Kurdish Studies
December 2024
Volume: 12, No: 6, pp 48-58
ISSN: 2051-4883 (Print) | ISSN 2051-4891 (Online)
www.KurdishStudies.net

DOI: 10.53555/ks.v12i6.3711

The Effects of Cooperative Learning for Children with Disabilities in inclusion Classroom

Dr. Abdullah Abubakr*

*Assistant Professor at College of Education, Imam Abdulrahman Bin Faisal University, P.O. Box: 2375, Dammam, Saudi Arabia, Email: aybakr@iau.edu.sa

Abstract
The purpose of this study was to give teachers' perspectives on the effects of cooperative learning inclusive classrooms. Eleven educators who employed cooperative learning strategies were interviewed for the study. The investigation explored how students with disabilities gained from cooperative learning, their participation in class activities, and the method's influence on their educational and behavioral growth. Results showed that teachers generally held positive views about cooperative learning for students with disabilities, although its efficacy varied among individual students. The study also found that students' academic achievements improved, particularly in writing skills. Additionally, students with disabilities in inclusive settings experienced enhanced social interactions and increased self-esteem through cooperative learning approaches. The current study recommends the need to consider students' perspectives on cooperative learning and the extent to which they benefit from it.

Keywords: Cooperative learning, Teacher questions

Introduction

Education is increasingly shifting toward removing barriers for students with disabilities by integrating them into mainstream classrooms. According to UNICEF, approximately 240 million children worldwide have disabilities. These children have the same rights as their peers, including the right to pursue their aspirations, develop their skills, and receive a quality education that enables them to reach their full potential (Leatherman & Niemeyer, 2005).

Achieving true inclusivity in education requires adapting and modifying curricula, instructional methodologies, and assessment strategies. Adaptation involves making targeted adjustments to teaching methods or evaluations based on the nature and severity of a student's disability. The primary objective of these adaptations is to enhance students' access to essential knowledge and skills while ensuring equitable learning opportunities for all (Garrote et al., 2020).

Asola (2015) emphasizes that adaptation does not involve altering the content of instruction but rather making subtle modifications to the medium of delivery. For instance, adaptations may include capitalizing words and letters for visually impaired students, administering written tests instead of oral ones for students with hearing impairments, or allowing students with attention deficit hyperactivity disorder (ADHD) to move freely within the classroom. Adaptations encompass modifications in presentation, student response formats and procedures, instructional strategies, time allocation and scheduling, classroom environment, specialized tools, physical accommodations, and assessment methods (Westwood, 2005).

Curriculum modification, on the other hand, entails altering what a student is expected to learn or practice during a given semester to align with their cognitive abilities. Such modifications involve fundamental changes in educational content that may differ from the student's chronological age but correspond to their capabilities and educational objectives. These modifications may include alterations in content volume, instructional time, input and output expectations, skill level, and task complexity. Additionally, assistive technologies—such as auditory or visual aids—can be incorporated into lesson delivery, and assessment methods can be adjusted based on the nature and severity of the disability. Moreover, modifications may involve increasing or decreasing teacher support in the classroom and adjusting expected learning outcomes for the students (Hall, Vue, Koga, & Silva, 2004).

The selection of appropriate adaptation or modification strategies depends on the specific needs and abilities of each student with a disability, the nature of the curriculum, and its alignment with their characteristics and competencies. Additionally, the effectiveness of these strategies is contingent upon teachers' instructional proficiency, their ability to convey information effectively, and their integration of modern educational tools and strategies (Lee et al., 2006).

Instructional methods play a crucial role in ensuring that teaching is appropriately adapted to students' abilities. One effective strategy is cooperative learning, also known as peer-assisted learning, which enhances information retention and fosters students' self-confidence (Wagner & Gansemer-Topf, 2005). Cooperative learning involves organizing students into small groups where they work collaboratively to teach one another or complete tasks (McMaster & Fox, 2002). Research indicates that cooperative learning is a highly beneficial instructional approach for students with disabilities in inclusive classrooms, as it promotes active engagement, social interaction, and peer support (Secomb, 2008; Boudouris, 2005; Draper, Brown & Jellison, 2019; Lazarus, 2014).

This educational method differs from the traditional approach in that it includes several critical steps to ensure that students function as a cohesive group, with each student participating effectively and equally (Maheady et al., 2002). The elements of cooperative learning include positive interdependence, individual and group responsibility, direct interaction (face-to-face),

social and communication skills, and group processing of performance (group self-assessment). Cooperative learning is also recognized as an instructional approach in which a group of students with diverse individual differences interact within an educational setting to achieve a specific learning objective under the supervision and guidance of the teacher (Tran et al., 2019). Cooperative learning is a widely recognized concept in educational contexts and is applied to various instructional activities that require interaction among students working in small groups. This approach enables students to collaborate on tasks and activities, fostering both individual development and the achievement of shared goals (Igel & Urquhart, 2012). The primary objective of cooperative learning is to encourage students to support one another and reinforce the academic concepts they are acquiring.

Each cooperative learning group typically consists of two to five students. The minimum of two students ensures that the fundamental principle of cooperation is upheld, while the maximum of five students allows for more effective communication and comprehension among group members. This structure facilitates the learning process by enhancing students' understanding and enabling them to complete educational tasks more efficiently (Felder & Brent, 2001).

For cooperative learning to be effective, there must be constructive interdependence among group members, ensuring mutual reliance and collaboration in pursuit of the group's objectives. Without such interdependence, the group is unlikely to achieve meaningful results. The teacher plays a crucial role in monitoring the group's progress, assessing its performance, and ensuring that the intended learning goals are met. Additionally, direct interaction among students is essential for knowledge exchange, peer guidance, and collaborative problem-solving. Throughout the process, the teacher should provide ongoing reinforcement and encouragement to support student engagement and success (Felder & Brent, 2007).

This approach can be implemented using various grouping methods. One method is random grouping, in which the teacher assigns students to groups without considering individual differences. This can be done through alphabetical ordering, spatial proximity in the classroom, student preference, or the order in which students arrive at the learning space. Another approach is the cluster method, in which the teacher forms groups based on homogeneity, considering students' academic levels, psychological conditions, age, interests, and cognitive tendencies. Alternatively, the heterogeneous grouping method involves forming groups that include students with varying academic achievement levels and individual differences within the same group, fostering a more diverse learning environment (Pratt, 2003).

Several studies indicate that cooperative learning has a positive effect on the social participation of students with disabilities, and has increased self-confidence, sense of self, and influence on group work. In addition, regular students who participate with students with disabilities have shown acceptance and positive interaction with students with disabilities (Jenkins et al 2003; Fore et al 2006).

The importance of this research lies in the lack of recent research that examined the effect of cooperative learning on various students with disabilities in general education classes from the caregiver's perspective.

Purpose of the study

This qualitative study aimed to measure the impact of the use of cooperative learning strategies by teachers of students with disabilities in integration classes in schools in the Kingdom of Saudi Arabia on the academic, behavioral, and social aspects through the perceptions of their teachers.

1.What is the level of participation of students with disabilities in cooperative learning activities?
2.What is the effect of cooperative learning on the social behaviors of students with disabilities?
3.What is the effect of cooperative learning on the academic level of students with disabilities?

Research Delimitations

One of the major limitations of this study is the small sample size due to the small number of classrooms that included inclusion. Another limitation is the time required to conduct the interview; participants may find it difficult to remain fully focused on the interview for more than ten minutes, which can be considered a disadvantage compared to other research techniques. The distribution methods used in this research can result in partial data and restricted response rates (Tenny et al 2017).

Definitions of Terms

1.Cooperative Learning: A pedagogical approach that emphasizes collaborative student engagement to achieve shared educational objectives. In this model, students are organized into small groups, where they work collectively to solve problems, complete assignments, or gain a deeper understanding of the subject matter.

2. Students with Disabilities: Learners who have specialized educational needs due to physical, sensory, cognitive, or learning disabilities that impact their ability to acquire knowledge at the same pace or in the same manner as their peers. Their education necessitates tailored instructional strategies and accommodations designed to meet their individual needs and support their full academic potential.

3. Inclusive Classroom: A learning environment that integrates students with disabilities alongside their typically developing peers to foster equitable educational opportunities and promote social interaction. This model incorporates instructional modifications and adaptive teaching strategies to accommodate the diverse needs of students with disabilities, enabling them to learn effectively within a supportive and inclusive setting.

Theoretical framework and previous studies

Cooperative learning

Cooperative learning is rooted in Gardner's theory of multiple intelligences, which posits that the diversity of intelligence levels within a cooperative learning group enhances the overall learning experience. The varied cognitive abilities within a group contribute to the development of individual intelligence and foster deeper learning. Additionally, Bandura's social learning theory suggests that learning is both influenced by and influences the surrounding environment, particularly the social context. This principle is strongly reflected in cooperative learning, as the multiple dimensions of interaction within small groups create a dynamic learning environment that motivates students to engage more effectively (Jacobs, 2004).

Cooperative learning is also an effective method for structuring the classroom environment, as it involves organizing students into small, heterogeneous groups based on their varying abilities and academic backgrounds. These groups collaborate on a shared task with the objective of learning through active participation (Johnson & Johnson, 2015).

Furthermore, cooperative learning is a modern instructional strategy that is particularly beneficial in classrooms with large student populations or those that include students with disabilities. This approach emphasizes active engagement in educational discussions and encourages small groups—composed of students with diverse abilities and learning styles—to engage in problem-solving and inquiry-based learning (Tran, 2013).

The implementation of cooperative learning in classrooms is driven by several key factors, including the necessity of connecting learning with active participation, stimulating students' cognitive engagement, fostering learner independence, enhancing academic abilities and skills, and promoting positive attitude development and support (Sutherland, Wehby, & Gunter, 2000). Before implementing cooperative learning, teachers must review key guidelines to ensure its effectiveness. This includes strategically grouping students based on their educational needs, learning styles, or academic levels. Additionally, the teacher must clearly define the purpose of cooperative learning, both in writing and mentally, and communicate these objectives to each group. To facilitate the achievement of learning goals, teachers should provide necessary instructional tools and supplementary activities. Furthermore, they should assign roles to students within each group to promote structured collaboration (Gillies & Ashman, 2007).

The process of forming groups involves assigning two to five students per group and distributing specific roles among them. One student typically assumes the role of leader, responsible for directing and monitoring the group's progress while coordinating tasks among members. Another member serves as the recorder or reporter, documenting the group's findings. A third member may act as the summarizer, synthesizing key insights from discussions. Additionally, a researcher can be designated to gather relevant sources and materials. Groups may also appoint a spokesperson to present their collective findings. The teacher can either assign these roles or allow students to choose their responsibilities (McInnerney & Roberts, 2005). It is essential for the teacher to explain the function of each role and ensure that students fully understand their responsibilities.

To maintain an effective learning environment, teachers should establish clear timeframes for each objective or task, monitor group interactions, and encourage collaboration in problem-solving. Additionally, teachers should assess students' engagement by listening to group discussions and posing random questions to individual members. Recognizing and rewarding high-performing groups—rather than individual students—reinforces teamwork and collective achievement. After each group's work is completed, teachers should facilitate discussions, provide corrective feedback, and review key lesson concepts to reinforce learning (Slavin, 2011).

Slavin (2013) further emphasizes the importance of assessing the progress of students with disabilities after cooperative activities. This can be done through pre-prepared oral questions or short tests to evaluate individual comprehension. Teachers should also assess the group's overall success based on its ability to collaborate effectively, master the required academic skills, and demonstrate cooperative learning behaviors.

One effective group management strategy is the numbering method, in which students are assigned numbers instead of names, allowing the teacher to randomly select speakers. This approach ensures active participation and motivates high-achieving students to support their peers with lower academic performance (Chophel, 2021).

Although cooperative learning offers numerous benefits, it also presents certain challenges. Potential drawbacks include the risk of misinformation if students provide incorrect explanations without teacher supervision, dominance by high-achieving students, and feelings of inadequacy among some learners. Additionally, if not properly managed, group discussions may become chaotic, leading to wasted instructional time. Some students may also take on a disproportionate share of the work, while others may resist this learning method altogether (Woods & Chen, 2010).

Cloud (2014) identifies approximately 24 cooperative learning strategies that educators can implement based on the diverse characteristics of students in the classroom. Among these, one of the most well-known is the **Think-Pair-Share** strategy, which involves students collaborating in pairs to read, analyze, evaluate, and summarize information. They then present their findings to the class, facilitating broader discussion. This method ensures that all students actively participate and have an opportunity to articulate their thoughts (Usman, 2015).

Another notable strategy is **Peer Support**, wherein two students assist each other in memorizing essential information, such as course-specific vocabulary, before assessing one another's understanding (Solomon, 2004). Additionally, the **Role-Playing** strategy engages students in a dynamic learning experience where one member of a small group assumes the role of the teacher while the others act as students. These roles are then rotated to enhance comprehension and engagement (Hasler-Barker, 2016).

Among the most effective cooperative learning strategies is **Numbered Heads Together**, which ensures equitable participation by requiring all students to contribute to a discussion. This method is particularly useful for problem-solving and topic exploration, as it encourages active engagement and collaborative thinking. Due to its simplicity and effectiveness, I frequently utilize this strategy to facilitate discussions in my classroom (Razak, 2016).

Another widely recognized cooperative learning method is the **Jigsaw Strategy**, in which students are divided into small groups, each responsible for explaining a specific lesson. Within each group, students allocate different sections of the lesson among themselves, ensuring that the strongest students support their peers in mastering their assigned portions. Once all members have thoroughly understood their sections, the group collaboratively presents the complete lesson to the class. Since all groups work on the same lesson, students from different groups can engage in discussions and compare their insights (Huang et al., 2014).

Another effective strategy is the **Corners Strategy**, which utilizes the four corners of the classroom to facilitate interactive learning. In this approach, predetermined answers or pieces of information are placed in each corner. Students are then instructed to move to the corner that aligns with their chosen answer. Alternatively, corners can be designated with the names of significant individuals or key concepts, prompting students to select a corner, discuss the information presented, and justify their choice before sharing their reasoning with the class (Magraner, Valero, & Moret-Tatay, 2019).

Additionally, the **Group Research Strategy** fosters cooperative learning by encouraging group members to collaboratively explore and discover essential learning components under the teacher's guidance. This method promotes active learning through engagement with various information sources, facilitating knowledge construction through discussion, exchange, and critical analysis within the group (Gillies, 2016).

Inclusion Classroom

Recent advancements in the field of special education aim to reduce barriers and transition students with disabilities from educational isolation to full inclusion within the general education system. Integration in education refers to incorporating students with disabilities into mainstream classrooms alongside their peers, ensuring that the necessary support and services are provided to help them reach their full academic potential (Atkins et al., 2010). The primary objective of inclusion is to shift away from segregated special education settings and integrate students with disabilities into regular schools, fostering a more natural and socially inclusive environment.

The inclusion model is an educational approach designed to address the academic and developmental needs of students with disabilities within mainstream classrooms to the greatest extent possible, while accommodating their specific requirements and readiness levels. This approach not only enhances their educational experience but also facilitates meaningful social interactions (Kilanowski-Press, Foote, & Rinaldo, 2010). The inclusion of students with special needs in general education classrooms is widely regarded as an essential responsibility, irrespective of their ability to meet traditional curriculum standards. These students are expected to be fully integrated members of the classroom community (Gilman, 2007).

A study conducted by Horne and Timmons (2009) examined teachers' perspectives on the key considerations necessary for successfully integrating students with special needs. The findings emphasized the importance of structuring lesson materials effectively and adjusting instructional stimuli to sustain students' motivation and attention. Teachers should assess students' training needs, transitioning from intensive to distributed learning sessions, and reinforce learning by presenting information through multiple modalities to enhance memory retention and knowledge transfer. Additionally, employing positive reinforcement strategies tailored to students' preferences, providing constructive feedback, and integrating both verbal and written language with visual aids can enhance the learning process. Breaking down educational tasks into smaller components and systematically training students to complete them in a logical sequence further supports their learning and development.

Inclusion plays a crucial role in helping students with special needs navigate their environment and overcome challenges related to adaptation, interaction, and mobility. It enables a greater number of students with disabilities to access quality education (Reid, 2010). Furthermore, integrating students with disabilities into general education classrooms fosters equity within the educational community, enhances their independence, and boosts their self-confidence and self-awareness. This inclusive approach not only facilitates their participation in various academic and extracurricular activities but also fosters a culture of acceptance among their peers, preparing non-disabled students to work collaboratively with individuals with disabilities in both academic settings and broader societal contexts (Wiebe-Berry, 2006).

Research has highlighted several positive outcomes associated with the inclusion of students with disabilities, particularly in the development of their self-concept and the cultivation of a more positive perception of themselves and others. When students with disabilities are integrated into general education classrooms alongside their peers, they gain opportunities to recognize both their differences and similarities with those around them, reflecting the diversity of the real world. This exposure fosters a greater acceptance of diversity and inclusivity. Furthermore, inclusion promotes the formation of friendships and the development of stronger social relationships both within and beyond the school environment. Schools serve as ideal settings for students to build connections and acquire essential social skills. Meaningful interactions—whether through play, collaboration, or daily interactions—enhance mutual understanding and respect, thereby creating valuable opportunities for students with disabilities to learn both with and from their peers (McGinnis, 2013).

Inclusion is generally considered a beneficial approach that enables students with special needs to maintain academic progress alongside their peers. It fosters active participation in the classroom by enhancing student engagement and enjoyment, which, in turn, promotes academic motivation and healthy competition. Additionally, in inclusive classrooms, students are exposed to a broader range of subjects that may not be available in separate special education settings. This exposure allows students with special needs to evaluate and identify study materials that best align with their interests and strengths (Barr & Bracchitta, 2008).

Students with disabilities

A student with a disability is defined as an individual who experiences emotional, intellectual, or physical impairment that requires support to access the educational environment effectively. Disability is commonly regarded as a barrier to leading an independent and normative life, as well as to achieving educational progress comparable to peers of the same chronological

age (Test et al., 2009). Students with disabilities exhibit differences from the general population in terms of physical, cognitive, or sensory functions. These differences may be permanent—arising from genetic, neurological, or physical conditions—or episodic, such as epilepsy, which intermittently disrupts their ability to engage in fundamental personal, social, and educational activities. These challenges hinder the fulfillment of their needs and their ability to learn through conventional methods, necessitating specialized support (Cook et al., 2000).

Disability can also be defined as a partial or complete impairment, whether temporary or permanent, that restricts an individual's capacity for activity and interactive participation (Antonak & Livneh, 2000). Individuals with disabilities are generally categorized into two main groups: pervasive disabilities and sensory-motor disabilities. Pervasive disabilities include autism spectrum disorder, intellectual disabilities, learning disorders, emotional and behavioral disorders, and attention deficit hyperactivity disorder (ADHD). Sensory and motor disabilities encompass multiple disabilities, physical impairments, visual impairments, and hearing impairments (Odding, Roebroeck, & Stam, 2006).

Cooperative learning and students with disabilities

The significance of cooperative learning in inclusive educational settings stems from the challenge of a single teacher effectively delivering instruction to students with diverse abilities and disabilities. Given that students interact with multiple individuals within the school environment, collaboration fosters a supportive atmosphere where both students and teachers can share knowledge and work collectively to solve problems (Sencibaugh & Sencibaugh, 2016).

The cooperative learning strategy aims to actively engage students with disabilities in classroom activities, offering a more inclusive alternative to traditional instructional methods. This approach allows students to express their ideas more freely, receive constructive and affirming feedback, participate in questioning techniques, gain additional skill reinforcement, and benefit from increased opportunities to respond. Furthermore, cooperative learning enables students with disabilities to articulate their thought processes while working within a group, facilitating more effective teacher assessment of both individual and group needs, as well as timely instructional intervention when necessary (Bucalos & Lingo, 2005).

According to Stevens and Slavin's theory, students with disabilities demonstrate significant academic improvement when they receive instruction and modeling from their peers (Ncube, 2011). One of the most widely used cooperative learning strategies in inclusive classrooms is mixed-ability grouping, in which high-achieving students are paired with students with disabilities. This method encourages high-achieving students to act as mentors, guiding their peers in mastering specific skills or concepts. Simultaneously, more capable students refine their higher-order thinking skills while supporting students with disabilities in completing assigned tasks. However, it is essential to recognize that cooperative learning requires careful planning and structured implementation to maximize its effectiveness for all students (Garmston & Wellman, 2016).

Among the most significant studies assessing the impact of reciprocal learning is the research conducted by Jenkins et al 2003. The primary objective of this study was to examine teachers' perceptions of Cooperative Learning (CL) as an instructional strategy for remedial and special education students. Many educators have increasingly adopted the cooperative learning approach due to its numerous benefits for student development. This pedagogical method involves dividing students into small groups, enabling them to maximize their potential through collaborative engagement. Elementary-level educators favor this approach as they believe it facilitates comprehension and simplifies learning. Furthermore, they observed that student participation increased during lessons, ultimately leading to improved academic performance.

The study employed various interviews to assess the advantages of CL for students with special needs. The findings indicated multiple ways in which cooperative learning supports remedial and special education students. Approximately 52% of the respondents frequently highlighted benefits such as enhanced academic performance, increased self-esteem, and a greater sense of security for disadvantaged students. Some educators also asserted that CL fosters student engagement and amplifies their voices in the classroom. However, self-esteem emerged as the most frequently cited benefit, as it contributes to students' sense of inclusion among their peers. By participating in collaborative tasks, special needs students experienced a significant boost in self-esteem, which fostered a positive self-image. Additionally, they felt a sense of pride in being part of a team where they could seek assistance when necessary. Consequently, their academic performance improved, underscoring the significance of cooperative learning for both remedial and special education students.

In a related study, Fore, Riser and Boon (2006) explored how cooperative learning enhances academic achievement, fosters an enjoyable learning environment, and cultivates shared interests among students. This research focused on students with mild disabilities. In contemporary educational settings, teachers are responsible for motivating students, managing classroom behavior, and evaluating student learning outcomes. Effective instruction for such students necessitates a combination of diverse instructional delivery methods and curricular adaptations. Many researchers advocate for cooperative learning as one of the most effective pedagogical approaches. Through collaborative learning techniques, students engage in discussions related to specific academic tasks.

The study identified various cooperative learning models, including Jigsaw II, Team Assisted Individualization (TAI), Student Teams-Achievement Divisions (STAD), and Cooperative Integrated Reading and Composition (CIRC). Slavin, a prominent researcher in this field, has extensively examined the implications of cooperative learning for students with disabilities. His findings suggest that schools can mitigate learning challenges by increasing student motivation. One of his studies demonstrated that students in CIRC classrooms exhibited superior performance in language expression, reading vocabulary, and comprehension compared to their peers with mild disabilities in traditional settings. Each of Slavin's models serves specific student populations. For instance, the Success for All (SFA) program emphasizes early intervention and prevention strategies to promote student success.

Maheady, L., Michielli-Pendl, J., Harper, G. F., and Mallette, B. (2006) conducted research to identify effective instructional strategies that enhance student responses and academic achievement among sixth-grade students. This study evaluated the impact of the Numbered Heads Together (NHT) technique in improving student engagement and performance. Active

participation in the classroom is essential for learning. Typically, teachers assess student comprehension by directing questions to individuals following a lecture. However, this traditional method limits opportunities for all students to contribute, potentially resulting in disengagement. Additionally, research suggests that increasing the time interval between questions can improve the quality of student responses.

The study found that NHT is an effective instructional strategy that increases student engagement. In this approach, students work in groups and provide a collective response after deliberation. Enhanced engagement subsequently leads to improved academic performance. The study, which included 28 participants, tested the impact of NHT under different conditions, with and without an incentive package. A female undergraduate teacher, who underwent two hours of training prior to the study, collected data by videotaping students during quizzes in different phases. The results indicated that the average performance in chemistry quizzes ranged from 61.9% to 79.1% under normal conditions. Following the implementation of NHT, the class's average performance increased to 80.3%. However, the study faced several limitations, including a lack of data maintenance and generalizability, a small sample size, and a restricted curriculum scope.

An exploratory study by Gray, I. M., Bruton, C., Honan, R., McGinnis, R., and Daly, M. (2007) examined the effects of mediation in cooperative learning on task engagement and social interaction among students. The research was conducted in two settings: a special education classroom and a mainstream classroom. The participants were eight-year-old boys diagnosed with autism spectrum disorder, who were placed in cooperative learning groups with three neurotypical peers and two female students.

The study included 11 baseline sessions, followed by seven sessions of cooperative learning intervention and four sessions of traditional instruction. Each session was recorded to facilitate in-depth analysis, as determining the intervention's effects without rigorous review was challenging. In the special education classroom, only the instructor and participating students were present during the sessions, while mainstream teachers facilitated cooperative learning activities in the general education setting. Each session lasted 30 minutes, and teachers received prior training on implementing CL techniques. The videotaped sessions were subsequently analyzed in 10-second intervals, with a particular focus on Michael and Owen, the primary subjects of interest. The results demonstrated a marked increase in task engagement for both students following the implementation of cooperative learning strategies. The study concluded that CL interventions can significantly enhance social engagement, particularly in children with autism spectrum disorder.

Finally, a study by Haydon, Maheady, and Hunter (2010) investigated the effects of Numbered Heads Together (NHT) on the on-task behavior and quiz performance of students with disabilities. Research has consistently highlighted the effectiveness of NHT as a cooperative learning strategy compared to conventional teaching methods. Students with emotional and behavioral disorders often struggle academically due to high absenteeism rates and an increased risk of dropping out. Educators, administrators, and policymakers generally concur that disruptive, inappropriate, and hyperactive behaviors must be addressed before students can successfully acquire academic skills. Peer-mediated strategies have been recommended as effective interventions to enhance student performance.

This study focused on three students whose IQ scores and disabilities were evaluated using various assessment criteria. The research was conducted during a language arts class in the afternoon. The teacher prepared three introductory questions to establish connections between students' experiences and the lesson objectives before administering 10 questions under both NHT and baseline conditions. The findings indicated that the three students demonstrated higher daily quiz scores and improved on-task behavior under NHT conditions. Teachers also reported that NHT was easy to implement and that students preferred it over traditional methods. This study concluded that cooperative learning strategies, particularly NHT, serve as effective instructional approaches for students with diverse abilities, fostering increased engagement and academic success.

Method

Research design

The researcher employed interviews as the primary data collection method. Interviews are a widely used technique in qualitative research, involving structured conversations or dialogues with individuals relevant to the research topic. In this study, the researcher conducted interviews with teachers of students with disabilities in inclusion classrooms to explore their perceptions of cooperative learning. Interviews are considered one of the most essential methods for gathering qualitative data, offering several advantages. One of the key benefits is their ease of implementation compared to other qualitative research tools. Through interviews, researchers can gain insight into participants' thoughts, emotions, and perspectives—insights that may not be accessible through direct observation alone. By asking targeted questions, researchers can reconstruct social events that were not directly witnessed, thereby enriching the depth of the study. Additionally, interviews allow for the collection of a substantial amount of information within a relatively short time frame. For this study, the researcher utilized a structured interview format. In this approach, participants were asked a predetermined set of questions with fixed response patterns. All respondents were presented with the same questions in the same order and manner, ensuring consistency and minimizing researcher bias. The researcher maintained a neutral stance throughout the process to ensure objectivity in data collection.

Participants

Eleven elementary school teachers (four males and seven females) from four public schools in the Eastern Province and Riyadh, Saudi Arabia, participated in the study. These public schools were similar in terms of structural design and student demographics. The participating teachers had an average of 10 years of teaching experience, with a range spanning from 1 to 30 years. Twenty percent of the teachers held a master's degree. The average class size was 30 students, with a range of 18 to 35 students per class.

Teachers were selected based on specific criteria: they actively implemented cooperative learning strategies, represented various grade levels (1–6), and had experience teaching students with special needs. Most students with special needs in these

classrooms were diagnosed with learning disabilities (LD), although some classrooms also included students with behavior and emotion disorders (BD), attention deficit/hyperactivity disorder (ADHD), and more significant cognitive impairments. These students were eligible for government support and possessed official disability identification cards.
The sample selection was based on the nature of the classes the teachers instructed. The participating teachers had several years of teaching experience, and considering the student population with disabilities, the sample can be regarded as representative of educators working with this group.

Demographic	N	%
Gender		
Male	4	36.3
Female	7	63.7
Geographical location		
Eastern Region	6	54.5
Riyadh Region	5	45.5
Teaching experience years		
1-5 years	3	27.3
6-10 years	4	36.3
More than 10 years	4	36.3
Academic degree		
Bachelor's degree	9	80
Post-graduate degree	2	20
Types of disabilities		
learning disabilities (LD)	8	47
behavioral emotion disorders (BED)	3	17.6
attention deficit/hyperactivity disorder (ADHD)	6	35.4
Cooperative learning type		
Numbered Heads Together	3	27.3
Formal cooperative learning	4	36.3
Positive interdependence	2	18.2
Think-pair-share	2	18.2
Grade levels		
First to third grades	7	63.7
Fourt to six grades	4	36.3

Interviews
The researcher conducted two rounds of interviews with the participating teachers via Zoom. The primary objectives of these interviews were to: (a) examine their perspectives on the effectiveness of cooperative learning for different student populations, and (c) evaluate the extent of student participation in cooperative learning activities.
The first round of interviews focused on teachers' knowledge of cooperative learning, the various types of cooperative learning strategies they employed, the extent of their implementation, and their perceived impact. The researcher transcribed and systematically analyzed these responses, assigning thematic codes to identify key patterns and insights. The second round of interviews served as a follow-up, allowing the researcher to probe further into the teachers' responses, clarify ambiguities, and refine the coding process.

Procedures
The interviews took place over one month, with each teacher participating in two sessions. The first interview lasted approximately 30 minutes, while the follow-up interview averaged 10 minutes. Both interviews were audio-recorded to facilitate accurate transcription and analysis.
To systematically analyze the data, teachers' responses were categorized based on key themes aligned with the research objectives, including:

- The level of participation of students with disabilities in cooperative learning activities.
- The perceived impact of cooperative learning on students with disabilities.

Upon completing the coding process, the researcher utilized Ethnograph software (Seidel, Kjolseth, & Seymour, 1988) to systematically organize and analyze the transcribed interviews. This software facilitated the structuring of coded data, allowing for a more comprehensive interpretation of teachers' insights and experiences regarding cooperative learning and its impact on students with special needs.

Results and Discussion
The findings indicate that educators observe substantial enhancements in various aspects of learning, behavior, and social development among students with disabilities, as well as their peers without disabilities.

First Question: What is the level of participation of students with disabilities in cooperative learning activities?
When assessing students' engagement with cooperative learning strategies, all educators reported that students with disabilities initially demonstrated reluctance toward the approach, whereas their peers without disabilities remained neutral. However, over time, as educators provided more structured guidance, students with disabilities became increasingly receptive and enthusiastic about participation, particularly after receiving encouragement and support from their peers. Eight educators asserted that cooperative learning remains an effective pedagogical strategy that they continue to implement periodically, whereas two educators indicated that they had transitioned to co-teaching, particularly following the introduction of a special education teacher in inclusive classrooms.
Five teachers reported that prolonged use of a single cooperative learning strategy led to a decline in student engagement among both students with and without disabilities, resulting in reduced interaction. To address this, they temporarily reverted to traditional teaching methods for two weeks before reintroducing cooperative learning, which subsequently increased student participation. In contrast, six teachers observed a similar decline in engagement but responded by implementing a variety of cooperative learning strategies rather than relying on a single approach.
During the second interview, when asked about the most frequently used or effective cooperative learning strategies, the teachers indicated that they regularly incorporated diverse methods. However, they noted that students tended to prefer certain strategies over others. As a result, the most favored strategy was used more frequently, as it proved to be the most effective in enhancing student participation.
Teachers were also asked whether they consulted students before implementing cooperative learning strategies. Seven teachers stated that they did not directly seek students' opinions but instead observed their reactions during group formation to assess their level of acceptance. Meanwhile, four teachers reported that they individually consulted students with disabilities about their preferences regarding cooperative learning. These teachers also allowed students to choose peers for their groups, believing that student involvement in selecting instructional methods enhances the learning experience.
When asked whether they used cooperative learning strategies throughout the entire course, all teachers responded in the negative. Three teachers stated that they primarily implemented cooperative learning during review sessions to reinforce learning and assess students' understanding. The remaining seven teachers indicated that they incorporated cooperative learning intermittently as a means of introducing variety into their teaching approach.

Second Question: What is the effect of cooperative learning on the social behaviors of students with disabilities?
Regarding the influence of cooperative learning on students' social and behavioral development, 90% of educators reported significant improvements in adaptive behavior, behavioral discipline, and collaborative skills. A fourth-grade educator noted, "Students complete more work in a group setting than they would independently, which enhances their self-esteem and reinforces their confidence in their abilities." Another educator emphasized that self-esteem was a common trait among students with disabilities who consistently engaged in cooperative learning, as collaboration fostered a sense of accomplishment and contribution.
Furthermore, educators highlighted that cooperative learning significantly enhanced students' social communication skills. They observed that students became more articulate in expressing their thoughts and opinions and demonstrated increased engagement in peer interactions. Educators also noted that students with emotional and behavioral disorders, particularly those who previously experienced shyness or social isolation, became more active and participatory in classroom discussions and group activities. Meanwhile, educators working with students with learning difficulties reported that cooperative learning created a supportive and less stressful learning environment, as it alleviated undue focus on individual students, thereby reducing the likelihood of discrimination or stigmatization.
The findings further revealed that cooperative learning contributed to higher academic achievement and increased student productivity, which, in turn, bolstered students' confidence. Students exhibited greater ease in expressing their ideas and demonstrated increased willingness to ask questions or provide responses in front of their peers. Additionally, 45% of educators indicated that cooperative learning nurtured students' understanding of cooperation, participation, and responsibility, leading to significant advancements in teamwork skills.
Educators working with students diagnosed with ADHD observed that cooperative learning mitigated negative behaviors such as excessive movement, defiance, aggression, and social withdrawal by fostering a structured, supportive environment that promoted a sense of belonging and encouraged positive social interactions. However, one educator working with students with attention deficits noted that cooperative learning yielded only marginal improvements, emphasizing that such students require individualized support and specialized interventions.

Third Question: What is the effect of cooperative learning on the academic performance of students with disabilities?
When evaluating the academic impact of cooperative learning, educators working with students with learning difficulties affirmed that group-based instructional approaches significantly enhanced students' academic performance, particularly in comprehension and conceptual understanding. One educator stated that engaging in group discussions and exchanging ideas with peers facilitated a deeper and more comprehensive grasp of concepts.
Seventy percent of educators reported that their students encountered challenges in comprehending certain lessons when taught through traditional methods. However, when cooperative learning strategies were integrated, students demonstrated improved understanding within a group setting. Additionally, 30% of educators noted that cooperative learning enhanced students' observational, modeling, and repetition skills.

Regarding participation rates, 70% of educators observed that their students consistently engaged in cooperative learning activities, exhibiting heightened motivation, enthusiasm, and commitment to academic tasks. Educators also reported substantial improvements in students' ability to complete assignments and classroom activities with increased accuracy and diligence.

Several educators emphasized that cooperative learning facilitated the development of reading and writing skills, particularly among students with learning difficulties. This approach provided students with frequent opportunities to practice reading aloud in small groups, engage in repeated readings, and listen to their peers before reading in front of the entire class, ultimately improving their reading fluency and confidence. Similarly, writing skills improved as cooperative learning required students to draft, review, and refine their work collaboratively before final submission, significantly enhancing their written expression.

The findings of this study affirm that cooperative learning is a highly effective pedagogical approach for fostering the academic, social, and behavioral development of students with disabilities in inclusive classrooms. Its advantages extend beyond academic achievement, fostering enhanced social interaction, increased self-esteem, and improved communication skills, thereby facilitating students' integration into the general education setting and broader society.

Given these findings, educators strongly advocate for the expanded implementation of cooperative learning strategies in schools. They emphasize the necessity of raising awareness regarding its benefits through targeted professional development programs and recommend designing cooperative activities tailored to the unique abilities and needs of students with disabilities. By adopting such measures, educators can optimize the efficacy of cooperative learning and ensure meaningful and inclusive educational experiences for all students.

Limitations

Although this study is the first in Saudi Arabia to assess the impact of cooperative learning on students with disabilities in inclusive classrooms from teachers' perspectives, it has certain limitations. The most significant limitation is the small sample size, which may be attributed to both the limited implementation of inclusive education and the infrequent use of cooperative learning strategies by teachers.

Additionally, the time allocated for conducting interviews was insufficient to explore teachers' perspectives in greater depth. Another potential limitation is that the interviews were conducted online, which may have contributed to a more formal atmosphere, making teachers more reserved in their responses. Furthermore, the interviews were conducted individually rather than in a group setting, which reduced opportunities for discussion and the exchange of ideas.

A further limitation is the extended time gap between the first and second interviews, which may have affected teachers' recall of previously discussed topics. Lastly, the study sample included students from only three categories of disabilities, which limits the generalizability of the findings to the broader population of students with disabilities.

Some of the interviews were conducted during the mid-term school break, which can be considered a limitation, as teachers were not in direct contact with their students at the time. This temporal gap may have influenced their responses, leading them to reflect on their experiences in the past tense rather than providing real-time insights. Additionally, having a single interviewer conduct the interviews may have affected the process of interpreting and summarizing teachers' perspectives, potentially introduced bias or limited the depth of analysis. Qualitative research findings often highlight the need for further, extensive empirical studies to explore the perspectives presented in greater detail and depth.

Recommendation

Researchers have proposed several ideas to investigate the long-term effects of cooperative learning strategies, particularly in teaching students with disabilities. A valuable direction for future research is to examine the impact of cooperative learning strategies on different disabilities individually through experimental studies. This approach would significantly enhance the applicability and effectiveness of cooperative learning. Additionally, the researcher recommends studying the perspectives of students with disabilities on cooperative learning—specifically, how it has impacted their academic and social experiences, which would be highly beneficial. Engaging students in discussions about the benefits of cooperative learning can provide a deeper understanding of its role in their education. Furthermore, listening to teachers in inclusive classrooms, regardless of their area of expertise, share their perspectives on the benefits of cooperative learning for students with disabilities highlights the widespread acceptance of this approach and its underlying philosophy. However, previous research suggests that cooperative learning is not a one-size-fits-all approach; its success depends not only on its implementation but also on the quality and effectiveness of that implementation.

Reference

1. Asola, E. F. (2015). Preparing teaching for adaptive physical education for young children with special needs. Critical Issues in Preparing Effective Early Childhood Special Education Teachers for the 21 Century Classroom: Atkins, M. S., Hoagwood, K. E., Kutash, K., & Seidman, E. (2010). Toward the integration of education and mental health in schools. *Administration and policy in mental health and mental health services research*, *37*, 40-47.Interdisciplinary Perspectives, 99.
2. Atkins, M. S., Hoagwood, K. E., Kutash, K., & Seidman, E. (2010). Toward the integration of education and mental health in schools. *Administration and policy in mental health and mental health services research*, *37*, 40-47.
3. Barr, J. J., & Bracchitta, K. (2008). Effects of Contact with Individuals with Disabilities: Positive Attitudes and Majoring in Education. Journal of Psychology, 142(3), 225-244.
4. Boudouris, C. C. (2005). Peer-tutoring: Positive peer interactions. *Ohio Reading Teacher, 37*(1), 11.
5. Bucalos, A. B., & Lingo, A. S. (2005). Filling the Potholes in the Road to Inclusion: Successful Research-Based Strategies for Intermediate and Middle School Students with Mild Disabilities. *Teaching Exceptional Children Plus*, *1*(4), n4.

6. Chophel, Y. (2021). Effect of Kagan cooperative learning structures on learning achievement: An experimental study. *International Journal of Multidisciplinary Research and Explorer*, *1*(9), 124-132.
7. Cook, B. G., Tankersley, M., Cook, L., & Landrum, T. J. (2000). Teachers attitudes toward their included students with disabilities. *Exceptional children*, *67*(1), 115-135.
8. Cloud, T. (2014). Cooperative learning in the classroom. *Journal on Best Teaching Practices*, *1*(2), 7-8.
9. Draper, E. A., Brown, L. S., & Jellison, J. A. (2019). Peer-interaction strategies: Fostering positive experiences for students with severe disabilities in inclusive music classes. *Applications of Research in Music Education, 37*(3), 28-35.
10. F. Antonak, R., & Livneh, H. (2000). Measurement of attitudes towards persons with disabilities. *Disability and rehabilitation*, *22*(5), 211-224.
11. Felder, R. M., & Brent, R. (2001). Effective strategies for cooperative learning. *Journal of Cooperation & Collaboration in College Teaching*, *10*(2), 69-75.
12. Felder, R. M., & Brent, R. (2007). Cooperative learning. *Active learning: Models from the analytical sciences*, *970*, 34-53.
13. Fore, C., III, Riser, S., & Boon, R. (2006). Implications of cooperative learning and educational reform for students with mild disabilities. *Reading Improvement*, 43(1), 3.
14. Garrote, A., Felder, F., Krähenmann, H., Schnepel, S., Sermier Dessemontet, R., & Moser Opitz, E. (2020). Social acceptance in inclusive classrooms: The role of teacher attitudes toward inclusion and classroom management. In *Frontiers in Education* (Vol. 5, p. 582873). Frontiers Media SA.
15. Garmston, R. J., & Wellman, B. M. (2016). *The adaptive school: A sourcebook for developing collaborative groups*. Rowman & Littlefield.
16. Grey, I. M., Bruton, C., Honan, R., McGuinness, R., & Daly, M. (2007). Co-operative learning for children with an autistic spectrum disorder (ASD) in mainstream and special class settings: An exploratory Study. *Educational Psychology in Practice*, 23(4), 317-327.
17. Gillies, R. M., & Ashman, A. F. (2007). Cooperative learning. *Cooperative Learning: Integrating Theory and Practice. Available online also at: http://doi. org/10.4135/9781483329598 [accessed in Bandung, Indonesia: March 24, 2017]*.
18. Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education (Online)*, *41*(3), 39-54.
19. Gilman, S. (2007). Including the Child with Special Needs: Learning from Reggio Emilia. Theory into Practice, 46(1), 23-31.
20. Haydon, T., Maheady, L., & Hunter, W. (2010). Effects of numbered heads together on the daily quiz scores and on-task behavior of students with disabilities. *Journal of Behavioral Education*, 19(3), 222-238. doi:10.1007/s10864-010-9108-3.
21. Hall, T., Vue, G., Koga, N., & Silva, S. (2004). Curriculum modification. *Wakefield, MA: National Center on Accessing the General Curriculum. Récupéré de http://aem. cast. org/about/publications/2004/ncac-curriculum-modification. html.*
22. Hasler-Barker, M. (2016). Effects of metapragmatic instruction on the production of compliments and compliment responses: Learner-learner role-plays in the foreign language classroom. *Pragmatics and language learning*, *14*, 125-152.
23. Horne, P. E., & Timmons, V. (2009). Making it work: Teachers' perspectives on inclusion. *International journal of inclusive education*, *13*(3), 273-286.
24. Huang, Y. M., Liao, Y. W., Huang, S. H., & Chen, H. C. (2014). Jigsaw-based cooperative learning approach to improve learning outcomes for mobile situated learning. *Journal of Educational Technology & Society*, *17*(1), 128-140.
25. Igel, C., & Urquhart, V. (2012). Generation Z, meet cooperative learning: Properly implemented cooperative learning strategies can increase student engagement and achievement. *Middle school journal*, *43*(4), 16-21.
26. Jacobs, G. M. (2004). Cooperative Learning: Theory, Principles, and Techniques. *Online Submission*.
27. Jenkins, J. R., Antil, L. R., Wayne, S. K., & Vadasy, P. F. (2003). How cooperative learning works for special education and remedial students. *Exceptional Children*, 69(3), 279-292. doi:10.1177/001440290306900302.
28. Johnson, D. W., & Johnson, R. T. (2015). Theoretical approaches to cooperative learning. *Collaborative learning: Developments in research and practice*, 17-46.
29. Kilanowski-Press, L., Foote, C. J., & Rinaldo, V. J. (2010). Inclusion classrooms and teachers: A survey of current practices. *International Journal of Special Education*, *25*(3), 43-56.
30. Lazarus, K. U. (2014). Effect of peer tutoring and cooperative learning instructional strategies on mathematics achievement of students with learning disabilities in Oyo State, Nigeria. *African journal for the psychological studies of social issues, 17*(1), 96-105.
31. Leatherman1, J. M., & Niemeyer, J. A. (2005). Teachers' attitudes toward inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education*, *26*(1), 23-36.
32. Lee, S. H., Amos, B. A., Gragoudas, S., Lee, Y., Shogren, K. A., Theoharis, R., & Wehmeyer, M. L. (2006). Curriculum augmentation and adaptation strategies to promote access to the general curriculum for students with intellectual and developmental disabilities. *Education and Training in developmental Disabilities*, 199-212.
33. Maheady, L., Michielli-Pendl, J., Harper, G. F., & Mallette, B. (2006). The effects of numbered heads together with and without an incentive package on the science test performance of a diverse group of sixth graders. *Journal of Behavioral Education*, 15(1), 24-38.
34. Maheady, L., Michielli-Pendl, J., Mallette, B., & Harper, G. F. (2002). A collaborative research project to improve the academic performance of a diverse sixth grade science class. *Teacher Education and Special Education, 25*, 55–70.
35. Magraner, J. S. B., Valero, G. B., & Moret-Tatay, C. (2019). Learning Corners in University Music Education: A Proposal for Implementation and Assessment. *Noble International Journal of Social Sciences Research*, *4*(10), 138-144.
36. McMaster, K. N., & Fuchs, D. (2002). Effects of CL on the task achievement of students with Learning disabilities: An update of Tateyama-Sniezek's. Review, Learning Disabilities Research and Practice, 17(2), 107–117.

37. McInnerney, J. M., & Roberts, T. S. (2005). Collaborative and cooperative Learning. In *Encyclopedia of distance learning* (pp. 269-276). IGI Global.
38. McGinnis, J. R. (2013). Teaching Science to Learners with Special Needs. Theory into Practice, 52(1), 43-50.
39. Ncube, S. (2011). Peer-collaboration: An effective teaching strategy for inclusive classrooms. *Journal of the International Association of Special Education*, *12*(1), 79-80.
40. Odding, E., Roebroeck, M. E., & Stam, H. J. (2006). The epidemiology of cerebral palsy: incidence, impairments and risk factors. *Disability and rehabilitation*, *28*(4), 183-191.
41. Pratt, S. (2003). Cooperative learning strategies. *The Science Teacher*, *70*(4), 25.
42. Razak, F. (2016). The effect of cooperative learning on mathematics learning outcomes viewed from students' learning motivation. *JRAMathEdu (Journal of Research and Advances in Mathematics Education)*, *1*(1), 49-55.
43. Reid, C. M. (2010). The Inclusive Classroom: How Inclusive Is Inclusion?. *Online Submission*.
44. Secomb, J. (2008). A systematic review of peer teaching and learning in clinical education. *Journal of clinical nursing, 17*(6), 703-716.
45. Sencibaugh, J. M., & Sencibaugh, A. M. (2016). An analysis of cooperative learning approaches for students with learning disabilities. *Education*, *136*(3), 356-364.
46. Slavin, R. E. (2011). Instruction based on cooperative learning. *Handbook of research on learning and instruction*, 358-374.
47. Slavin, R. E. (2013). Cooperative learning and student achievement. *School and classroom organization*, 129-156.
48. Sisalem, Kamal Salem. (2006). Integration in public schools and its classes. (2nd ed.). Al Ain: Dar Al Kitab Al Jami'i.
49. Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric rehabilitation journal*, *27*(4), 392.
50. Sutherland, K. S., Wehby, J. H., & Gunter, P. L. (2000). The effectiveness of cooperative learning with students with emotional behavior and behavioral disorders: A literature review. Behavioral Disorders, 25(3), 225–238
51. Tenny, S., Brannan, J. M., & Brannan, G. D. (2017). Qualitative study.
52. Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development for Exceptional Individuals*, *32*(3), 160-181.
53. Tran, V. D., Nguyen, T. M. L., Van De, N., Soryaly, C., & Doan, M. N. (2019). Does Cooperative Learning May Enhance the Use of Students' Learning Strategies?. *International Journal of Higher Education*, *8*(4), 79-88.
54. Tran, V. D. (2013). Theoretical Perspectives Underlying the Application of Cooperative Learning in Classrooms. International Journal of Higher Education, 2(4), 101-115.
55. Usman, A. H. (2015). Using the think-pair-share strategy to improve students' speaking ability at Stain Ternate. *Journal of Education and Practice*, *6*(10), 37-45.
56. Wagner, M., & Gansemer-Topf, A. (2005). Learning by teaching others: A qualitative study exploring the benefits of peer teaching. *Landscape journal*, *24*(2), 198-208.
57. Westwood, P. (2005). Adapting curriculum and instruction. *The Routledge Falmer reader in inclusive education*, 145-159.
58. Wiebe Berry, R. A. (2006). Inclusion, power, and community: Teachers and students interpret the language of community in an inclusion classroom. *American Educational Research Journal*, *43*(3), 489-529.
59. Woods, D. M., & Chen, K. C. (2010). Evaluation techniques for cooperative learning. *International Journal of Management & Information Systems (IJMIS)*, *14*(1).