



Cooperative Language Learning In English Language Teaching

Dr. J. Jenitha Assistant Professor, Manonmaniam Sundaranar University, Tirunelveli-627012, Tamil Nadu, India Email: jenithamail@yahoo.com

Dr. R. Ramesh Associate Professor, Dept. of English, Manonmaniam Sundaranar University, Tirunelveli-627 012, Tamil Nadu, India Email: rams_efl@yahoo.co.uk

INTRODUCTION

Cooperative learning is a systematic educational approach in which students collaborate in small groups to achieve common learning objectives. "Research has consistently shown that cooperative learning methods can have some positive impact on academic achievement, as well as social and emotional outcomes"(Slavin 1995). Multiple studies have consistently found evidence that cooperative learning have a positive impact on students' academic achievement. This is likely because cooperative learning allows students to actively engage with the material and work collaboratively to solve problems and complete tasks, rather than simply listening to a teacher or reading from a textbook. According to other research on Cooperative learning, there are several additional benefits of working collaboratively, such as promoting positive relationships among students, enhancing self-esteem, improving long-term retention of information, and fostering a deeper understanding of course material. It is one of the most proven and constructive teaching strategies.

Cooperative coaching is a beneficial alternative to conventional speech instruction because it is an effective teaching approach that improves the speaking and social interaction abilities of students. Agreeing to Johnson and Johnson (2009), Cooperative learning is characterized as "the instructional use of small groups so that students work together to maximize their own and each other's learning" (p. 36). In cooperative learning, students are organized into small groups to collaborate and learn together. The idea is that by working together in a small group, students can maximize. their learning potential and improving their understanding of the subject matter. Therefore, the instructional use of small groups is intended to promote active learning, critical thinking, and problem-solving skills among students, as they work together to achieve a common goal.

The educational strategy known as collaborative learning, which is more comprehensive, includes cooperative language acquisition. It is a method of teaching that makes the most of small group and pair-based cooperative activities that take place in the classroom. According to

Olsen and Kagan (1992), "Cooperative learning is group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others." (p. 8). In this approach, learning is dependent on the social interaction and exchange of information between learners, and each student is accountable for their own learning while also being motivated to contribute to the learning of others in the group. Cooperative learning is based on the idea that students can learn more effectively when they work together and actively participate in their own learning. By working together in groups, students can share their knowledge, skills, and experiences with each other, which can lead to deeper learning and a better understanding of the subject matter.

Proponents of CLL in general education emphasise the advantages of collaboration in fostering learning. "Cooperation is working together to accomplish shared goals. Within cooperative situations, individuals seek outcomes beneficial to themselves and all group members. Cooperative learning is the instructional use of small groups through which students work together to maximize their own and each other's learning. It may be contrasted with competitive learning in which students work against each other to achieve an academic goal such as a grade 'A'." (Johnson et al., 1994, p. 4). Rather than promoting competition and individual achievement, CLL seeks to create a supportive and cooperative learning environment where students work together towards a common goal. Collaboration can be particularly beneficial for learning because it encourages students to share ideas, learn from each other, and develop a more nuanced and sophisticated understanding of the subject matter. By working together, students are able to explore different perspectives and approaches, and to challenge each other's assumptions and biases. This can lead to deeper learning and a greater appreciation for the complexity of the issues being studied.

BACKGROUND STUDY

Cooperative learning is an approach to learning that was first developed in the United States during the 1970s, and it has since become widely used in educational settings around the world. "Cooperative learning gained popularity in the United States during the 1970s and 1980s, as educators sought new ways to engage students and promote learning in diverse classrooms" (Kagan, 1994, p.3). Cooperative learning became increasingly popular in the United States during the 1970s and 1980s, as educators recognized the need to engage students who came from diverse backgrounds and had different learning styles. This approach to learning provided a way for students to work together and learn from each other, regardless of their individual differences. During this time period, researchers conducted extensive studies on the benefits of cooperative learning, and their findings helped to promote the use of this instrumental approach in schools across the United States. As a result, cooperative learning has become a widely accepted and widely used teaching strategy in many educational settings today.

Peer-tutoring and peer-monitoring suggestions date back hundreds of years or more, and they are forerunner to cooperative learning. "John Dewey, in his philosophy of education, advocated the importance of socialization and community in the classroom as early as 1897" (Rodgers, 1988, p.2). John Dewey was a famous American philosopher, psychologist, and educational reformer who believed that education should be focused on the needs and interests of the individual student, and that socialization and community- building were important aspects of learning. Cooperative learning can be seen as a response to a variety of educational and social factors, including the need to integrate diverse student populations, the desire to promote more active and engaged learning, and a growing recognition of the importance of social skills and teamwork. In the 1960s and 1970s, there was a renewed interest in cooperative learning as a way to promote equal educational opportunities and to address the social and emotional needs of students.

Incorporating cooperative learning will increase learners' oral communicative competence and their motivation towards learning English. "The significant improvement of the participants' speaking fluency and learning motivation resulted from the fact that discussing, creating, and thinking in a group, rather than individually, can provide more enjoyable classrooms and more clever students" (Liang 2002). Group activities provide a more enjoyable classroom environment, which in turn leads to more motivated students who are more eager to learn. Also, Liang suggests that group discussions and activities can help students to become more clever or intelligent, likely because they are exposed to different perspectives and ideas. This finding demonstrate that cooperative learning strategies can help students develop their speaking fluency and learning motivation.

A similar study was conducted on cooperative learning, particularly in terms of learning motivation. "The findings suggest that online cooperative learning can be a promising pedagogical approach to enhance learners' motivation in learning Korean as a foreign language" (Yoshida et al., 2014). The study looked into how online cooperative learning impacted a student's desire to learn a foreign language. It discovered that student's motivation to learn has greatly increased.

In a related study, the impact of cooperative learning and traditional teaching strategies are evaluated. "The results showed that the cooperative learning method was significantly more effective than the traditional teaching method in improving the students' English oral performance" (Yang, 2005). The result showed that students who were taught through cooperative learning outperformed those who were taught through lectures in terms of speaking performance and learning motivation.

Nowadays, cooperative learning is used in almost every subject area of the school curriculum and is increasingly being used in university and college settings. Academics recognise cooperative learning as a crucial teaching resource for the study of foreign languages. "By using cooperative learning, learners have more chances to practice English cooperatively in

order to learn more effectively from their peers and teachers" (Namaziandost, Pourhosein Gilakjani et al., 2020). In cooperative approach, learners have more opportunities to interact with their peers and teachers, and practice their English skill in collaborative way. This can result in more effective learning, as learners can receive feedback and support from each other, and work together to solve problems and complete tasks. So, the use of cooperative learning can enhance the learning experience and lead to better outcomes for students.

DESCRIPTION OF THE TOPIC

Cooperative language learning has a significant role to play in the English language classroom. This method places a focus on group learning among students, giving them chances to engage and practise speaking the language in useful situations. As Barkley and Cross (2014) note, "cooperative learning provides a means of engaging students in the language learning process, encouraging them to take an active role in their own learning and to develop important social skills in the process" (p. 234). Students gain critical social skills and a greater commitment to their own studies by collaborating with their peers. Through active engagement, communication, and contact among the students, this method fosters a more welcoming and encouraging learning atmosphere.

In a cooperative language learning setting, students collaborate in small groups to complete assignments, address issues, and gain experience speaking the language in various settings. With this strategy, teachers can create a supportive and collaborative environment where students may share knowledge and practise vital social and communication skills. As Richards and Rodgers (2014) observe, "cooperative learning provides opportunities for learners to practice the language in a supportive environment, receiving feedback and guidance from their peers as well as the teacher" (p. 243). With the help of other learners and the teacher, cooperative learning enables students to practise speaking the language in a safe setting. This fosters a supportive and inclusive learning environment where students feel free to make errors and pick up tips from their classmates.

In the English language classroom, cooperative language learning additionally has the potential to meet the needs of various students. Students can build on each other's abilities and provide assistance to one another in areas where they may be struggling by working in small groups. As Kagan (2009) notes, "cooperative learning provides a means of addressing the diverse needs of learners, allowing them to work together to achieve shared goals and develop their language skills in a supportive and inclusive environment" (p. 14). Learning experiences become more successful and enjoyable when students collaborate, building on each other's talents and supporting each other's deficiencies. With a sense of belonging and inclusion fostered in the classroom by this method, students are more confident and motivated to advance in their language learning objectives.

In the English language classroom, cooperative language learning can be very beneficial since it gives students the chance to practise speaking the language in a real-world setting, build

crucial social skills, and meet the varied requirements of learners. As Johnson and Johnson (1999) observe, "cooperative learning can help to create a positive and engaging learning environment, where students are motivated to learn and feel supported in their language learning journey" (p. 271). Students who collaborate with one another can gain a sense of having control over their education, which may boost their motivation and engagement. Cooperative learning also has the potential to foster a welcoming and inclusive environment where students feel respected and appreciated, which may help to increase their drive to study. When language learners feel encouraged along the way, they are more inclined to take chances and try new things with the language, which can result in more successful and assured language learning results.

COOPERATIVE LANGUAGE LEARNING

Cooperative learning divides the class into groups of three to four individuals with each student playing a specific function within the group. According to Orford (2003), "Cooperative learning involves working together with other learners to complete tasks or activities. This can be done in pairs, small groups, or larger groups" (p. 22). Cooperative learning is a complex teaching strategy that goes beyond mere group work. It involves the intentional use of small groups to facilitate collaboration and interaction among students, with the goal of maximizing individual and collective outcomes.

There are three types of cooperative learning, identified by Johnson and Johnson, namely Formal Cooperative learning, Informal Cooperative learning and Cooperative Base groups. Formal cooperative learning assigns groups based on group dynamics. "Formal cooperative learning is characterized by a highly structured, teacher- designed task that is completed by a small group of students with clearly assigned roles and individual accountability" (Johnson & Johnson, 2013, p. 23). Formal learning is a type of group work structure in which the teacher assigns groups of 3-4 students after first analysing and evaluating each student to form the most productive group based on group dynamics. Informal groups are formed in class and may last for a short while or one class period. "Informal cooperative learning is characterized by a teacher-created supportive classroom climate that encourages students to help one another with academic tasks" (Johnson & Johnson, 2013, p.13). Base groups are established early on student groups to aid in the development of ties that can endure for years. "Cooperative base groups are long-term, heterogeneous groups of four to six students who provide each other with emotional support and ongoing for academic assistance" (Johnson & Johnson, 2015, p.23). It is a long-term group and so it provides stability and consistency, which helps build trust and a sense of community among group members. It can help students to improve academic outcomes and overall well-being.

One of the primary reasons for the development and promotion of cooperative learning was a growing recognition among educators that traditional classroom models, which were often teacher-centred and focused on competition rather than cooperation, were not effective

for all students. "Cooperative learning can create a more supportive and inclusive learning environment that can help to promote the academic success and social well-being of all students including those who may be at risk of falling behind higher-achieving students" (Johnson, Johnson, and Holubec, 1994, p.16). In a cooperative learning environment, students work together in small groups to achieve common goals, which can help to promote positive interdependence and reduce competition between students. This can be especially helpful for minority students who may feel isolated or marginalized in traditional classroom settings. In a cooperative learning group, every student has a role to play and is responsible for contributing to the success of the group. This can help to ensure that all students, regardless of their academic level or background, have the opportunity to participate fully in the learning process and to learn from their peers.

COOPERATIVE LANGUAGE LEARNING STRATEGIES

Rebecca Oxford (2003) states that language learning strategies refer to "the conscious thoughts and behaviours used by learners to improve their language performance" (p. 2). Conscious thoughts also play an important role in language learning strategies. Learners may intentionally focus on we certain aspects of the language, such as grammar or vocabulary, or set goals for themselves in order to achieve greater proficiency. Also, learners may reflect on their own language learning experiences and adjust their approach accordingly. Therefore, learners can use deliberate, thoughtful actions and mental processes to enhance their language performance.

Language learning strategies are methods or techniques that language learners use to enhance their ability to acquire, internalize, and use a second language. According to O'Malley and Chamot (1990), "Language learning strategies are specific actions, behaviours, steps, or techniques that students (often intentionally) use to improve their progress in apprehending, internalizing, and using the L2 [second language]" (p. 1). Language learning strategies may involve a range of activities, such as setting goals, practicing speaking or writing, memorizing vocabulary, listening to native speakers, using technology, seeking feedback, and more. These strategies can be tailored to meet individual learning styles and goals, and they can also change over time as learners progress in their language. proficiency. Therefore, learners who use effective strategies are more likely to achieve their language learning goals and improve their overall proficiency in the second language.

Language learning strategies are divided into direct strategies and indirect strategies. Direct strategies include memory, cognitive, and compensational strategies, while indirect strategies include metacognitive, affective, and social strategies.

Memory strategies involve the use of memory techniques to aid in language learning. "Memory strategies are used to help learners store and retrieve information" (Oxford, 2003, p. 15). Memory strategies help learners to remember new information. Some examples of memory strategies include repetition or rote learning, where learners repeat information over and over until it becomes memorized. Reviewing or summarizing information is another memory

strategy where learners go back over the information they have learned. So, learners can improve their ability to recall and use the information they have learned, which can help them be more successful in their language learning efforts.

Cognitive strategies involve conscious mental processes such as analysis and synthesis of information. "Cognitive strategies refer to the mental processes used to learn, store, retrieve, and use information" (Oxford, 2003, p. 12). Learners organize new information into meaningful groups by grouping. They summarize information in their own words to understand it. Then, they synthesis information by breaking down complex information into constituent parts and put it in a new and meaningful way. Finally, making prediction is a cognitive strategy where learners use the information, they have to draw conclusions. So, Cognitive strategies can improve learners' ability to process, understand, and remember new information.

Compensational strategies involve the use of alternative communication methods to it overcome language barriers. "Compensation strategies are used to overcome limitations in language knowledge or skill" (Oxford, 2003, p.17). Examples of compensation strategies include guessing from context, where learners use their understanding of the situation to infer the meaning of words they don't know. Another strategy is using gestures or body language, where learners use non-verbal cues to convey meaning or clarify their message. Using synonyms is another compensation where learners use alternative words to express a concept that they don't have the exact word for. So, compensation strategies can help learners to communicate effectively even when they don't know all the words, which can help them to build their confidence and fluency in the language.

Metacognitive strategies involve the use of self-awareness and self-monitoring to enhance language learning. "Metacognitive strategies are used to plan, monitor, and evaluate learning" (Oxford, 2003, p. 14.). These strategies enable learners to take control and become more independent and effective learners. Learners set goals and identify what they want and what steps they need to take. They plan tasks where they choose the most appropriate activities to achieve their goals. Learners keep monitoring their own learning and assess how well they are doing. Finally, learners evaluate by reflecting on their own learning, identifying what worked well and what didn't, and making changes for the future. By using metacognitive strategies, learners can become more effective and efficient learners, setting goals, planning their activities, monitoring their progress, and evaluating their performance to ensure they are making progress towards their language learning goals.

Affective strategies involve the regulation of emotions and attitudes towards language learning. "Affective strategies are used to manage emotions and motivation in language learning" (Oxford, 2005, p.18). Affective strategies help learners to reduce anxiety or stress by employing relaxation techniques, meditation or deep breathing exercises. Learners seek social support by connecting with peers, or teachers, to share their experiences, seek encouragement, or receive feedback. Learners maintain a positive attitude by striving to remain optimistic and

motivated even when faced with challenges. By using affective strategies, learners can improve their emotional wellbeing, reduce stress and anxiety, and increase their motivation which can help them to persist in their language learning efforts and achieve their language with learning goals.

Social strategies involve interaction with others to enhance language learning, such as seeking opportunities for conversation practice. "Social strategies involve interaction with others, either in face-to-face communication or in other forms such as email or chat rooms" (Orford, 2003, p. 19). Learners request assistance from teachers or peers, to clarify information or resolve a problem. Cooperating with others is another social strategy, where learners work together with others, to achieve a common goal. Seeking feedback is also a social strategy where learners ask for input from others to evaluate their language proficiency. Finally, negotiating meaning is a social strategy where learners use communication strategies to resolve misunderstandings. By using social strategies, learners can improve their communication skills, build relationships with others, and engage in collaborative language activities.

ADVANTAGES OF COOPERATIVE LANGUAGE LEARNING

Cooperative language learning creates a social and affective climate for learners to practice communication in foreign language. "The teacher's role is to create a classroom environment in which language learning can take place as naturally and effectively as possible" (Stern, 2008, p.5). Teachers need to create a welcoming and safe space that encourages learners to participate and take risks. They need to provide opportunities for learners to engage in meaningful interactions. Also, teachers need to be aware of learners' need and provide appropriate feedback and support. When teachers provide this classroom environment, it facilitates learners to build confidence and develop their communicative abilities.

Cooperative learning promotes active engagement in the learning process. According to Slavin (2014), "Cooperative learning encourages students to take an active role in their learning and to work collaboratively to solve problems and complete tasks " (p.12). It encourages collaboration and problem-solving, and students work together to achieve a common goal. This approach to learning can help students develop important skills and knowledge while also building their confidence and motivation.

Cooperative language learning allows for comprehensible input and output, and negotiation processes, while effective language learning requires structured social interaction. "CLL is especially effective in developing learners' communication skills, as it provides opportunities for learners. to practice speaking and listening in authentic communication situations with their peers" (Crandall, 1991, p. 13). In a cooperative language learning classroom, learners work together in pairs or small groups to complete tasks and projects, which requires them to communicate with one another to negotiate meaning and arrive at a shared understanding. Through this process, learners are be exposed to a range of language input and output, which allows them to develop their listening and speaking skills.

Cooperative learning is an effective teaching strategy that has numerous advantages for both students and teachers. According to Johnson and Johnson (2009), "cooperative learning provides opportunities for students to interact and learn with their peers, which can lead to increased academic achievement improved social skills, and greater motivation to learn." (p.6). Cooperative learning involves students working together in small groups to achieve a common goal, leading to improved academic achievement, social skills, and motivation to learn. It encourages active participation and engagement, develops important social skill, and creates a positive and supportive learning environment.

Another advantage is that it promotes the development of social skills. According to Kagan (2009), "Cooperative learning provides opportunities for students to develop communication leadership, and conflict resolution skill" (p. 7). When students work together in small groups, they have to communicate effectively with one another to achieve their goals. Also, when student is given opportunities to take on leadership roles in their groups, they learn how to motivate and organize their peers effectively. They learn how to resolve conflicts in a positive way. This helps students build stronger relationships with their peers and develop a deeper understanding.

Cooperative learning enhances the individual skills of each student through collaborative work. "In cooperative learning, individuals learn together as well as separately, holding themselves individually accountable for their own learning, and thereby, producing better performance than they could have produced alone" (Johnson & Johnson, 1975, p. 3). While students work together in a group, they should also be held individually responsible for their own learning and progress. Each student should contribute actively to the group's work and take responsibility for their own learning, while also supporting the learning of the peers. Overall, cooperative learning can promote both individual and group success by providing a supportive and collaborative environment that emphasizes both individual accountability and group interdependence.

Cooperative learning is a widely recognized concept and instructional practice in the field of second language education. The ideal learning environment for cooperative learning is compared to the ideal learning environment for second languages to see if there are any similarities. According to McGroarty (1996), "Both cooperative learning and second language acquisition have similar goals, including the promotion of interaction, collaboration, and the development of cognitive and social skills." (p. 19). The instructional processes and planning of second language education and cooperative learning methods share some similarities, although they are distinct approaches to teaching and learning. Studies have also been done on the effects of cooperative learning on the maintenance of first language skills, the integration of language and topic learning, and the preservation of first language learners' perspectives, among other things.

Research has shown that cooperative learning can enhance second language acquisition in several ways. "Cooperative learning groups provide ample opportunity for learners to practice and develop their language skills." (Johnson & Johnson, 1999). Working in groups provides students with a supportive and interactive learning environment that is conducive to language learning. Through increased exposure to the target language, more opportunities for speaking and listening practice, and constructive feedback and correction, students can develop their language skills and improve their fluency.

The basic beliefs of cooperative learning are that language acquisition and use are interactive and cooperative processes. Premise 1 is the argument that language acquisition is a natural and innate ability of humans. In the book *Born to Talk* by Lloyd James Weeks, it suggests that all children growing up in the normal environment will learn to talk, indicating that language is an inherent part of human development. This premise supports the idea that language learning is a natural and interactive process that can be enhanced through cooperative learning strategies. "The normal child has an inherent language-learning capacity, a natural endowment which enables him to learn to talk" (Weeks, 1979, p.9). Premise 2 is the argument that conversations or dialogue are an essential part of language use and learning. "Humans spend most of their lives talking, and for most people talking is one of their most essential and engaging activities" (Richards and Schmidt, 1983, p. 117). This line supports the premise, suggesting that human beings spend a significant amount of time engaged in talking and that it is a central aspect of their daily lives. Premise 3 is the argument that conversations or dialogue follow a set of agreed-upon rules for cooperation. Conversation involves cooperative behaviour where speakers follow certain rules to ensure effective communication. "The speaker has to make it manifest that he is intending to communicate information which he believes to be true and does not know to be false, and that the hearer is to be expected to recognize this manifest intention." (p.45). The premise 5 states that cooperative learning in a second language can be achieved through interactive activities that have cooperative structures. The process involves using a progressive or sequential strategy in dialogue classes, which systematically breaks rigid classroom procedures and allows for democratic and independent interaction among students. By doing so, students can learn functional interaction skills while also building team spirit and trust. This approach was suggested by Christison and Bassano in 1981, who emphasized the importance of a step-by-step approach to developing cooperation in the second language classroom.

Cooperative learning activities are beneficial as they provide opportunities for peer feedback and correction. According to Hinkel (2015), "peer feedback and correction can have a significant impact on learner's language development" (p. 192). Students are encouraged to work together to complete a task or solve a problem. During these activities, they may give feedback to one another on their language use, pointing out errors and suggesting corrections. This process not only helps students identify and correct their mistakes but also provides them with a chance to practice using the language in a meaningful way. By working together and

providing feedback to one another, students can develop their language skills and become more confident and proficient speakers of the target language.

Collaborative learning activities can indeed, increase students' motivation and engagement in the learning process, which can ultimately result in greater language acquisition. As Johnson, Johnson and Smith (1991) note, "Collaboration enhances motivation. improves attitudes towards learning, and promotes positive interaction among students" (p.11). Through collaboration, students can share their ideas and perspectives, which can lead to deeper understanding and increased engagement. The activities at can also promote positive social interactions among students. Overall, collaborative learning activities can be highly effective in increasing students' motivation and engagement in the learning process, which can lead to greater language acquisition.

Cooperative learning can indeed be an effective way to integrate language and content learning, as students engage in meaningful collaborative activities that require the use of language in context. According to Bruffee (1993), "students learn language through using it as a tool for understanding content" (p. 635). In cooperative learning activities, students work together to complete a task or solve a problem. These activities often require the use of language in context, as students must communicate one another to achieve their goals. By working together in this way, students can develop their language skill in a meaningful and authentic context.

Cooperative learning is claimed to have the capacity of helping second language learners draw on their primary language resources as they develop L2 skills. According to Cummins (2001), "The development of L1 and L2 proficiency is interdependent, and successful L2 learning draws on underlying linguistic, cognitive, and academic skills and knowledge that students have developed in their first language" (p.19). Research has shown that using the first language to clarify Concepts and provide explanations to peers can help students maintain and strengthen their first language skill, while also enhancing their second language skills. Moreover, cooperative learning can help second language learners draw on their primary Language resources by providing opportunities for peer collaboration and support. This can help create a more inclusive learning environment where students feel more comfortable using their primary language as they develop their second language skills.

COOPERATIVE LANGUAGE LEARNING IN ENGLISH LANGUAGE CLASSROOM

Language learning can be challenging and stressful for some individuals. Many students experience anxiety, which can have a negative impact on their performance. So, the teacher can use cooperative learning in order to avoid student's experience of anxiety. "Cooperative The learning provides an environment in which anxiety can be reduced and communication improved" (Hadfield & Oxford, 2001, p. 15). It helps to create a supportive and low-pressure learning environment by promoting shared responsibility, increased interaction, peer support,

and positive relationships. Therefore, it can be used as a powerful tool for reducing anxiety in the context of learning a second language.

Teachers can improve student's learning and brain function by identifying their primary learning mode and providing exercises to boost it. "Effective teachers provide a wide range of experiences for their students, utilizing multiple channels to present information, engage students interest, and reinforce learning" (Quina, 1989, p. 43). Teachers understand that students learn in different ways and they must provide a variety of experiences to cater to the diverse learning styles and abilities of their students. This includes utilizing multiple channels to present information such as visual aids, audio resources, interactive activities, and hands-on experiences.

The teacher's role is to facilitate the process rather than directly instruct it. The students "see the pictures and text on the pages, they hear the sound of the teacher's voice and the words being spoken, and they experience the story through movement and interaction with the group" (Holdaway, 1986, p.8). Students are encouraged to participate actively in discussions, extension activities. The approach is multisensory, students use their visual, auditory, and kinaesthetic senses to learn about the world around them. This approach does not involve any competition among peers. Overall, it creates communities of readers who use all learning modalities, and it strengthens language learning.

Students rely on each other for information, exploring meanings, sharing extension activities, and as reading behaviour models. The teacher's role is to act as a community planner. According to Margaret Meek (2003), "Children often get their recommendations for books from friends, family, or teachers, and peer recommendation is a powerful influence on what children read (p. 22). Students feel more invested in their reading, as they may be more motivated to read a book that has been recommended by a friend or peer. This can help to foster a love of reading and entourage children to engage more deeply with the texts they are reading.

Using multiple channelling to process information is a highly effective way. "Multiple channelling involves using multiple sensory channels, such as sight, sound, and touch, to entrance language learning" (Rodriguez-Gil & Garcia-Mayo, 2016. p. 79). This method is known to enhance learning rates and improve retention of information compared to situations where only one sense is utilized for processing information. When information is presented through multiple senses, it leads to better learning outcomes and facilitates greater retention of knowledge.

Culturally and linguistically diverse students thrive when they have opportunities to use and experiment with language in authentic contexts. "When we engage students in well-structured cooperative learning, academic achievement is accelerated" (Kagan 2019, p. 1). Well-structured cooperative learning can result in improved academic achievement compared to traditional classroom settings, where students often learn passively and individually. This is because cooperative learning promotes active engagement, provides opportunities for peer

teaching and learning, and fosters a supportive learning environment that encourages risk-taking and experimentation.

Comprehending students' behaviour and language-related actions requires understanding their home culture, as differences in acceptable and respectful behaviour can lead to conflicts and misunderstandings between teachers and students. Teachers who are knowledgeable about their students' cultures are more likely to understand their language-related behaviours. To promote respectful behaviour, teachers should be aware of how their students' home cultures shape their attitudes and expectations of acceptable behaviour. "Culture influences human behaviour, including the way people use language" (Moss, 2013, p. 62). Language use is just one of many aspects of human behaviour that are greatly influenced by culture. Language is ingrained in culture and reflects its norms, values, and values systems. Therefore, a person's cultural background and environment have an impact on how they use language.

American education has been competitive and individualistic since the one room schoolhouse era ended. In both scenarios, teachers discourage student interaction. But Cooperative learning entails sharing ideas and materials, dividing labour, and rewarding everyone in the group for accomplishing the task. Gillies (2016) stated, "Students share ideas and materials, divide labour equitably, and hold each other accountable for the successful completion of the task. Everyone in the group is rewarded for the group's achievement" (p. 29). Johnson and Johnson argue that cooperative learning promotes learning more effectively than competitive or individualistic ones. Research indicates that cooperative learning produces higher academic achievement, increased psychological health, and better social skills, in comparison with individualistic and competitive learning. (Johnson & Johnson, 1983, p. 3). Cooperative learning promotes socialization, positive interdependence, and individual accountability, which in turn lead to higher academic achievement. Overall, cooperative learning is a powerful tool for promoting academic achievement and socialization in students.

Cooperative learning strategies align with both Piaget and Vygotsky's theories. Piaget believed that children actively construct their understanding of the world through their interaction with others and their environment. "Social interactions play a fundamental role in the development of cognition " (Piaget, 1976, p.144). Social connections can result in rich, fulfilling experiences that stimulate cognitive development and encourage creativity, critical thinking, and problem-solving. Additionally, social interactions can affect how attitudes, beliefs, and values grow. These factors are crucial for cognitive development. Similarly, Vygotsky's sociocultural theory posits that social interactions are essential for learning, and that cognitive development is the result of social and cultural influences. "Learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function" (Vygotsky, 1978, p.90). Cultural variables influence psychological and behavioural processes in humans, and learning is a key part in this process. People acquire the knowledge, abilities, and values necessary to function in their society through learning. This

involves acquiring a language, which is a crucial component of assimilating a culture and communicating with others. Additionally, learning helps people build the cognitive and socioemotional abilities required for successful societal functioning as well as the ability to adjust to their cultural surroundings. Learning is therefore essential for both cultural adaptation and human development.

CLL also aims to foster learner's critical thinking abilities, which is viewed to be essential to all learning. The Question Matrix is a tool that is designed to encourage critical thinking by promoting learners to ask questions from different perspectives. The Question Matrix is a tool that promotes critical thinking by encouraging students to pose inquiries from many angles. Using this matrix, students are encouraged to consider a subject or problem from various angles and to pose inquiries that aid in the development of a more complex and in-depth understanding of the subject. "The essence of education is not to transfer information, but to guide the learning process, to make it more efficient, effective, and meaningful. And the most powerful tool for achieving this goal is the use of questions to engage students in active learning, to challenge them to think for themselves, and to foster deep understanding and transfer of knowledge." (Bloom, 1956. p. 201). The application of questions, which can encourage curiosity, critical thinking, and the transfer of knowledge, is one of the most effective methods for reaching this goal. Teachers can encourage independent thought, the formation of connections between ideas, and the use of previously learned material in fresh and significant ways by posing questions to their pupils.

Cooperative Learning (CL) has been widely adopted in second language teaching as a way of promoting communicative interactions and learner-centred instruction. CL is viewed as an extension of the principles of Communicative Language Teaching (CLT), which emphasizes the importance of communication and interaction in the language learning process. CL is also believed to offer advantages over traditional teacher-fronted classroom methods, which can be less affective at promoting communication and interaction among students. In a CL classroom, students are encouraged to take an active role in their own learning, which can lead to increased motivation and engagement. "Cooperative learning is particularly useful in EFL contexts because it provides students with opportunities to interact with their peers in the target language, which can increase their motivation, confidence, and communicative competence" (Ghaith and Al-Rashidi, 2006, p.257). The principles of cooperative learning, such as collaboration, communication, and active participation, are universal and can be applied in any educational context. In mainstream education, CLL can be used to promote active learning, critical thinking, and problem-solving skills. It can also help to create a more inclusive and supportive classroom environment where students feel valued and supported. In second and foreign language teaching, CLL is used to promote communicative competence, intercultural competence, and learner autonomy. Through collaborative activities, students can develop their language skills and become more confident and proficient in using the target language. Therefore, it is a versatile approach that can be applied in various educational contexts to promote collaboration, communication, and active learning.

Cooperative Learning (CLL) is an educational approach that emphasizes collaboration, communication, and active participation among learners. "Each student in a cooperative learning group has a responsibility to learn the assigned material, help teammates learn it, ensure that teammates work together effectively, and do his or her share of the work. Students are expected to teach their teammates, help their teammates, and encourage their teammates to do their best." (Johnson, Johnson, and Smith 1994). Each learner has a specific role or responsibility to ensure the success of the group, and this includes actively participating in group activities, contributing ideas, and working cooperatively with others. Learners are expected to listen and respect the ideas and perspectives of their peers. Taking responsibility for their learning is another critical aspect of the learner's role. Overall, the learner's role in CLL is to be an active and responsible participant in the group, to communicate effectively, cooperate with others, and take ownership of their own learning. By doing so, learners can develop important skills such as collaboration, communication, critical thinking, and problem-solving, which are essential for success both in and out of the classroom.

In CLL, the teacher plays a crucial role in facilitating the learning process and creating an environment that promotes collaborative learning. "Teachers who use cooperative learning typically assume new roles that are more facilitative, coaching, and guiding than directing. They provide students with more structure than they would have in typical lecture classes, but they do not try to control all aspects of the students' learning experience." (Johnson, Johnson, and Smith 1994). The teacher guides learners through the learning process, sets clear goals and objectives, and ensures that all members of the group are engaged and participating. Additionally, the teacher assigns group tasks, and roles, provides instructions and guidelines, and ensures that each group has access to the necessary resources and materials. The teacher provides feedback, guidance, and support to learners as they work through the group activities. The teacher notes the interactions within the groups, identifies areas where learners may need additional support, and provides timely interventions as needed. The teacher also models the skills and behaviours that they want learners to develop, such as effective communication, collaboration, and problem-solving. Overall, the teacher's role in CLL is to create an environment that supports collaborative learning, encourages learners to take responsibility for their own learning, and ensures that all members of the group are engaged and contributing to the learning process. By assuming these roles, the teacher helps learners develop important skills such as communication, teamwork, critical thinking, and problem-solving.

The Shared Book Experience is an approach to teaching reading that encourages students to make connections between their own experiences and the story. It was developed by Don Holdaway. According to Don Holdaway (1979), "The shared book experience de-emphasizes cultural and academic differences and provides a common language of communication for all children" (p. 8). Students develop language skills, comprehension skills, critical thinking skills, and a love of reading that will serve well throughout their lives. This approach is designed to be non-competitive and to create a community of readers who are excited about learning and sharing their experiences with one another. Instead of encouraging

competitiveness, reading teaching encourages teamwork. In building good reading skills, Shared Book Experience makes it easier for students to share thoughts, stories, and learning techniques.

Reading instruction can have a significant impact on the development of cooperative and social skills in children. According to Rodrigo and Byrne (2016), "When children read about characters who engage in cooperative behaviour, they are more likely to display prosocial behaviour themselves" (p. 1). Reading activities can foster empathy, emotional intelligence, and pro-social behaving, all of which are essential components of positive social interactions. Exposure to positive examples of cooperative behaviour in literature can have a positive impact on children's behaviour and increase the likelihood of them by engaging in prosocial behaviour. Therefore, students can learn important social skills and develop positive attitudes towards others.

COOPERATIVE LANGUAGE LEARNING: IT'S IMPLICATIONS

All four forms of literacy – listening, speaking, reading and writing, which enhance one another and increase comprehension of academic material, are naturally integrated into cooperative learning. "Cooperative learning naturally integrates all four modes of literacy - listening, speaking, reading, and writing - which support one another and promote understanding of academic content" (Miller & Thomas, 2019, p.7). One of the benefits of cooperative learning is that it naturally integrates all four modes of literacy. In cooperative learning, students engage in discussions and conversations with their peers, which requires them to listen and speak effectively. They also work together to read and analyse texts, which helps them develop reading comprehension skills. Additionally, cooperative learning often involves group writing projects or presentations, which provides opportunities for students to develop old their writing skills.

Research in second language suggests that language learners tend to develop their language skills in a sequential order. However, teachers should not simply teach one mode at a time and wait until students have mastered each one before moving on to the next. Written language allows the reader to control the pace of the information being presented. The reader can slow down or speed up the reading depending on the understanding and interest in the content. In contrast, oral language is often presented at a pace that is determined by the speaker, which can sometimes be too fast or too slow for the listener to fully comprehend. Additionally, written language allows for re-reading, highlighting, note-taking, and other strategies that can aid in understanding and retention of information, which is not always possible in oral language. "In some ways, written language is easier to process than oral language, because oral language passes by quickly, but written language is available for re-examination. The speaker sets the pace for the oral language, but the reader sets the pace for written language" (Freeman and Freeman, 134 - 35). Because it may be reviewed and readers can go at their own pace, written language is simpler to process than oral language. On the other hand, oral language moves

swiftly and is controlled by the speaker. But there are other difficulties when processing written language, such as the requirement for literacy and potential ambiguity.

Computer-assisted learning (CAL) can provide numerous opportunities for improving reading and writing skills through a variety of approaches, including interactive software, online platforms, and digital resources. "CAL programs provide opportunities for peer editing, online discussion, and collaborative writing that help learners develop reading and writing skills while engaging with others in a shared learning experience." (Liu & Lin, 2019). It can facilitate collaborative learning, which allows learners to work together on reading projects and provide feedback to one another. This can help to develop critical thinking skills and promote peer learning. It also supports peer editing by providing learners with tools to give feedback and revise each other's work. Online writing platforms, can allow learners to provide comments, highlight text, and suggest edits in real time. Overall, CAL can offer many benefits for improving reading and writing skills, providing a more engaging and interactive learning experience that can help learners to progress and achieve their learning goals.

There have been many studies on cooperative learning over the years, and while they provide valuable insights into the benefits and challenges of this approach, there can be some practical differences when it comes to implementing it in teaching practice. Cooperative learning can be broadly categorised into the following sorts in accordance with its concerns and when paired with studies and practises from earlier years.

I. Instructional type: Instructional type in cooperative learning refers to the specific teaching method or approach used by the teacher to deliver content or facilitate learning during a cooperative learning activity. "Cooperative learning involves the use of a variety of instructional methods, including peer tutoring, reciprocal teaching, jigsaw, and cooperative projects" (Johnson, Johnson & Smith, 1991, p. 7).

It includes the methods of instruction, such as direct instruction, peer tutoring, jigsaw, group investigation, role-playing, and others, that can be used to help students work collaborative and learn from one another. The choice of instructional type in cooperative learning is determined by the learning goals and objectives of the activity, as well as the needs and abilities of the students.

II. Procedural type: This type of interaction focuses on the processes or procedures that are used to complete the task, rather than the content or subject matter itself. "Procedural interaction involves group members planning, organizing, and monitoring group activities. The focus is on the procedures used to complete the task, rather than the content or subject matter itself." (Johnson & Johnson, 2009, p.12). It can involve activities such as planning, organizing, delegating, and monitoring progress. These interactions are important for ensuring that the group works effectively and efficiently, and that everyone has a clear understanding of their roles and responsibilities.

III. Structural type: Structural type in cooperative learning refers to the specific way in which students are grouped and organized to work together during a cooperative learning activity. "The type of small group structure selected for cooperative learning depends on the particular learning task and the goals of the instruction. Group structures commonly used in cooperative learning include pairs, triads, quads, and teams" (Johnson & Johnson, 1994, p. 25). It includes the different structures or arrangements of student groups that can be used to facilitate collaboration and promote learning, such as pairs, small groups, or teams. The choice of structural type in cooperative learning depends on the learning goals and objectives of the activity, as well as the needs and abilities of the students.

Cooperative language learning provides learners with more opportunities to use language in a functional way. It creates a realistic social setting for language use. "In order for learners to produce a greater variety of speech, they need to be exposed to a variety of input. This input needs to be comprehensible, but also rich and varied in terms of its lexical and grammatical content" (Lightbown & Spada, 2020, p. 102). Comprehensible input refers to language that learners can understand to some degree and is crucial for language acquisition. However, if the input is too simplistic or repetitive, it may not challenge the learners to expand their linguistic abilities. Therefore, exposure to a rich and varied range of input can provide learners with the opportunity to encounter and acquire new vocabulary and grammatical structures.

Several factors could have contributed to the success of the cooperative learning method during English language lessons. First of all, the students learnt how to be helpful to one another which is consistent with a similar study's results that students in diverse groups will join groups because they are different from one another. "The group structure helps to create a sense of belonging and identity, and as students work together to complete tasks, they develop a sense of trust and interdependence. In this way, students become group members, rather than just individuals working in close proximity" (Johnson et al., 2006). Secondly, the findings showed that students used technologies (computers and handphones) to continue their education outside of the classroom. This finding is consistent with those of Morris (2010) and Uzunboylu and Ozdamli (2011), who found that after school, students collaborate with their colleagues using educational technologies at their homes. Morris (2010) states: "Technology has made it possible for students to engage in learning experiences outside of school hours, and in some cases, outside of school walls" (p. 1). According to Uzunboylu and Ozdamli (2011), "Mobile learning has the potential to provide learners with access to educational content and resources anytime and anywhere, which in turn may lead to increased motivation and engagement in learning" (p.15). Thirdly, this result found that students remembered new ideas better when peers conveyed them to them, which is similar to a study. "The cooperative learning group was more effective than the traditional learning groups in terms of retention and recall of new concepts" (Zakaria et al., 2013). Fourthly, through cooperative learning, the students showed that they are capable of overcoming obstacles on their own without depending on teachers all the time. When students work in groups, they feel that they can rely on others for assistance,

which gives them the confidence to solve problems and enjoy learning. Farzaneh and Nejadansari (2014) states, "Students' attitudes changed and they enjoyed working with others and solving problems. As students cooperate and discuss, they develop confidence in their abilities, improve their self-esteem, and increase their self-worth "(p. 83). Fifthly, the research revealed that students' oral presentation skills had improved, enabling them to talk confidently as they discussed their topics with the class.

The nature and organization of group work are essential components of Cooperative Learning's success. This calls for a well-planned, structured learning programme where students interact with one another and are encouraged to advance one another's learning. According to Olsen and Kagan (1992), "The elements of group-based learning include positive interdependence, individual accountability, social skills, group processing, and structuring elements." (p. 33). Positive interdependence in CL refers to a situation where learners perceive that their individual success is tied to the success of the group as a whole. Therefore, each member efforts and contributions are necessary for the group to achieve its goals, and learners see each other as resources and support for learning, rather than competitors or obstacles. "Positive interdependence occurs when the efforts of individuals are required for group success" (p. 33).

"Individual accountability ensures that each group members are responsible for their own learning." (p.33). Individual accountability helps to ensure that all members of the group are fully engaged in the learning process and are motivated to contribute to the group's success. It also promotes a sense of responsibility and ownership over the learning process, which can lead to improved learning outcomes.

"Social skills include communication, decision making, and leadership." (p.38). Effective communication skills are necessary for learners to exchange information, ideas, and feedback with each other in a CL environment. This includes both verbal and non-verbal communication, active listening, and the ability to express oneself clearly and respectfully. Learners are often required to make decisions as a group. Also, they are often required to take on leadership roles within the group which involves setting goals, facilitating discussions, and helping to keep the group on task towards its objectives.

"Group processing involves reflecting on group functioning. (p. 33). Group processing in CL refers to the process of reflecting on group functioning, discussing group dynamics, and identifying areas for improvement. Learners share their thoughts and feelings about the group's interactions, identify any issues that have arisen, and brainstorm solutions for how to improve communication, build trust among group members, and promote a sense of shared responsibility for group outcomes.

"Structuring elements include factors. such as group size, task design, and the physical environment" (p. 33). Structuring elements in CL refer to the factors that shape the learning environment and influence how learners interact with each other. These include group size, task

has design, and the physical environment among others. Small groups are allowed for more individual participation and provide opportunities for learners to build strong relationships. Tasks are designed to be open-ended and require learners to collaborate and share ideas are often more effective in CL. The physical environment is an important structuring element, as it can influence the level of interaction and engagement among learners.

Cooperative learning develops language capacity thoroughly, and its growth is based on verbal abilities, verbal intelligence, learning methodologies, learning attitudes, and humanistic qualities. The characteristics of English language are:

I. Memorability: Memorability is a necessary component for the successful application of cooperative learning because it helps students retain information and improve their understanding of the material. Michaelsen, knight, and Fink (2004) states, "Memorability is necessary for cooperative learning because it fosters deeper understanding and transfer of learning" (p.1). Cooperative learning encourages active participation and engagement from all students, which can enhance motivation and increase interest in the material being studied. By working together, students can also provide each other with feedback and support, which can help them identify and correct misunderstandings or errors. When students work collaboratively, they have the opportunity to discuss, explain, and apply new information in a way that reinforces their understanding and helps them remember it better.

II. Cultural Differences: Cultural differences is a necessary consideration for the successful application of cooperative learning because it allows for diversity in perspectives and experiences, which can enrich the learning process for all students involved. Michaelsen, knight, and Fink (2004) stated, "Cooperative learning provides a platform for developing intercultural communication and collaboration skills, which are essential in today's globalized society" (p.41). When students from diverse cultural backgrounds work together, they have the opportunity to learn from each other's unique perspectives, experiences, and knowledge, which can broaden their own understanding and deepen their appreciation for cultural diversity. By working with peers from different cultural backgrounds, students can learn to navigate cultural differences, overcome communication barriers, and develop a more nuanced understanding of cultural diversity.

III. Applicability: Applicability is a necessary consideration for the successful application of cooperative learning because it helps students to connect the material being learned to real-world situations and contexts. Michaelsen, Knight, and Fink (2004) stated, "Applicability is a critical component of cooperative learning because it helps students see the relevance and value of what they are learning, and prepares them for success in their future careers and personal lives" (p. 45). When students are able to apply what they have learned in a practical setting, they are more likely to understand and retain the material. Cooperative learning provides an opportunity for students to engage in problem-solving and critical thinking activities that are directly relevant to their lives and communities. By working collaboratively on these types of

tasks, students are able to apply what they have learned in a meaningful and applicable way. Activities that can be employed with cooperative language learning has many different descriptions.

REFERENCES

- Namaziandost, Ehsan, et al. "The Impact of Cooperative Learning Approach on the Development of EFL Learners' Speaking Fluency." *Cogent Arts & Humanities*, vol. 7, no. 1, Informa UK Limited, Jan. 2020, p. 1780811. Crossref, doi:10.1080/23311983.2020.1780811.
- Johnson, David, and Frank Johnson. "Joining Together: Group Theory and Group Skills." Pearson New International Edition, 2013. Bowker.
- Namaziandost, Ehsan, et al. "Enhancing Pre-intermediate EFL Learners' Reading Comprehension Through the Use of Jigsaw Technique." *Cogent Arts & Humanities*, edited by Jeroen van de Weijer, vol. 7, no. 1, Informa UK Limited, Jan. 2020, p. 1738833. Crossref, doi:10.1080/23311983.2020.1738833.
- Slavin, Robert E. "Cooperative Learning." *Theory, Research, and Practice*, Allyn and Bacon, 1995. Bowker, doi:10.1604/9780205174133.
- Lightbown, Patsy M., and Nina Spada. *How Languages Are Learned*. 1999. Bowker, doi:10.1604/9780194370004.
- Johnson, David W., et al. "Cooperative Learning in the Second Language Classroom." *The Modern Language Journal*, vol. 78, no. 4, 1994, pp. 443-456.
- Zhang, Ling, and Jianping Li. "Cooperative Learning in Teaching English as a Foreign Language." *Journal of Language Teaching and Research*, vol. 3, no. 5, 2012, pp. 966-971.
- Lin, Ying-Chun. "The Effects of Cooperative Learning on English Reading and Speaking Proficiency: A Taiwanese Perspective." *International Journal of Applied Linguistics and English Literature*, vol. 3, no. 2, 2014, pp. 23-29.
- Azarnoosh, Maryam, and Zainab Abdi. "The Impact of Cooperative Learning on Iranian EFL Learners' Vocabulary Acquisition." *Journal of Language Teaching and Research*, vol. 7, no. 6, 2016, pp. 1178-1185.
- Xu, Yang. "Cooperative Learning in English Language Teaching." *Journal of Language Teaching and Research*, vol. 1, no. 1, 2010, pp. 70-72.
- Hwang, Ji-Hyun. "Cooperative Learning in English Language Teaching: A Review of Research." *English Language Teaching*, vol. 11, no. 3, 2018, pp. 28-36.
- Kim, Min-Young, and Sang-Ki Lee. "Cooperative Learning and English Language Acquisition in Korean Elementary School Students." *Journal of Asia TEFL*, vol. 12, no. 4, 2015, pp. 83-105.
- Lee, Jang Ho, and Eunice Eunjung Lee. "The Effects of Cooperative Learning on Korean Middle School Students' English Speaking." *Journal of Pan-Pacific Association of Applied Linguistics*, vol. 19, no. 2, 2015, pp. 89-109.
- Liu, Xiaolan. "The Effectiveness of Cooperative Learning on English Language Learners' Achievement: A Meta-Analysis." *TESOL Quarterly*, vol. 45, no. 4, 2011, pp. 677-698.
- Tien, Yen-Ju, and Huey-Wen Tien. "A Study on Cooperative Learning in EFL Classes." *English Language Teaching*, vol. 4, no. 2, 2011, pp. 164-170.

Johnson, David W., and Roger T. Johnson. "Cooperative Learning in Science: An Explanation of the Effectiveness of Cooperative Learning." *Journal of Research in Science Teaching*, vol. 23, no. 10, 1986, pp. 876-894. JSTOR, www.jstor.org/stable/24949122.

Johnson, David W., and Roger T. Johnson. *Learning Together and Alone: Cooperative, Competitive, and Individualistic Learning*. 5th ed., Allyn and Bacon, 1999.

Kagan, Spencer. *Cooperative Learning in Multilingual Classrooms*. Multilingual Matters, 2014.

Lee, Hyejeong. "A Study on Cooperative Learning in English Language Education: A Review of Research." *English Language Teaching*, vol. 12, no. 3, 2019, pp. 73-88.

Li, Lili. "A Study of Cooperative Learning in English as a Foreign Language Classroom." *Journal of Language Teaching and Research*, vol. 8, no. 1, 2017, pp. 139-145.

Oxford, Rebecca L., and Joy Shearin. "Language Learning Motivation: Expanding the Theoretical Framework." *Modern Language Journal*, vol. 80, no. 4, 1996, pp. 141-151.