Cooperative Learning as an Approach to Enhance the Implementation of Inclusive Education

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ABSTRACT

Inclusive education requires teachers to design instruction that benefits all students, regardless of their abilities, gender, or cultural background. Cooperative learning, a strategy that inherently fosters inclusivity, is one of the approaches that can enhance the implementation of inclusive education. Therefore, teachers need to be well-versed in this pedagogical approach. The extant literature on cooperative learning in inclusive education settings is limited. This study, therefore, examined cooperative learning as an instructional approach to improve the implementation of inclusive education. This qualitative study was conducted through semi-structured interviews with four purposively selected teachers from four schools in South Africa. Lesson observations were conducted during teaching and learning, and documents were reviewed. Data were analysed through content analysis. The findings revealed that cooperative learning, in its essence, allowed students to actively help each other, share their domestic knowledge, and build connections. The implications of these findings for inclusive education are discussed.

Keywords: Barriers; cooperative learning; inclusive learning; learners with disabilities
Introduction

The concept of inclusive education is rooted in the ideas of social justice and democracy, as outlined in the Salamanca Statement and Framework for Action on Special Needs Education, hereafter referred to as the Salamanca Statement (Hernández-Torrano et al., 2020). Inclusive education is not only about diversity in terms of ability but also encompasses differences in gender and cultural background and how schools structure and address these differences (Hernández-Torrano et al., 2020). It aims to counteract discrimination and exclusion, focusing on diversity, equity, equality, citizenship, and the universal right to sufficient and adapted education (Göransson & Nilholm, 2014). The principles of inclusive education describe individual and interactive learning opportunities that all students should benefit from in the learning process. Florian and Beaton (2018) suggest that within the concept of inclusive education, teachers should respond to student diversity through differentiation strategies.

Inclusive education is implemented through various strategies and policies to ensure equitable access to education for all learners. This is often achieved by operationalizing international agreements into national laws and policies (Ireri et al., 2020). For instance, in Kenya, the government recommended that all secondary schools adopt, design, and implement programs that carry out inclusive education as part of the policy framework (Ireri et al., 2020). However, implementing inclusive education policies can be hampered by challenges such as the lack of teachers' skills and knowledge in differentiating the curriculum to address a wide range of learning needs (Mckenzie & Dalton, 2020). To address these challenges, professional development programs have been conducted to promote using instructional design approaches like Universal Design for Learning (UDL) to facilitate learning for all students in inclusive classrooms (Mckenzie & Dalton, 2020). Nzuza (2023) explored strategies for creating inclusive learning in South Africa and found that learners experiencing barriers in their learning comprehended the curriculum content through role play and constructed objects. Additionally, efforts have been made to work on educational policies and practices towards inclusive education, although questions arise about their efficacy and efficiency (Ireri et al., 2020).

Several studies have examined cooperative learning as one of the approaches that can enhance the implementation of inclusive education (Paschal et al., 2020; Van Leeuwen & Janssen, 2019; Rott & Marohn, 2018). According to Viado and Department (2023), cooperative learning is a teaching strategy in which students with different abilities work together in small
groups to achieve a common goal. Cooperative learning is a student-centred pedagogical model with five elements capable of promoting students’ active engagement and improvement (Silva et al., 2021). Johnson and Johnson (2018) pointed out that these elements are positive interdependence, promotive interaction, individual responsibility, group processing, and interpersonal skills. Muñoz-Martínez et al. (2020) add that cooperative learning elements are strategies or tools for developing inclusive values. In inclusive classrooms, cooperative learning encourages students with disabilities to be more active in the classroom and allows them to navigate the classroom with the help of other students (Muñoz-Martínez et al., 2020). The main goal of cooperative learning is to ensure that all learners, including those experiencing barriers to learning, have access to meaningful and appropriate learning opportunities in educational settings. With the current international push towards inclusive education, as articulated in the Salamanca Statement, cooperative learning can facilitate the successful implementation of inclusive education practices worldwide (Paschal et al., 2020).

Research indicates that cooperative learning is an effective strategy that promotes learning by allowing heterogeneous groups of students to support each other (Völlinger & Supanc, 2020; Moriña & Orozco, 2019). These studies show that students benefit from cooperative learning activities where they exchange and negotiate with each other. According to Gillies (2016), “helping students to interact and work together not only enables students to learn from each other but also to accept responsibility for the tasks they have to complete and the decisions they have to make” (p.44).

Cooperative learning can be instrumental in increasing participation and involvement among all students, regardless of their abilities, which is a core aspect of inclusive education (Muñoz-Martínez et al., 2020). It incorporates task-related processes that facilitate student engagement, particularly for students lacking age-appropriate physical or social-skill competencies (Klang et al., 2020). Van Leeuwen and Janssen (2019) found that cooperative learning improved students’ critical thinking. Similarly, Sencibaugh and Sencibaugh (2016) found cooperative learning approaches effective in improving the academic achievement of students with learning disabilities. Polat et al. (2022) also found cooperative learning to be effective at improving students' social skills. Extant literature, therefore, supports cooperative learning as one of the essential teaching approaches for implementing inclusive education in the classroom.
However, cooperative learning does not just happen because teachers wish it to happen, and simply “placing students in groups and expecting them to work together will not necessarily promote cooperation” (Gillies, 2016, p.40). Instead, effective cooperative learning results from careful planning, design, and implementation. According to Johnson and Johnson (2018) as well as Klang et al. (2020), effective cooperative learning should be built on the five principles of social interdependence theory, including positive interdependence among group members, promotive interaction, individual accountability, interpersonal skills, and the student’s ability to reflect on their progress. Social interdependence theory posits that the outcomes of individuals are influenced not only by their actions but by the actions of others as well (Johnson & Johnson, 2018). Klang and colleagues describe positive interdependence as the awareness among group members that each group member’s success is dependent on the success of the other group members. Individual accountability is described as each group member taking responsibility for their contribution to the group’s success while promoting interaction, which requires students to have opportunities for interaction to achieve their goals (Klang et al., 2020). The principle of social skills calls for explicitly teaching social skills and reinforcing their use in group interactions. In contrast, the principle of group processing requires the teacher to think critically about the group work to promote effective future implementation (Klang et al., 2020). These principles highlight the instrumental role of the teacher in ensuring effective cooperative learning experiences in their classroom (Gillies, 2016).

Nevertheless, gaps have been identified in the existing literature related to the impact of cooperative learning on inclusive education (Paschal et al., 2020). While extant research acknowledges the benefits of cooperative learning in fostering innovation, creativity, and academic performance among learners (Muñoz-Martínez et al., 2020), it also highlights the need to further emphasise cooperative learning strategies within the teacher education curriculum to improve learner achievement (Muñoz-Martínez et al., 2020). More specifically, there is a lack of education policies and supervision of implementing cooperative learning in schools to attain inclusive education (Klang et al., 2020). Hence, this current study was influenced by the social interdependence theory and sought to explore cooperative learning as an approach to enhance the implementation of inclusive education. This study was conducted to answer the question: How does cooperative learning enhance the implementation of inclusive education?
Methods

The study employed the interpretivism paradigm. This paradigm looks for significance in natural environments and tries to comprehend and interpret them (du Plooy-Cilliers et al., 2014). According to de Vos et al. (2017), this paradigm allows the researchers to understand social life and the meaning people attach to everyday life. In this regard, this paradigm assists in understanding people directly involved in a particular phenomenon. Therefore, this study aimed to understand how educators use cooperative learning to enhance the implementation of inclusive education in their teaching; hence, the interpretivism paradigm was deemed fit. An approach used in this study was qualitative. A qualitative approach enables investigating and comprehending profound human experiences and the interpretations associated with a specific phenomenon (Creswell, 2014; de Vos et al., 2017; du Plooy-Cilliers et al., 2014). Thus, the present study concentrated on how teachers created classroom realities by interacting with students while adapting the curriculum to facilitate cooperative learning. This study used a case study design. According to Yin (2015), a case study design is an empirical investigation that looks at a modern phenomenon in the context of real-world occurrences. In employing the case study design, the present study aimed to explore how educators used a cooperative learning approach to improve the implementation of inclusive education during the teaching process. This study's emphasis on teachers at four different primary schools qualified as a case study.

Participants

Convenience sampling was used to select the four primary schools in uMgungundlovu District in the province of KwaZulu-Natal in South Africa. All selected schools in the township are no-fee and ranked as quintile 3. According to Cohen et al. (2018), convenience sampling involves choosing the nearest study site available and accessible during the research. Convenience sampling was therefore deemed suitable for this current study based on the schools’ accessibility and willingness to participate in the study. Therefore, the four research sites were chosen based on this. Four participants were selected from the four schools. de Vos et al. (2017) assert that sample size depends on what needs to be known, the research purpose and what will add value to the research. These participants were selected using purposive sampling. According to de Vos et al. (2017), purposive sampling is based on the researcher's judgement by determining the characteristics of the population that are important for the research. Participants were selected based on their experience in implementing inclusive education, which enabled detailed exploration and understanding of cooperative learning. Each
school had four teachers in each grade. Therefore, the four participants in this study were selected based on their roles and experiences working with learners with special needs and implementing inclusive education. All participants had more than ten years of experience in teaching learners experiencing barriers to learning. Specifically, the sample consisted of four female educators teaching grades 1-4 in four primary schools. These grades were chosen based on the foundation phase, the infant of the learner's education process. Hence, choosing these grades would provide better insight into implementing inclusive education in primary schools. The anonymity of the schools and participants was preserved by using pseudonyms. For example, participants were named Teachers 1-4 and Schools as School A-D. du Plooy-Cilliers et al. (2014) suggest that anonymity is honoured when a researcher undertakes that he/she will not record the names of the participants at any stage of the research process. Research participants were also asked for their informed permission. The participants were informed that, at any time during the study, they could choose to withdraw if, for any reason, they no longer wanted to participate. Participants’ demographic information is presented in Table 1.

<table>
<thead>
<tr>
<th>School</th>
<th>Participant</th>
<th>Gender</th>
<th>Years of Experience</th>
<th>Grade Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Teacher 1</td>
<td>Female</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Teacher 2</td>
<td>Female</td>
<td>21</td>
<td>3</td>
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<tr>
<td>C</td>
<td>Teacher 3</td>
<td>Female</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>Teacher 4</td>
<td>Female</td>
<td>34</td>
<td>1</td>
</tr>
</tbody>
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**Procedures**

Semi-structured interviews were conducted with the participants to gain a detailed picture of the participants’ beliefs on cooperative learning as an approach to implementing inclusive education (de Vos et al., 2017). A set of questions were developed to be used during the interviews. Informed consent was obtained from the participants before the commencement of the interviews. In terms of protecting participants from harm during the research process, they were alerted before the start of the research that should they feel discomfort or unwillingness to continue with the study, they may withdraw. Each interview was audio-recorded using a voice recorder and lasted 30 to 40 minutes with each participant. Semi-structured interviews were relevant because they allowed an in-depth focus on understanding individual experiences and perspectives of the research phenomenon as well as opportunities
for clarification. The data were transcribed immediately afterwards. In addition, observations and document reviews were conducted. Observations were conducted by the researcher to witness events of cooperative learning in inclusive classrooms as they occurred. Using an observation schedule, lesson observations were conducted during teaching and learning to ascertain how teachers applied cooperative learning. According to Cohen et al. (2018), observation is a systematic notetaking of behaviours, events and settings from natural occurrences and social situations. Observations included how cooperative learning is conducted during teaching and learning and how learners respond to cooperative learning. Students’ behaviours in responding to cooperative learning were recorded by taking notes. Lesson observations were conducted three times on different days in each grade. In this regard, non-participant observation was employed to record the events of cooperative learning with the aim of understanding the context in which learners experiencing barriers to learning behaviours occurred. Being non-participant assisted the researcher from being biased during the research process. Document reviews were also conducted for this study. Document reviews are intended to provide access and insights into related areas of knowledge about human social activity (Cohen et al., 2018). Document reviews assisted the researcher in understanding the substantive content of cooperative learning through the lens of school documents to illuminate the deeper meaning of the phenomena. Document reviews included the documented content of the lesson, such as curriculum policies, teachers' files and learners' books were reviewed. The documents were reviewed at the end of the lesson observations each day of the research. These techniques were selected because the data they offered enabled the researchers to understand cooperative learning more deeply to improve inclusive education. The three techniques (interviews, observations, and document review) worked in concert to produce methodological triangulation (Cresswell, 2014). Triangulation, therefore, helped to cross-check the veracity of the data in this investigation (Cresswell, 2014).

Data analysis

Content analysis was used to analyse the data. The audio recorder's data was transcribed verbatim. To become acquainted with the information that surfaced from the interviews, researchers went through the transcripts of the interviews. The text was transcribed accordingly. Through content analysis, words were distilled into a few contents related to the study. The aim was a condensed and broader description of the phenomena. Keeping the research in mind, the text was read as many times as necessary to apprehend essential features of cooperative learning. In organising, data was coded through notes and headings written in
the text while reading. The list of categories was grouped under high-order headings to reduce the number of categories by collapsing those that were similar or dissimilar. Additionally, during analysis, the information gathered from observations and document reviews was added to create broad categories: collaborative learning, patience and dedication, building relationships and mutual respect, and enjoyment of learning. The generated data from the three techniques (interviews, observations and document review) were combined to find patterns and provide context for the study. Member checking was employed to ensure that the data collected from participants were reliable (Cohen et al., 2018). Participants were given the data in this regard and asked to confirm, provide feedback, or correct any inaccuracies that might have occurred. This process assisted the researchers to confirm or refute the consistency of the interpretations derived from the data (Cohen et al., 2018).

### Results

This section discusses the findings of this study, which explored cooperative learning as an approach to enhancing the implementation of inclusive education. These study findings relate to the teachers’ use of cooperative learning. The findings revealed that teachers group learners to learn from their peers, bringing learning confidence, a spirit of helping, unity, and empathy.

**Collaborative learning.** The teachers organise students into groups to promote peer support and comprehension of new concepts. This is demonstrated in the following excerpt from one of the teachers:

> I arrange learners into groups collaboratively; that way, each learner helps each other, and those who grasp quickly can assist those who take time to understand. Grouping learners has made them bond and understand one another. After introducing and teaching the new concept, I grouped learners, and they had to repeat what I had taught them in their groups. In that way, the one who did not understand me learned from his/her peers. Although this method takes time, whilst I have much to cover for the year, it promotes positive learning for all learners. (Teacher 2, School B)

The above findings revealed that grouping learners allows them to help each other and benefit from one another as they do during teaching and learning. According to the results, cooperative learning allowed learners’ space to share what they had been taught by teachers, thus creating a positive learning environment among learners. Similar views were shared by
Participant 4, who mentioned that cooperative learning through grouping learners consumed much time and required persistence.

**Patience and dedication.** The findings emphasise the value of investing time and effort into cooperative learning, recognising it as a beneficial but time-intensive approach.

> In all my lessons, I ensure that all learners are catered for without fail. When dealing with complex concepts, I group learners according to their abilities and after teaching, I move them from one group to another, assisting them. I have realised that learners in their groups can teach each other easily, they respect each other, and those who struggle quickly learn from their peers as they work on the concept. If they are learners who cannot understand the concept, I take them and place them in another group until they understand the content under discussion. Once they have grasped the content, they are very quick to alert me so that I can see they have comprehended it. Therefore, using cooperative learning requires a lot of patience and time from the teacher, but it has produced good results for me. (Teacher 4, School D)

The above findings revealed that grouping learners could simplify the concept to benefit struggling learners. Furthermore, the findings showed that learners were not placed in one group. Should there be a need, they were moved to another group. They were moved around until they comprehended the content of the lesson. The findings suggest that teachers must be tolerant and on par with the learners as they learn from each other. Likewise, Teacher 1 mentioned that grouping learners was not the ultimate solution, especially for learners experiencing barriers to learning. It is sometimes necessary to modify the content further to meet the learners' needs.

**Building relationships and mutual respect.** Grouping students encourages community, respect, and positive peer interactions. Teacher 1 echoed the following:

> Grouping learners experiencing barriers to learning with those who are clever has worked for me. At times, I am compelled to get close to them and teach the content repeatedly in a group, and if a need arose, I would come up with other methods until they grasped the content. When I had done that, I would leave and observe them respectfully teaching each other. When I returned to pose a few questions, I found they had understood the concept. I have also noticed that grouping learners creates a bond in that way; even at break time, these learners would play together. (Teacher 1, School A)
The above extract revealed that struggling learners can learn from others when collaborating. Furthermore, the findings revealed that learners learn the content several times until they grasp it. According to the findings, the teaching method changes should the learners fail to comprehend. It is noted from the findings that grouping learners creates unity among learners.

**Enjoyment of learning.** The findings emphasise the positive effects of cooperative learning on students' attitudes and the cultivation of a positive and enjoyable learning environment. Teacher 3 shared that learners can assist each other and gain confidence in the lesson when they work in pairs.

> When learners arrive in my classroom at the beginning of the year, I give them baseline tasks. From that task, I understood their capabilities, which made me place them in groups to mix the clever ones with those struggling. For example, I am teaching vowels, i.e. ‘o’. I will ask learners who have cows and donkeys at their homes. I will then mix them with those who do not have these animals. I will then ask how these animals cry. When they make that sound, those who do not have these animals will be taught by others. Once they have mastered that, I ask them to write the vowel ‘0’ to ‘o’ on the air and at the back of the partner in the group using their fingers. Once they have done that repeatedly, they all write on the paper, helping one another. As they help each other, even the one struggling can write and feel positive. You see the joy of learning in the learners' eyes (Teacher 3, School C).

The above findings showed that when learners refer to what they know, they can comprehend the content of the lesson and can impart the same knowledge to others. The findings revealed that learners used their fingers to demonstrate how to write, and they did that repeatedly. It further emerged from the findings that learners were allowed to work in pairs and teach each other before they were allowed to write what they had learnt on paper.

**Discussion**

The results of this study show that cooperative learning is positively viewed as a teaching approach for students experiencing barriers to learning. The results showed that through cooperative learning, students could help each other, unite, and respect each other. Data from participants showed that students' understanding of content is enhanced as they can learn from one another when they work together. The results showed that when students are in a group, they often repeat what the teacher has taught with the help of group members until
they understand the lesson. In one of the lessons, while observing the class, the researcher noticed that the students separated themselves and divided into groups while the teacher still explained the topic for discussion. It was evident that students preferred to work in groups. As the students worked in groups, it was observed that they understood each other's shortcomings, were patient, and helped each other. However, the researchers noticed that although the students helped each other, some dominated the group. The participants did not mention this finding from the lesson observation during the interviews. In addition, upon reviewing the teacher's files, it was noticed that there were students' group sitting plans with learners' names; however, such was not followed when learners were grouping themselves.

According to the researchers, the interviews and observations confirmed the data from the analysed documents. In reviewing the teachers' lesson plans and learners' exercise books, the researcher noticed lessons where students were taught in groups. However, the lesson plans mentioned group work as part of the teaching and learning remedial activity. This means that teachers led group instruction to help students experiencing learning barriers. In addition, the lesson plan specified that students would be assessed. However, participants did not mention this finding during interviews or classroom observations. Students were observed writing tests in groups, and upon completion, teachers collected student workbooks for marking.

According to the results of this study, even struggling students can understand class content if they help each other. These findings are consistent with Linder and Schwab (2020), who found that when students received support from their peers, diverse groups of students, regardless of ability, could demonstrate their skills and interests in the classroom. Sembiring and Dewi (2023) agree that students who studied together understood their lessons better when they helped each other. This is consistent with the findings of this study, where participants indicated that students understood class content more easily when working in groups. The study found that teachers grouped students who had animals at home with students who were unfamiliar with animals so that the students could learn from each other.

During our conversation, research also showed that during cooperative learning, students repeated content over time until they were ready to master it. This conclusion was consistent with the classroom observations. When teaching and learning, students repeated what the teacher taught them and what they wanted to learn and pointed their fingers in the air. A review of teacher documentation revealed no evidence that students repeated instruction during group work. This suggests that teachers may have undocumented teaching methods that
work. In other words, the study found that students repeated class content until they understood it. This is consistent with Casserly et al.’s (2019) findings that teachers revise their lessons individually after the entire lesson. Interviews showed that students formed cohesive bonds when working together in groups.

While observing the class, the researcher noted that the students were studying together even when they had to be separated and in their seats. They sat next to each group member, not next to other group members. These findings support the findings of Muthukrishna and Engelbrecht (2018), who emphasized the decolonization of inclusive Ubuntu education as an inclusive concept of humanity, caring for one another, and concern for well-being. In addition, Derzhavina et al. (2021) believe that even today, structured interaction between participants in the educational process can positively impact inclusion by encouraging teamwork among children and developing appropriate psycho-educational support systems for student education. People with disabilities participate in inclusive courses.

**Conclusion**

In conclusion, using cooperative learning to enhance the implementation of inclusive education can encourage learners experiencing barriers to learning to develop a positive attitude toward their learning. The learners enjoyed learning from their peers and could better understand the content. Learners with high competence helped the struggling learners in groups, resulting in improved learners’ confidence and motivation to be engaged in learning. Grouping learners demonstrated peer interaction and cohesion, hence boosting their intrinsic motivation. Thus, learners could build knowledge through others and share ideas that enriched others' insights. However, cooperative learning requires educators to be well-prepared and vigilant in the classroom, as they must walk around each group and assist learners. Future research should consider exploring the concept of learners as co-teachers in the classroom.
References


