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The use of a cooperative approach to enhance learner performance in life orientation

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Education in the 21st century has had an evolutionary impact on teachers' teaching approaches in South African schools. Teachers are continuously faced with challenges in improving teaching and learning approaches in response to addressing the particular needs of a diverse group of learners. With this article we aimed to explore life orientation teachers' use of a cooperative teaching and learning approach to enhance learners' performance in secondary schools. A qualitative research design was employed with an interpretivist-constructivist paradigm to obtain the views of the secondary teachers who responded via face-to-face interviews. We employed purposive convenient sampling of seven ($N = 7$) teachers from the Northern Cape province in South Africa. Data were analysed using inductive thematic analysis and supported by the literature review and the theory underpinning this study. Findings of this study reveal that some teachers were favourably implementing cooperative teaching methods, despite the lack of resources and many other challenges they faced. School managers must infuse cooperative learning in their daily teaching praxis to ensure that teachers become confident and continuously employ this approach.

Keywords: cooperative learning; learner-centred approach; learners' performance; life orientation teachers; teaching approach

Introduction

In recent decades cooperative learning (CL) has globally become one of the major research subjects centred on the quality and improvement of learners' performance (Johnson & Johnson, 2018). The importance of quality teaching and learning that enhances learners' performance has become the engine of economic growth and is rapidly gaining a share of the world economy (Hanushek & Woessmann, 2015). It is our view that Africa, despite being well-known and rich in mineral resources, is now also becoming an epicentre of the global wealth in knowledge (Hanushek & Woessmann, 2015). In this article we aim to explore life orientation (LO) teachers' use of a CL approach to enhance learners' performance in secondary schools. CL as a diversified pedagogical approach is needed to address learner diversity and improve learning (Sharan, 2010). CL methods and strategies are designed to enhance learners' participation and contributions to the learning process. This will encourage learners to engage their thoughts, knowledge and feelings in the learning process.

Since 2006 LO was introduced as a compulsory subject for Grades R to 12 and is one of the four fundamental subjects for Grades 10 to 12. In restructuring and recirculating the education system, the main objective of LO was to develop and equip learners with knowledge, skills, and values to be able to make informed decisions about subject choices and career opportunities in the world of work (Department of Basic Education [DBE], Republic of South Africa [RSA], 2011). In light of the above, teachers must use CL methods and strategies to discover the learners' worlds and incorporate them into the world of the classroom.

Context of the Problem

Several research studies on strategies to facilitate CL have been conducted (Van Wyk, 2016), but a limited number on CL to improve performance in LO exists (Swarts, Rens & De Sousa, 2019). According to the National Senior Certificate Examination Report of 2019, there were notable achievements in the South African national examination (DBE, RSA, 2019) with significant improvement in only seven of the 11 gateway subjects, of which LO is not one. To increase learners' critical thinking skills and overall performance in their school-based assessment (SBA) remains a challenge. Why some learners perform at Level 7 (that is the rating code and percentages for recording and reporting of which the learner achieves 80% and more) (DBE, RSA, 2011) in all subjects except for LO, makes one wonder why it is difficult for learners to perform at Level 7 in LO as expected. The Quality Learning and Teaching Campaign ([QLTC] DBE, RSA, 2012), as an imperative to improve teaching and learning, which was launched in 2008, aimed at ensuring that every South African has access to quality schooling. Despite the vision of the QLTC, learners' low performance and poor achievement have led to the quality of the South African education system to be officially regarded as a societal issue. Consequently, we argue that the values of LO should be successfully integrated into other subjects, particularly as it is regarded as a multi-disciplinary subject that relates with content from sociology, human movement, political sciences, psychology, and labour-related studies (Geldenhuis, Kruger & Moss, 2013).

Learner-centred pedagogy has brought a mind shift into teachers' praxis; a change from a teacher-oriented approach to a learner-centred pedagogy (Onojerena & Eromosele, 2018) has been motivated in the South African curriculum. We conclude that a learner-orientated approach helps learners to develop critical thinking skills and the ability to apply these skills in real-life situations. This argument is substantiated by Amponsah and Van Wyk (2020) whose findings reveal that in a learner-centred environment, it is understandable that no single

teaching strategy can effectively satisfy all learners. However, the use of a CL approach is guaranteed to satisfy the needs of most learners in a class. Scholars of CL pedagogies point out that teachers need to master the subject matter for the implementation of CL (Zakaria, Chin & Daud, 2010) drawing on effective pedagogical content knowledge. It is important that for CL to be implemented successfully as a learning pedagogy, effective learning strategies rely on well-planned lesson objectives, well-sequenced content which relates to learning material and explicit activities and assessment, and finally, effective support and developmental feedback (Van Wyk, 2019). Furthermore, CL techniques can only enhance positive learning outcomes if they adhere to the fundamental guidelines of implementation (Moges, 2019). Thus, teachers without the appropriate capabilities and understanding to employ effective CL methods in the classroom will hamper learners' ability to acquire new skills, knowledge, and attitudes required.

According to the social interdependence theory the accomplishment of every learners' goals is effected by the actions of others. It thus remains important that in the CL approach learners are required to work together in small groups to accomplish a common goal (Johnson & Johnson, 2014). Individual contributions cannot be excluded since group members can be held individually accountable for their part of a task. Literature on CL includes Adiansyah, Muh.Amin, Mansyur and Mu'nisa's (2017) work on improving learners' skills based on the learning approach employed. Results from this study have revealed that CL directs learners to independent learning, improves learners' retention skills, develops critical thinking skills, and improves academic achievement. Although CL is consistently acknowledged for its efficacy in enhancing social, motivational and cognitive outcomes (Johnson & Johnson 2009), its implementation remains a challenge (Sharan, 2010) that requires vigorous involvement and many changes in terms of instructional strategies (Gillies & Boyle, 2008). Marais (2016) argues that teachers who teach in overcrowded and large classes are in many circumstances confined to the chalk-and-talk instructional method, which limits the use of alternative teaching methods. Overcrowded classrooms are one of the most common factors leading to didactic neglect, which refers to the teacher's inability to pay enough attention to each learner's educational needs (Marais, 2016). Despite some arguments against the use of CL, if the five elements of CL, positive interdependence, individual accountability, interpersonal and small group skills, face-to-face promotive interaction, and group processing are not implemented correctly, these advantages will not be obtained and student attitudes towards CL will be negative

(Mentz, Van der Walt & Goosen, 2008). Effective implementation of CL can be ensured when all stakeholders become actively involved. CL empowers learners with the relevant knowledge and skills to meet the challenges of the 21st century (Johnson & Johnson, 2014).

Despite the need for a learner-centred approach, very few studies have investigated LO teachers' use of CL. We seek to critically examine the cooperative teaching and learning approaches that teachers can apply to bring a positive change in learners' performance in LO.

Against this background we sought to address the following question:

- How does the use of a cooperative learning approach enhance learners' performance in life orientation?

Literature Review

Learners as active participants

Learners' participation in constructing new knowledge depends on their level of interest in the learning experience. Learner involvement rests on the teachers' shoulders to constantly motivate and engage with learners in the subject matter and become involved in the activities. Although learners work individually, their productivity rate is much higher when they work together to pursue a common goal (Johnson & Johnson, 2014). Spooner (2015) concurs that learners working in a CL environment attend to each other's needs in the sense that they assist each other and work towards a common goal. The teacher needs to apply a learning approach that allows a group of diverse learners to interact in solving problems and then provide an opportunity for them to share their solutions of problem-solving with the rest of the group. Additionally, teachers should enable the group to identify which member needs more support and encouragement to improve performance in completing a task or developing other skills (Johnson & Johnson, 2009). Yusuf, Natsir and Hanum (2015) report that a successful teaching and learning process is influenced by a teacher's beliefs and stance on the methods and techniques used in the classroom and can result in learners achieving high scores. Learners taught through a cooperative learner-centred approach are actively involved and take the responsibility for their own learning and development of knowledge.

A cooperative learning approach

CL is regarded as small groups of learners that collaborate and support each other and accomplish a common goal (Slavin, 2011). Killen (2007) is of the view that CL, as a stimulus, fosters successful collaborative learning and engagement among learners. Van Wyk (2012) expands on that view by reporting that CL offers learners a supportive, practical engagement in an equal social learning environment.

CL has its roots in the work of John Dewey (1859–1952) who strongly believed that authentic and meaningful learning could only be constructed in a social environment. CL as a particular pedagogical practice enhances learners' academic performance and creates social relationships where learners work together in small groups to accomplish individual and group goals (Gillies & Boyle, 2008). When learners need to apply their gained knowledge effectively, teachers should be very specific with regard to the choice of teaching methods to apply. Research results indicate that CL is recognised as best practice and it has, therefore, become necessary for teachers to be enlightened on the guidance received and how contextual implementation of CL can be maintained (Baloche & Brody, 2017:275).

Life orientation as an integrative subject

Magano (2011) posits that before 1994 LO was known as *school guidance* which was a non-examinable subject, with a focus mainly on vocational education, character development, and socially appropriate behaviour. LO draws on sociology, psychology, political science, human movement sciences, labour studies and industrial studies. It is guided by learning outcomes that focus on personal, social, career, and physical and recreational development with the focus on the diversity of learners as human beings in their totality as the self in relation to society (Sedibe, 2014).

The general view is that LO addresses skills, knowledge and values about the self, the environment, responsible citizenship, a healthy and productive life, social engagement, recreation and physical activity, careers and career choices. It not only focuses on knowledge, but also emphasises the importance of the application of skills and values in real-life situations, participation in physical activity, community organisations and initiatives (DBE, RSA, 2011). An important issue that has emerged is, due to the integrative nature of LO with other content subjects, teachers need to be up-skilled in the different subjects since it covers a wider spectrum of subjects that need specialised subject content knowledge. To mention a few LO topics: 1) social and environmental responsibility that covers levels of government laws, personal and world views, religion, ideologies, and natural disasters like droughts, poverty and earthquakes which are integrated with social sciences [history and geography]; 2) development of the self which covers lifestyle diseases, hypertension, cancer, tuberculosis which integrated with life sciences; 3) democracy and human rights which covers violation of human rights, the Bill of Rights and labour relations which integrate with history and commerce subjects (DBE, RSA, 2011).

Cooperative learning elements

Many scholars with an interest in CL have deliberated on the specific elements that underpin this phenomenon identified as positive interdependence, face-to-face promotive interaction, individualised learning performance, group accountability, small-group social skills, and group processing (Johnson & Johnson, 2013). Positive interdependence indicates that each member of the group is responsible for the success of the group as a whole in which everyone is assigned a specific role (Johnson & Johnson, 2013). With face-to-face promotive interaction learners work close to each other so that they can easily communicate with each other and have the opportunity to practice (Johnson & Johnson, 2013). During promotive interaction learners promote each other's success by helping, assisting, supporting, encouraging and praising each other's efforts to learn. Interestingly, promotive interaction changes the self-efficacy of group members to joint efficacy (Johnson & Johnson, 2019). Individual accountability implies that every learner has the responsibility for carrying out a specific assigned task, working towards a common goal to succeed. Group processing is the fourth element, in which group members need to focus on the continuous improvement of the quality of the processes they are using to achieve their goals. They describe members' actions, ensuring effective working relationships and make decisions about changing behaviour (Johnson & Johnson 2019). Lastly, social and interpersonal skills as an element of a successful CL strategy should be fostered (Johnson & Johnson, 2013). However, teachers must master these elements of CL before they can implement these strategies in their respective classrooms. Therefore, it is evident that these elements form the grounding pillars of the intended lessons before they can employ the CL strategy (Johnson & Johnson, 2009).

The premise of this research falls within the social-cultural constructivist theoretical framework (Merriam, 2009). Concerning social constructivism, Vygotsky (1978) underscores the critical importance of the social context for cognitive development. It is in this light that knowledge is constructed by learning and comprehension in a social environment with multiple participants who share their experiences. Furthermore, the CL theory and the social-cultural learning theory of Vygotsky (1978) espouses the social learning context where learners learn through social collaboration and sharing. This builds on the theories of social constructivism of Dewey (1961) who believes that learners must exercise their freedom and that their interdependency ensures that group goals are achieved. Furthermore, Bandura's social learning theory (1986) mentions

that behaviour may be learned not only by operant and classical conditioning, but by watching another person modelling the behaviour without any reinforcement (Mash & Wolfe, 2012). Therefore, working cooperatively in a social learning environment has become an essential attribute for learners to acquire in a post-school environment. Additionally, when teachers take the responsibility for planning, teaching, and monitoring the success of learners, they interact as collaborators in an interactive learning environment (Zhou, Kim & Kerekes, 2011).

According to Killen (2007) this kind of interaction stimulates learner collaboration and ignites successful learning, while Van Wyk (2012) emphasises the idea of active learning and a more supportive social environment. Although learners may work independently, they remain responsible for the group and the success of the group, as underpinned by CL principles (Chen & Wang, 2013).

In planning any form of CL activities, teachers must consider the principles that underscore CL approaches that place learners centrally. Van Wyk (2019) comments on the desirability and procedures to be followed when employing CL. We argue that the use of operative learning could enhance learner performance in LO when the five elements of CL are systematically structured and implemented correctly. However, this is only possible when teachers are goal oriented and highly motivated.

Research Methodology

The context of this article is informed by the interpretivist-constructivist paradigm since the intention was to obtain the views of secondary teachers by capturing the participants' actions, opinions, and interactions. We employed a qualitative research approach to collect data.

The focus in this study was on the Pixley Ka Seme district in the Northern Cape province of South Africa. A purposive sampling of secondary school LO teachers ($n = 7$) was selected. Seven LO teachers (three male and four female) were purposefully selected. Purposive sampling was used as all the teachers were permanently appointed by the DBE to teach LO in Grades 10 to 12. Based on their teaching experience, training on CL and the curriculum and assessment policy statement (CAPS), and subject knowledge as stipulated in CAPS that relate to the central issues for in-depth analysis (Nieuwenhuis, 2014), we believed that these participants would provide rich data that would assist in answering the research question. All the participants were between 24 and 50 years old and had varied teaching experience teaching Grade 10 to 12 learners (1–3 years – one teacher; 7–8 years – two teachers; 8+ years – four

teachers).

As data collection instrument we used open-ended questions to which teachers were required to substantiate their answers using narratives. The semi-structured face-to-face interviews were aimed at the LO teachers' teaching praxis in a CL situation and to gain an understanding of their experiences and observations of learners' performance on the different CL activities and tasks (Marshall & Rossman, 2006).

We employed the constant comparison analysis to analyse the qualitative data (Glaser & Strauss, 1967). Inductive methodologies included categories and sub-categories that emerged from the data analysis. Independent researchers transcribed the data, coded and analysed it manually, and presented it narratively following the themes that were generated. The data obtained from the semi-structured interviews were condensed into meaningful units (Miles, Huberman & Saldaña, 2014). Dependability was assured by the two researchers working independently and collaboratively through critical discussion and consensus. All the interviews were voice-recorded in order to develop a trail to promote trustworthiness in the data collection.

To obtain confirmability direct quotations from the interviews and narratives were included to support the findings. We ensured credibility by providing a complete breakdown of the participants and the context of the research. Credibility was also ensured through sufficient engagement with the research participants in the field (Lincoln & Guba, 2000). Furthermore, the two researchers frequently met and discussed the data to reach consensus. Member checking was also used for the participants to confirm that their comments were correctly recorded. Any forms of bias that could influence the findings of the study were attended to.

Ethical Considerations

The Ethics Committee of the University of South Africa (UNISA) approved the research (Reference number 2019/11/13/41003276/08/AM). The Northern Cape Department of Education granted permission to conduct the study at schools. Informed consent was obtained from the participants and issues of confidentiality and anonymity were dealt with.

Findings

The findings are discussed under subheadings according to the themes that emerged from the data analysis. Five themes emerged, namely, moving to a learner-centered pedagogy; teachers' subject content knowledge; implementing CL in the LO classroom; the value of CL, and the challenges of CL.

Moving to a Learner-centered Pedagogy

Teachers indicated an ongoing trend in implementing learner-centred pedagogies to involve learners more in their learning process. These learner-centred pedagogies cater for learners' needs in the classroom, particularly where teachers are dealing with diverse groups of learners in the classroom. Participants explained the need for the learners to actively work together in groups to advance their independent learning:

Explaining lesson content, give a summary, give exercises, learners to be actively involved, individually or in groups, and CL. In some exercises they are working together where everyone is participating and involved and come up with one answer from the group. In these groups they try to find solutions to the problems they encounter. (Participant V [P V])

Another participant was of the view that learners were encouraged to work together through

CL, group work, and collaborative learning. Asking learners questions to answer as a method is one that works well with our learners. I prefer learners to be active participants in a lesson, which indicates whether they are with you or not. (P R)

Another participant explained how she and the learners got involved in instructional conversations where learners responded to open-ended questions to exchange ideas and knowledge, and find solutions to problems. The participant confirmed the following:

After that, learners engaged in group discussion, debating, role-playing, and demonstrations, and [effective teaching] involves everyone. Learners must be able to communicate and be active participants in groups and with each other and that is why I prefer to ask questions. (P U)

The above extracts indicate that within the learner-centred teaching approach, teachers do not use a single method, but prefer to use different cooperative teaching-learning methods to accommodate learners with their unique skills and attitudes.

Teachers' Subject Content Knowledge

Teachers demonstrated their subject content knowledge and understanding by incorporating collaboration to ensure that content specialists teach certain aspects of the curriculum.

Participant P noticed an opportunity for collaboration and co-operative teaching when there was a need for extra help and to tap into other teachers' expertise. The participant explained as follows:

The same with me and a few of my colleagues, we are trying to assist each other when some of the content falls within your field of specialisation, then we still applying a CL method similar to the co-partner. This approach helps me to have a better understanding of the content that I am not familiar with.

P U explained how she was happy to work collaboratively with other teachers when applying

the same CL method, but to explain the subject matter to ensure that learners were being exposed to an effective teaching and learning process: *"I am in a better position to help other teachers as we normally do it at our school because I am on a higher level with regards to my knowledge of the subject."*

The views of the teachers on how the same CL method can be applied by another teacher, describe their confidence to teach and apply CL methods effectively and that they can even rely on their knowledgeable colleagues to assist in certain areas, despite their own experience and good subject knowledge.

Implementing Cooperative Learning in the LO Classroom

The following extracts from the interviews highlight teachers' implementation of group investigation as a CL approach in the teaching of LO. However, teachers were aware that this approach required training and experience for it to be effective:

I believe group investigation [CL] can be applied in various subjects, but there is a procedure to follow to ensure that the correct steps must be followed. Group investigation as a CL approach needs special training. It is not just anyone who can teach the subject [LO] although people assume that. When you understand the method [CL], you apply with great confidence and you are on top of the content (know the content well). (P P)

P U was well conversant with CL as a teaching-learning approach as well as the importance of knowing the procedures before implementing them successfully. P U realised the value of subject content knowledge and the issue of pedagogical content knowledge in using CL as an approach:

You must have a good understanding of it and the topic at hand must be clear to the learners. The teacher facilitate the process of how learners will work on the topics and sub-topics to be investigated. Then groups plan their investigation by developing their questions and how they will collect their information. After completing the investigation, information will be collated in the form of a summary and then presented to the group first and then to the class. In the end, the teacher and the learners evaluate the investigation. (P U)

Teacher participant M (P M) demonstrated how the jigsaw puzzle approach to learning work was used in the classroom. This was indicative that the teacher had the necessary competencies and adequate knowledge to employ such a strategy within the classroom where learners worked in smaller groups on certain sections of the work.

... the Jigsaw puzzle, it is so interesting where the master groups have to work on specific assignments over time, break into smaller groups and contribute by employing presentations that groups have to make for their success. They interact well and have to solve problems collectively.

The Value of Cooperative Learning

The value of CL lies in that it equips learners with the necessary competencies and skills that are needed in the 21st century (Marais, 2016). The CL approach motivates learners to take responsibility for their own learning.

Learners work together and they benefit from being in a team. I normally encourage everyone to participate in the groups and to give their part of the contribution. You move in and between the groups and so to me it [is] a way of establishing order in the groups. When learners do not understand, I divert the question to another group to make sure everyone is involved or approach the group to discuss or to re-explain again or when I realise it's the whole class that needs to be addressed, I speak to everybody, the whole class. (P C)

CL enables all learners to actively participate through discussions and problem-solving with the teacher working as a facilitator to ensure the learning process. This means that learners engage in higher cognitive levels of thinking developing critical thinking skills:

Learners develop skills to make judgments about information and create new meaning and come up with new ideas on their own. When they engaged in group work where they feel comfortable and at ease, they tend to learn higher-order thinking skills which help them to filter information easily. Learners learn to know each other in a short space of time. You know learners like individual attention and I am on the lookout for that. (P U)

The above extracts indicate that by becoming actively involved, learners learn various skills that are needed to improve their performance in LO.

The Challenges of Cooperative Learning

During the interviews, several challenges emerged from the participants' responses on their experiences of implementing CL. These challenges ranged from overcrowded classes, limited classroom space to disciplinary problems and a lack of subject content knowledge. One participant expressed how an overcrowded classroom restricted movement in the classroom: *"Big groups are unruly, limited space to move, they are noisy and some even ignore you when you are talking to them. This also deprives those who want to learn the opportunity to do so"* (P V).

Another participant expressed her frustrations about the overcrowded classrooms: *"It is difficult to move around and pay individual attention to groups that need help. Classes with 50 plus learners are difficult to manage and our management does not hear that excuse"* (P R).

Another challenge voiced by P M was the dependency syndrome which tended to occur with some learners who had not developed the confidence to work independently (on their own/individually):

The wait-for-the-other-one factor arises easily when learners are not sure about their facts. Some

are dependent on others and are not that willing to work on their own. This creates a wait-and-see of what will happen before learners start working on their own.

The above findings indicate that teachers experienced challenges like overcrowding and frustrations that hampered active and participatory learning and hindered CL. Not only did the overcrowded classrooms confine teachers to one place, but it also left them frustrated in attempting to implement the CL strategies they believed could be beneficial in such environments. These challenges are a result of the incorrect application of CL elements and not as a result of CL as such.

Discussion

Our aim with this study was to investigate how LO teachers used CL approaches to enhance learners' performance in LO.

Moving to a Learner-centered Cooperative Learning Pedagogy

Empirical evidence reveals that teachers are engaging in learner-centred CL pedagogies. Even though a teacher declared using the "question-and-answer method" learners participated in the discussion and the given activities to solve problems or complete tasks. The CAPS (DBE, RSA, 2011:4) aims at fostering a learning approach with the principle of active and critical learning. This principle further confirms a participative-critical approach to learning where learners construct new knowledge and understanding to what they already know and believe.

The findings suggest that learner-centred approaches stimulate instructional conversations among learners and the teachers – something that was evident in the discussions and debates that the learners were involved in. The fact that teachers implemented cooperative teaching-learning methods that enhanced active and participative learning illustrates that CL approaches can be successful when they are correctly implemented according to the five elements of CL (Van Wyk, 2012).

Teachers' Subject Content Knowledge

As mentioned in the literature review, subject content knowledge is crucial to teachers as they must know exactly what (subject content knowledge) and how to teach the subject matter (pedagogical content knowledge). Therefore, it is important to understand what teachers must learn and what support would assist them to sustain the use of CL (Baloche & Brody, 2017). In our study, teachers demonstrated different levels of subject content knowledge when implementing CL in the LO classroom. The lack of content knowledge illustrates why it was difficult to implement CL correctly and that is why continuous training would be helpful. This finding is congruent with the

assertions of Magano (2011) and Sedibe (2014) that illustrate the broad content coverage and the need for LO teachers to have specialised content knowledge.

In response to pedagogical content knowledge, teachers were able to name some teaching strategies, while others (teachers) could explain and expand on strategies which include questions and answers, group work, jigsaw method of group work as well as group investigation. As stated by Zakaria et al. (2010), teachers must understand the subject matter to be delivered, but need to ensure how that content is to be taught and thus need to plan how CL is executed. The opposing levels indicate the need for proper continuous in-depth training on CL approaches to enhance teachers' pedagogical content knowledge in teaching LO, which aligns with Van Wyk (2019) who emphasises that effective teaching strategies require well-planned objectives and sequenced content material that will foster effective CL in the classroom.

Implementing Cooperative Learning in the Life Orientation Classroom

Teachers revealed that they were aware that learners were unique and that their potential and abilities to learn differed. Therefore, they implemented CL in LO. Van Wyk (2012) emphasises that implementing a CL strategy is not a one-off thing, but a continuous process and as result we argue that teachers must continuously and regularly practice CL procedures for successful implementation. In our study of CL, teachers demonstrated that they were still in need of training. The experienced and trained attendees assisted them in the successful implementation of CL.

The Value of Cooperative Learning

Gillies and Boyle (2008) indicate that CL is an instructional pedagogy that enables learners to optimise and build on relationships both academically and socially in achieving shared goals. In terms of academic performance, it is evident from the literature that learners gain academically when exposed to a CL environment. Not only are the gains academic, but also social in the sense that they reach out to each other and share information within the group which thus scaffolds their learning (Johnson & Johnson 2009). What is much appreciative and valuable, is within the assumption of learning as a social activity, both learners and teachers construct knowledge and acquire those vital critical skills through active participation as espoused by the social constructivist theory of Levy Vygotsky.

The Challenges of Cooperative Learning

The current South African learner-centered teaching approach presents a variety of challenges

to teachers in the implementation of CL. Cooperative learning as a participatory strategy, in particular, can enhance effective learning if it is applied in a well-planned manner. However, the practice of CL has several challenges which make it difficult to effectively implement CL. Overcrowding and large class sizes were identified as some of the problem areas. Participants in this study identified the issue of overcrowding. As a result, the environment was not conducive to learning. Furthermore, the large numbers of learners per class resulted in poor class control. Mentz et al. (2008) confirm that such pitfalls can be alleviated when all elements of cooperative learning are being implemented correctly. Marais (2016) is of the view that poor behaviour such as screaming, fighting, and destruction has made it difficult for teachers to implement CL successfully during teaching and learning. Learners who are exposed to stressful environments tend to display behavioural problems. Consequently, these kinds of behaviour negatively influence learners' cognitive capabilities and academic performance in particular (Mash & Wolfe, 2012). To sum up, teachers that are able to implement all elements of CL correctly, might face some positive outcomes (Johnson & Johnson 2014).

Conclusion

The above illustration of CL approaches sought effective collaborative employment. Our study was designed to explore how LO teachers' use of the cooperative teaching and learning approach enhanced learners' performance in secondary schools. This investigation has shown that CL can be successfully employed when teachers understand the five elements of CL and can apply them correctly and continuously. It is with this understanding that the traditional teaching approach is not discarded, since it shows positive results when integrated with CL strategies. Although the effective implementation of CL is plagued by many pitfalls, the benefits outweigh these. A CL environment allows learners to interpret new information, solve problems and demonstrate new knowledge (Johnson & Johnson 2014). As these findings are only based on a local context, the applicability of CL as a teaching strategy cannot be generalised.

Recommendations

CL strategies should become mandatory for teachers to implement as they can bridge the pedagogical gap between learners and teachers. The Department of Education in collaboration with higher education institutions (HEI) should provide annual in-service training as part of continuous professional development (CPD) to ensure that teachers remain pedagogically skilled and competent to implement CL consistently and

continuously to prepare them for any challenges faced in their classrooms. Further research should focus on CL approaches in schools with a high teacher-learner ratio and those with a low or acceptable teacher-learner ratio to establish the effectiveness of CL and desired learner outcome.

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Authors' Contributions

ACS wrote the research methodology, literature review, findings, and discussion of the findings. ASM reviewed the final article before it was sent to the language editor.

Notes

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