platform that enables sharing of knowledge and experience (Gomez-Lanier, 2018; Kessler & Bikowski, 2010). Even more, each member of the team brings new perspectives and skills such as problem-solving, application of concepts and so forth, which benefit all learners (Gomez-Lanier, 2018). Similarly, Lai (2011) mentions that collaboration includes interdependence, a considerable degree of negotiation, and interactivity. These combined factors ensure that each team member becomes accountable for the success of the group. Gomez-Lanier (2018) argues that as the team reaches its goals, members will be inspired and motivated to take ownership of their own learning and do more for the group to succeed. As might be expected when team cohesion is strong, solidarity between learners is also enhanced. Thus, underperforming learners benefit from their interaction with high performers. Through collaboration, learners become critical friends who give each other constructive feedback and help each other reach personal goals (Bell, 2010). The benefit of collaboration is that learners will become a community of practice that assists each other when approaching academic challenges.

It also emerged from the literature that collaboration in PBL goes beyond the learners to include the teachers and the community within which the school exists (Meyer & Wurdinger, 2016). The teacher remains the facilitator throughout the learning process and is responsible for managing group dynamics and disagreements.

Theoretical Mooring: Understanding the Philosophy of Ubuntu

In this article, the philosophy of ubuntu is used to underpin the understanding of the collaborative interactions between a community of learners and teachers during PBL.

Ubuntu has been selected for its potential to link social interdependence to the imperatives of collaborative teaching and learning approaches. The concept of collaboration and the philosophy of ubuntu are clearly interlinked as they both require communal relations. Letseka's study (2012) shows that the supporters of ubuntu promote the integration of ubuntu principles into teaching and learning with the assumption that it will enhance the development of critical dispositions among learners. In this study, the tenets of ubuntu were used to situate the experiences of learners within the interchange between expectations, experiences and interpretations determining their motivation to collaborate in a PBL environment. The assumption made here was that the study could provide a useful account of how ubuntu-oriented attributes and dispositions can benefit learners who are expected to work together towards a common goal. Through the philosophy of ubuntu, we view learning as an undertaking embedded and negotiated in a social interdependence setting.

The philosophy of ubuntu is widely used in South African indigenous communities and communities in Sub-Saharan Africa. Hence, it is referred to as an African philosophy (Mugumbate & Nyanguru, 2013). Studies found that although ubuntu is a commonly used concept in many South African communities, it is difficult to pin it on one definition (Mabovula, 2011). The term "ubuntu" is universally understood to mean humaneness, personhood and morality (Letseka, 2012). In the South African context, ubuntu is grounded in the ethical maxim known as *motho ke motho ka batho* (in Sotho languages) and *umuntu ngumuntu ngabantu* (in Nguni languages) (Letseka, 2012). When expressed in English this guiding principle loosely translates to a person is a person through other persons (Letseka, 2012; Shepherd & Mhlanga, 2014). It is commonly reflected in the aphorism, I am because we all are (Mugumbate & Nyanguru, 2013). This expression is used in most indigenous African languages (Mugumbate & Nyanguru, 2013).

The literature reviewed in this study provides insight into the values of ubuntu (Letseka, 2013;

Taringa, 2007). The study by Taringa (2007) lists values such as cooperation, humility, sharing, hospitality, relationship, empathy, and compassion. By extension, Letseka (2013) uses words like respect for others, courtesy, benevolence, and altruism. By the same token, Mugumbate and Nyanguru (2013) mention values like interdependence, collectivity and solidarity. As far as the values of ubuntu are concerned, individuals that are morally irreproachable must treat fellow community members with dignity and gratification (Taringa, 2007). These values of ubuntu have the capacity to challenge and inspire learners to work with their counterparts and to see others succeed. The key aspiration of the proponents of ubuntu is to sustain the values of ubuntu for the good and benefit of all individuals belonging to a community (Bondai & Kaputa, 2016). Mbigi (1997, as cited in Mabovula, 2011:39) lists four tenets of ubuntu:

First, morality which includes trust and credibility. Second, interdependence which involves corporation, participation, sharing and caring. Third, spirit of man which refers to human dignity and mutual respect that insists that human activity should be person driven and humanness should be central. Fourth, totality, which pertains to continuous improvement of everything by every member.

The tenet of social interdependence has received considerable attention in the literature (Bondai & Kaputa, 2016; Letseka, 2013; Oviawe, 2016). Primarily, the relationship between a person and others around him or her is that of mutual interdependence (Shepherd & Mhlanga, 2014). By drawing from the concept of interdependence, Mugumbate and Nyanguru (2013) have been able to show that groups are a key feature within the ecosystem of African societies. In essence, the spirit of ubuntu is seen as a factor that binds the groups together (Mugumbate & Nyanguru, 2013).

The tenet of interdependence which emphasises community members working together for the benefit of the collective is central to this study. The tenet of totality, which entails continuous improvement of everything by every member also finds expression in the findings of this study. Ubuntu is a philosophy that is grounded in the interconnectedness of individuals. We perceived it to be appropriate for a more profound understanding of learners' responsiveness towards one another. Hence, we use the philosophy of ubuntu to understand and interpret collaborative engagement during PBL. It is also presented as an indication of how the boundaries that define epistemologies that inform knowledge construction in the classroom can be broadened to include philosophies of African origin. By evoking the principles of ubuntu, participants in this study confirmed the legitimacy of indigenous knowledge systems.

Methodology

The meta-theoretical paradigm of this study was that of social constructivism. Research conducted from a social constructivist lens believes in the notion of multiple realities, and the researcher endeavours to explore such world views (Erlingsson & Brysiewicz, 2013). To this effect, meaning is a social construct that is fundamentally created during interaction with other human beings (Creswell, 2009). Social constructivism regards individuals and the realm of the social as interconnected. Similarly, in this article we view learning as a process during which development takes place by means of collaborative activities and socialisation practices (Coghlan & Brydon-Miller, 2014). The study was qualitative in nature. According to Denzin and Lincoln (2018), qualitative research exposes the researcher to the world, and it is the responsibility of the researcher to make the world visible. Therefore, qualitative research allowed us to be in a close and prolonged relationship with the participants in the research field and we interpreted their narratives and lived experiences. In the main study we infiltrated the community of teachers and learners with the aim of learning and understanding the teacher's beliefs and attitudes and how these beliefs and attitudes shaped the unique delivery of PBL in the context of this study. Our role remained that of researchers and we were not involved with the participants beyond the research project.

A qualitative bounded case study research design was adopted. The focus was on one Saturday school (the case), with the aim of getting a holistic understanding of the phenomenon under study, thus a single case was explored. Saturday schools are generally established to enhance learning outcomes and help learners meet various educational needs (Akarsu, 2012). In the context of this study, Saturday school is a non-governmental institution that offers extra tuition to learners on Saturdays only. The use of case study research design generated a large amount of text from which we wrote the narratives. Likewise, we did not seek to generalise the findings of this research but rather to narrate the experiences and stories of the participants. In accordance with case study design, we presented broad interpretations of what we have learnt from exploring the case (Creswell & Poth, 2018). It was considered that narrative inquiry would supplement and extend the case study research design. By employing narrative inquiry, we wanted to highlight the meaning of personal stories and experiences of the study participants (Wang & Geale, 2015). In relation to this, Clandinin, Caine, Lessard and Huber (2016:13) mention that "the role of a narrative inquirer is to understand, to systematically inquire into the phenomenon of the storied experience of people."

A prolonged time was spent alongside the participants in 2019 to pay attention to the narrative inquiry space (Clandinin et al., 2016). During our engagement with the participants, we sought a holistic exploration of the case under study using multiple data collection methods (Lindsay & Schwind, 2016). Literature reveals that narrative inquiry is a relationship, process, and phenomenon that makes visible the extent to which beliefs, values, and assumptions influence our perspectives (Lindsay & Schwind, 2016).

The research site for this study was a Saturday school located in the Gauteng province. The school was chosen because it used PBL as an innovation to teach underperforming learners. It, therefore, provided a setting to learn about teacher beliefs and attitudes about PBL. The participants were selected through purposeful sampling. Teachers who have been with the project for at least more than 1 year were identified and six of them volunteered to participate in this study. Teachers selected to participate in this study had first-hand knowledge about PBL and, therefore, interacting with them provided credible descriptive data. Focus groups were conducted with six groups of six to eight learners per respective teacher.

In this study, data collection methods included semi-structured interviews, focus group interviews, observations, document analysis and field notes. The time allocated for each semi-structured interview was approximately 60 minutes. Semi-structured interviews were conducted at the school with six teachers who taught Grade 5 to 10 at times that were convenient for them. Six focus group interviews each comprising six to eight learners, were conducted. Six project-based lessons were observed. For this article we took another look at the data from the main study in which influence of teachers' beliefs and attitudes on underperforming learners were investigated. For the purpose of this article, we employed data collected from semi-structured interviews and focus group interviews. The benefit of using focus groups is that they allow multiple learners to be interviewed together (Hesse-Biber, 2017). Thus, multiple perspectives were heard simultaneously. Each focus group comprised six to eight learners. The duration of each focus group interview was approximately one and a half hours. The focus group interviews yielded data on learners' interpretations and experiences about PBL.

Data analysis in qualitative research happens concurrently with data collection. In this study, content analysis was used as the main method of data analysis. According to Cohen, Manion and Morrison (2013), content analysis is accomplished using coding frames and can be conducted with any text material, including documents and interview transcripts. ATLAS.ti software was employed to

code the data transcripts. Further analysis was done on the preliminary codes generated through ATLAS.ti to identify connections and form patterns. Themes were then generated as required in qualitative studies. The names of the participants and other identifiable labels were removed during data analysis and replaced with pseudonyms.

Trustworthiness is essential for qualitative studies (Creswell, 2014). Qualitative researchers have to give assurances why their results and the implications of their study can be viewed as adequate and of worth to the reader by making the methodology and methods that underpinned the research transparent (Morgan & Ravitch, 2018). To ensure trustworthiness; confirmability, transferability, dependability, and credibility were employed as quality assurance measures.

Ethical principles were observed in this study. The prescriptions set out by the Ethics Committee at the University of Pretoria provided guidance and ethics clearance was granted by the University in this regard. Permission to conduct the study was obtained from the school principal and the parents gave assent for the participation of the learners.

Findings

Teachers' Views on Collaboration

Teachers spoke positively about the significance of learners' collaboration. Findings indicate that teachers believed that by working together, learners shared their knowledge and encouraged one another. They also believed that collaborative learning would benefit learners in the future. The findings seem to suggest that underperforming learners benefited from the group work approach as it allowed them to learn with individuals with whom they shared common characteristics and needs.

I like it, so we prefer the kids to work together because if they work together, it helps them share their knowledge and to encourage one another. And also, that is one of the 21st century skills mentioned earlier, it is to be able to collaborate with people. (Luke, male teacher)

I think it is good. It trains them for work environments where they will work with other people. And it will help them in dealing with different personalities (Joy, female teacher).

I think it is a good way of learning when you learn with peers because you get to learn with people like you or with people who are where you are at. The only problem is the kids that are quiet and how to get them involved. I think that is a real mission and it is not easy. (Sarah, female teacher)

Although the teachers believed that collaboration during PBL provided learners with an opportunity to learn from one another, some of them also cautioned that care should be taken not to leave slow learners behind.

I think it is good because you are able to learn from others. One big challenge with teaching that I found is that it is very easy to move with the fast learners

because they engage but leave everyone behind. So you need to be mindful of that and need to move at a slower pace. But with the teams, they learn from each other. The bright kids will influence the others. But you need to be careful on how you group them because if they group themselves it would be along the lines of friendship. (Jerry, male teacher)

I think working in a group allows you to feed on one another's ideas and concepts and in a positive way. On the negative side you may have some dominant personalities in a group ... in a conversation and the direction in which conversation is going. So, we try to balance that by giving people time to express their views, allowing all group members to participate. (Brat, male teacher)

Evidence also revealed testimonies from learners who affirmed that working in groups provided a supportive environment that helped to reduce their anxiety. In this study, learning was seen as a collaborative activity during which participants encouraged each other and took responsibility for each team member's learning commitments. It was also found that there was ample collaboration between Hope Saturday school, the local church, and the host school. The church and the host school provided infrastructure and other human and non-human resources which supported PBL. Furthermore, the school partnered with work-based professionals who volunteered to teach learners the requisite skills.

Attitudes of Learners towards Individualistic Learning

Many of the learners interviewed in this study were positive about the prospects of collaborative learning. They believed that working in groups with others provided a supportive environment, which allowed them to learn from others. The extracts below show how most of the learners used the word "alone", to show that learning in isolation does not yield better results.

It is nice, is not like when you are working alone. Because when you do something wrong, your friends can help you and tell you no this is wrong you must do this and this (Ntsako, Tsonga male).

It helps because you do not make mistakes alone. When you do something wrong, they will tell you this is wrong, and you must do it like this or this (Daniel, Venda male).

When you work with a group you can't fail alone. Like when you sit alone it is not right. Like when you pass you pass together and learn together and do the same things (Kelly, Tswana female).

I think groups are people who work together and want to improve something better than being alone. Working alone will make you feel lonely and not successful in some work (Mosa, Pedi female).

I remember last year we were only ... we built a greenhouse, so I do not think I could have done it alone (Bongi, Zulu female).

It is nicer when you work together. Because when you work with others, other people know other

things and have other ideas but if you work alone you will not know many answers (Mosa, Pedi female).

A position developed by learners in this study showed that individualistic learning was less attractive than collaborative learning. Learners attested that it would be difficult to achieve learning outcomes on their own. It also became evident from this study that shared interest in solving problems or accomplishing a given project eliminated the supposed desire for competition between learners. Findings also demonstrate that learners valued the interpersonal relationships with their peers. This resulted in learners showing appreciation for the basic principle of human interaction within their learning space.

Findings of this study reveal that learners found validation in being listened to and they were proud to be part of a group to which they positively contributed. There is evidence that the focus was not on out-performing other learners but on collective success. One of the important findings in this study was that learners who showed understanding of certain concepts were determined to uplift learners who were seen as underperformers to be at the same level as them.

Yes, because if you learn things in a group, you can go and teach other children so they can be the same with us (Thandi, Zulu female).

For example, you might find out that you know something they do not know and that will help them (Ntsako, Tsonga male).

Yes, because you can help others when they make mistakes (Levy, Sotho male).

I also feel proud when they listen to me in the group (Kelly, Tswana female).

You feel like you are included (Jane, Zulu female).

You feel like you are part of the group and give them knowledge and power. When they do not listen to me I make my words stick, to say do this like this if they do they do, if they do not they don't. (Lerato, Pedi female)

... because you cannot say you know everything. When you are not sure what you are going to learn today ... so when I do not understand something, they help me, and I help them too. I help most of them in English and computer. (Sam, Tswana male)

Being able to help others was seen as a noble and desirable action. Learners' self-esteem was also enhanced by knowing that their knowledge was worth sharing with others. It may be that these learners benefited from a supportive environment that was conducive for developing a sense of belonging. As a result, learners interpreted the classroom as a safe space for participation and sharing knowledge.

Flocking Together in Times of Challenge

Most of the learners in this study indicated that working in groups was beneficial for everyone involved as they faced challenges and triumphs together. They seemed to view the classroom as a community in which members worked together to

construct knowledge while at the same time, navigating the challenges of learning. Learners used the word “together” to indicate the support system that existed among them.

What I like is that we work together and when we pass, we also pass together and when we do projects, we help each other (Levy, Sotho male).

The projects that we did help us to know more ... and I like them because we work in groups (Thabo, Pedi male).

When we work in a group, we work nicely and together (Lebo, Sotho male).

We do group work because working in a group makes you understand things more (Daniel, Venda male).

Below are some of the explanations given to show how they personally benefitted from working with their peers:

They help me when I write the wrong spelling. They also help me so I can get high marks and we do fine, working in a group (Jane, Zulu female).

We learn from each other and get to understand things ... we learn from each other (Levy, Sotho male).

When I don't know an answer to something someone can help me ... when I don't understand they help me and show me the way to do it (Ntombi, Zulu female).

You receive more knowledge from other learners (Khabi, Tsonga female).

When you make mistakes, they correct your mistakes. So, you will know you made a mistake and you will improve (Sam, Tswana male).

Learners believed that group work allowed for an environment in which they could motivate each other. Learning was seen as a collaborative activity during which participants encouraged each other as they embarked on completing the given projects. However, learners acknowledged that some of them were laid back and needed some encouragement to fully participate during PBL. The conversation with learners revealed that they experienced the spirit of oneness as they joined forces to complete the projects.

Everyone does their part so we can finish the project, but some are lazy, and they do not want to help. We encourage them to work harder, so that we can work together (Lucky, Tsonga male).

I like it because when we participate together the things come easier, we have fun and we learn more (Lebo, Sotho male).

In projects I actually like that we become united and we do not take advantage of each other, we understand each other (Ben, Pedi male).

They mostly motivate us when we are working in groups. They will be like guys look at that group. They have built something nice and would say, guys we need to stick together and work together (Ntombi, Zulu female).

Learners were of the opinion that the advantage of using group work during PBL was that they could share their limited resources and information.

I think group work is when you are working together and, for example, there is Group A and Group B, and mine, and you find out that my group

is out of jelly tots and they have them so it is obvious that I have to go to them and go ask them for jelly tots. And if I also see that my Geodome, for example, is falling apart I have to go to them and ask from Group A, 'How did you do it?' As they say, izandla ziya gezana (one hand washes the other). We have to stick together and be united as people. (Ntombi, Zulu female)

I think working in groups is a good idea because if you are working individually you cannot get more information. But in groups you can get more stuff and more information. But if you are doing it alone you cannot gather all that stuff and ideas you are going to ... maybe fail in a school project. When you are doing it as a group you are going to pass. (Jane, Zulu female)

Collaboration was highly demonstrated within and across groups as learners relied on each other for completion of projects. Findings reveal that sharing and joint use of resources instilled an ethos of togetherness and strengthened social ties. In like manner, unity was perceived as an indication of a functional group that had prospects of achieving the learning objectives.

Discussion

Findings in this study echoed the philosophy of ubuntu. According to Bondai and Kaputa (2016) the philosophy of ubuntu positions identity and lived experiences within a communal system. Teachers in this study created a communal entity in which learners were encouraged to learn through collaboration. The use of collaboration during PBL further supports the creation of settings in which learners come together to seek and find solutions to problems (Mabovula, 2011). The classroom becomes a platform where ideas are shared by all community members in each real-life context (Mabovula, 2011). The idea of people coming together to seek solutions to their problems, as articulated by Mabovula (2011), is corroborated by the teachers in this study. They revealed that underperforming learners benefited from collaborative activities as they were given an opportunity to learn with individuals with whom they shared common challenges. In African communities, the concept of ubuntu is evident in members collaborating in working the fields to plant or harvest crops (Mugumbate & Nyanguru, 2013). In developing economies education is seen as a means to promote national unity and a precursor for economic and social consciousness (Muyia, Wekullo & Nafukho, 2018). Results of this study clearly indicate that collaborative learning has the potential to instil skills required in society and the world of work.

Narratives of teachers reveal that there were challenges that learners navigated through as they interacted with their peers in a collaborative environment. For instance, the possibility of dominant personalities existing in some groups. As a way of mitigating such challenges, teachers

revealed how they gave learners opportunities to express their views to allow all group members to participate in an activity. This expression echoes the principle of tolerance as purported by the proponents of ubuntu. As stated by Mabovula (2011), tolerance entails individuals respecting others' points of view. To this end, teachers in this study modelled the value of tolerance by encouraging learners to open up about their views on group dynamics to promote participation.

We also found that almost all the learners were of the perception that working in groups with others provided a supportive environment, which allowed them to learn from their counterparts. This finding supports the principles of ubuntu as outlined by Oviawe (2016) who argues that an individual is not independent of the collective. By contrast, the relationship between an individual and her/his community is reciprocal, interdependent and of mutual value. By the same token, the results of this study show that learners detested individualistic learning as they believed that they were best placed to achieve their learning goals if they worked as a collective. These results mirror the tenet of interdependence where a learner depends on others and they in turn depend on him or her (Shepherd & Mhlanga, 2014). Learners used words like "I could not have done it alone" to affirm their reliance on other team members. From the study it became clear that the success of an individual was seen to ultimately lead to the success of the collective.

Literature reveals that the values of ubuntu include empathy, compassion, and solidarity among members of a group (Letseka, 2013; Taringa, 2007) – values that were corroborated by the results of this study. Learners sought to show compassion for those who showed evidence of underperforming in concepts that they seemed to understand more. Rather than pursuing to outperform others, they conceived their roles as helpers of those in need. Learners' narratives demonstrated the ideal of "we are in this together" and they were determined not to leave their counterparts behind. In alignment with ubuntu principles, the behaviour of the learners was morally creditable. This finding supports previous research by Taringa (2007) who argues that people who are driven by moral values interact with other community members with dignity and gratification (Taringa, 2007). Accordingly, in this study, collaboration during PBL showed evidence of building learner character and capacity to help others learn.

The philosophy of ubuntu advocates that a person's humanness is accentuated if he or she says "I participate; therefore, I am" (Mugumbate & Nyanguru, 2013). In this study a sense of agency was noted among the learners. They viewed themselves as active participants in a community of

learners. The results reveal that learners associated their participation with the benefit of the whole group achieving the learning goals. Another important finding was that learners motivated one another. The sense of togetherness held individuals accountable to other team members to achieve project goals. Therefore, they encouraged each other to work harder. This finding echoes the tenet of totality, which entails continuous improvement of everything by every member of the community (Mbigi, 1997, as cited in Mabovula, 2011:39). It was evident from this study that learners who were seen to be underperformers started to hold high self-efficacy beliefs about their proficiencies. Their improvement was also demonstrated in the manner that they wanted to take the lead and be valued as partners in PBL. These findings highlight that learners were developing valuable skills that are required in emerging economies, namely the ability to self-motivate, motivate others, and take accountability. The tenet of totality which advocates continuous improvement by every member of the society provides a firm foundation for the economic development and well-being of any emerging economy.

The tenet of interdependence in ubuntu includes sharing of resources (Mabovula, 2011). Learners in this study interpreted the act of sharing resources as a symbol of unity and togetherness. One of the learners used a Zulu expression, *Izandla ziyagezana*, meaning that "one good turn deserves another." In this context, the learner cited the principle of ubuntu by which she believed that helping other learners in the classroom would benefit her in the future. Findings of this study also reveal that learners believed that mobilisation of resources and information should happen across the groups to create a bigger pool that would benefit the whole community of learners. This aspect of the findings reveals how learners in this study learned the agency of using resources that are in short supply to benefit the collective. With this kind of approach, disparities between learners in emerging economies can be controlled by creating conducive learning environments. Rather than further marginalisation of the poor, learners mobilised their resources to increase participation and performance. This is an important finding in the context of many emerging economies as poverty continues to be a notable feature (Napier, Harvey & Usui, 2008).

Conclusion

Learners' testimonies revealed that the values expressed in a collaborative PBL classroom were aligned with the philosophy of ubuntu and strengthened cohesion and togetherness between learners. Learners evoked values such as sharing, caring, teamwork, solidarity, unity and helping one another as they navigated through the problems

posed in assigned projects. With this study we ascertained that underperforming learners can work together to improve their learning experience. The interconnectedness and common humanity that existed between the learners motivated them to take responsibility for each other's learning (Letseka, 2013). South Africa's curriculum frameworks advocates for human dignity, inclusivity and infusion of social and environmental justice (Department of Basic Education [DBE], Republic of South Africa [RSA], 2011). One of the aims of the South African national curriculum is to produce learners who "work effectively as individuals and with others as members of a team" (DBE, RSA, 2011:5). These values in the curriculum frameworks can only be realised when learners are taught in a supportive environment that takes into consideration that learners are a community, and their relationship is that of interdependence rather than an emphasis on individual achievements.

The findings of this study reveal that participants articulated values aligned to the philosophy of ubuntu as being more desirable than the neoliberal ideology that shapes current education practices. The trajectory of competition emphasised in traditional education settings influenced by neoliberal ideology was discouraged as learners reported that they were best positioned to succeed if they worked together as a team rather than as individuals. These findings reveal that the education system should refrain from focussing only on individualistic learner achievements and rankings and should embrace more authentic methods of assessment. We propose that current curriculum policies be reviewed to ensure that local philosophies are sufficiently represented to reduce overreliance on "borrowed" policies. It is recommended that a deeper examination be conducted on how and which indigenous knowledge systems can be strengthened to support current pedagogies.

Authors' Contributions

SV and MAM jointly wrote the manuscript. MAM provided data for Table 1 and conducted the interviews. SV assisted with the analysis of data. All authors reviewed the final manuscript.

Notes

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- ii. Published under a Creative Commons Attribution Licence.
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