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Evaluating the Effectiveness of the Inside-Outside Circle Method in Enhancing Students' Active Participation in Kelantan

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ABSTRACT

Active student engagement is increasingly recognised as a vital component of effective 21st-century teaching and learning, where students are expected to construct knowledge through interaction, communication and collaboration rather than passively receiving information. However, in the Malaysian context, particularly in Kelantan, student involvement remains low due to persistent teacher-centred practices, limited confidence among learners, and time constraints that hinder the implementation of interactive strategies. These issues highlight a critical research gap, as evidence on the effectiveness of specific cooperative learning strategies especially the Inside-Outside Circle (IOC) method is still limited. Therefore, this study was conducted to examine teachers' perceptions of the effectiveness of IOC, assess the level of active student engagement when IOC is applied, and identify challenges influencing its implementation in Kelantan. A quantitative survey design was employed, using a Google Form questionnaire distributed through convenience sampling to 110 teachers across several districts. Data were analysed using descriptive statistics including mean, percentage and standard deviation. The results show strong teacher agreement regarding the effectiveness of IOC, with mean scores ranging from 4.23 to 4.37. Across the items, between 46% and 61% of respondents agreed or strongly agreed that IOC enhances interaction, idea-sharing, communication skills and motivation, while only 7%–13% were neutral and fewer than 5% disagreed. Student engagement was also high, with an overall mean of 4.27; items related to communication, cooperation, attentiveness and motivation recorded mean values between 4.21 and 4.32, with 48%–60% agreeing and fewer than 10% disagreeing. Regarding challenges, time constraints (mean 4.03), passive student attitudes (4.02), large class sizes (3.95) and limited teacher expertise (3.83) were identified as the main barriers, with 38%–52% agreeing these issues affect implementation while fewer than 12% disagreed. Overall, the study concludes that the Inside-Outside Circle method is an effective cooperative learning strategy that enhances communication, collaboration, confidence and active engagement among students in Kelantan. Despite several structural and pedagogical challenges, IOC demonstrates strong potential to support more interactive, student-centred and meaningful learning environments, and its wider implementation should be strengthened through targeted training and improved classroom support systems.

Keywords:

Inside-outside circle; active engagement; cooperative learning; communication skills

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1. Introduction

The involvement of active students is one the important foundations in determining the effectiveness of teaching and learning process in the modern education system. In 21st century education, students are no longer seen as passive recipients of information but they are considered as active participants who are responsible to build knowledge by interaction, collaboration and meaningful learning experience. This perspective is supported by previous research which emphasises that a dynamic and cooperative learning environment enhances student participation, conceptual understanding, social skills, and collaborative spirit [1]. Other studies further indicate that cooperative and active learning approaches significantly enhance students' cognitive, behavioural, and emotional engagement in the classroom [2]. In Malaysia's education context, the need to increase the involvement of students becomes more desperate because of the pressure from the Ministry of Education Malaysia towards higher-order thinking skills, interactive learning and also the application of learning strategy based on students as stated by KPM, 2013.

Even though active learning has become a policy and priority in national education, the implementation still has its own challenges especially at classroom level. The study was conducted by Zulkifli *et al.*, [3] and Hilmi and Summiyani [4] stated that some teachers still use traditional teaching which is teacher-centered such as lecture even though they have been introduced with cooperative and interactive learning strategies. In article [4] also reported that teachers continue to rely heavily on traditional, teacher-centred instructional methods, which limit students' opportunities to actively participate and engage meaningfully in learning activities. That practice makes the students have less space to think, discuss and evaluate ideas critically and at the same time reducing their involvement in the classroom. In contrast, student-centred and cooperative learning approaches have been found to foster greater motivation, self-confidence, and willingness to participate, thereby supporting the conclusions of Silasi [5] regarding the positive affective outcomes of active instructional methods.

In an effort to address the involvement of students, cooperative learning approach has been identified as an effective method. Finding from the article Chen [6] asserts that cooperative learning provides opportunities for students to interdependently, to interact, share their responsibility and develop interpersonal skills in the context of group learning. Cooperative learning not only enhances academic learning, but it also improves the development of positive social relationships among students. It was supported with the study from Noge *et al.*, [7] which states that cooperative engagement fosters a more active learning atmosphere in which group collaboration promotes harmony and constructive interaction during the problem-solving process. There are too many strategies of cooperative learning which have been developed and Inside Outside Circle (IOC) is a method that emphasizes active interaction, two ways communications and the movement of physical objects through a double circle structure. This method has been introduced by Kagan, 1994 as a strategy that allows student exchange information in a short time systematically and at the same time gives opportunity to all students to be involved at once. Systematic structure can make students communicate with various friends while expanding the perspective and boost their confidence during teaching and learning process.

Although the effectiveness of the cooperative learning strategy has been widely proven in general, the detailed study about the use of the IOC method at schools in Malaysia is still limited. Cooperative learning strategies can improve student's achievement in academics, their motivations and social skills as stated by Ghaith [8]. Findings by Mitro [9] demonstrate that the Inside Outside Circle technique effectively enhances students' communication skills by providing structured opportunities for peer interaction and sustained verbal engagement during group exchanges.

Structured cooperative learning activities such as IOC also allow students to interact with different peers, broaden their perspectives, and enhance their confidence during the teaching and learning process [10]. Nevertheless, all the education contexts are unique and cultural factors, student backgrounds, and school environment can affect the effectiveness of its implementation. At Kelantan, most of the teachers face challenges in ensuring student engagement especially in huge classrooms involving students with different social level, economy and different academic achievements.

Non-formal observation at Kelantan's schools shows that most of the students are still passive in teaching and learning process, asking less questions, refusing to give opinion and only rely on the teacher's instruction. The factors such as insecurity, lack of confidence and learning culture of examination oriented also affect the situation. Meanwhile, teachers face time constraints, load of work and lack of professional training regarding the implementation of the cooperative learning strategy including Inside Outside Circle. The article was conducted by Sarah and Cathy [11] states even the educational policy emphasizes active learning but the implementation is not often in line with the curriculum goals because teachers are more likely to use traditional methods which are easier and save their time. Communication competence is a crucial skill that must be developed among students as part of long-term preparation for acquiring the knowledge and skills required to compete effectively in the global job market. Taher *et al.*, [12] emphasise that educational practices should prioritise the systematic development of communication skills through interactive and collaborative learning environments. In this regard, cooperative learning strategies such as the Inside Outside Circle method provide a meaningful platform for students to practise communication skills in authentic and supportive learning contexts.

In addition, there are significant research gaps in the field of cooperative learning, especially research about Inside Outside Circle in Kelantan's education context. Most of the research focused on general cooperative strategies such as STAD, Jigsaw and Think-Pair-Share. This raises the question how far the IOC method can give impact in increasing the involvement of students in that area. Without any strong empirical evidence, teachers will have lack of certainty to use the IOC method constantly. In the meanwhile, school administrators are difficult to provide training for teachers or plan an appropriate strategy in teaching and learning process. Considering that cooperative learning has been shown to enhance motivation, interaction, confidence, and collaborative skills [1,13], further investigation into the use of IOC within the local educational context is therefore necessary to provide context-specific empirical evidence to support teaching practice.

Therefore, the research about Inside Outside Circle to increase the engagement of students in Kelantan is very necessary. This research not only to evaluate the effectiveness of the strategy but it comes with three objectives: i. to examine teachers' perceptions of the effectiveness of the Inside–Outside Circle strategy; ii. to assess the level of active student engagement when the strategy is implemented; and iii. to identify the challenges influencing its implementation in schools across Kelantan. Besides that, from this research it can help and give confidence to the teachers to make changes in their teaching strategy using modern methods to make their teaching environment active and effective.

2. Methodology

2.1 Flow Cart

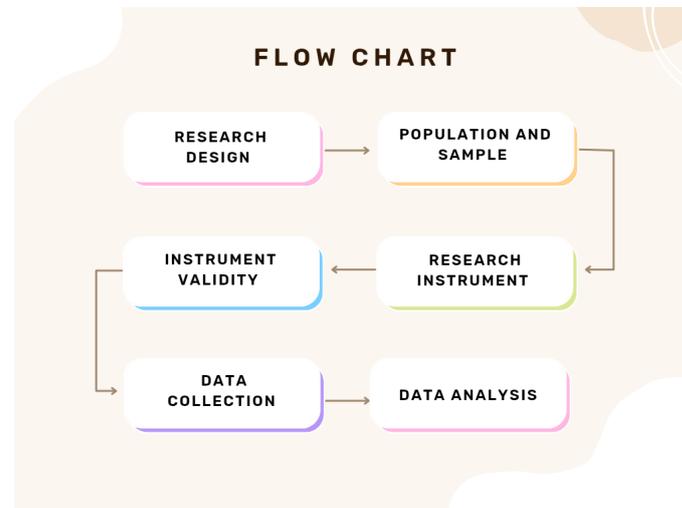


Fig. 1. Flow chart of the research methodology

Figure 1 illustrates the overall flow of the research methodology used in this study. The flow chart outlines each key phase carried out throughout the research process, beginning with the determination of the research design, followed by the identification of the population and sampling technique. It also includes the process of developing and validating the research instrument, administering the data collection procedure, and finally analysing the data obtained. This structured sequence ensures that the study is conducted systematically and that each stage contributes effectively to achieving the research objectives.

2.2 Research Design

The method of data collection used in this study was measurement, which involves collecting quantitative information in the form of scores to evaluate the effectiveness of the Inside–Outside Circle method [14]. This study is designed to investigate teachers' perceptions of the Inside-Outside Circle approach and how well it encourages active student participation and interaction with each other [15]. The survey method was chosen because it makes it possible to quickly and methodically gather data from a significant number of respondents.

2.3 Population and Sample

The population of the study consisted of school teachers in the state of Kelantan who have implemented or are familiar with the Inside-Outside Circle strategy during teaching and learning. Using a convenience sampling technique, a total of 110 teachers participated in the study. This sampling method was chosen due to its practicality and accessibility for collecting data online. The number of teachers participating was categorised by district to give a better picture of the distribution of respondents. Table 1 displays the distribution.

Table 1
Distribution of teacher respondents by district in Kelantan

District	Number of Teachers (n)
Tumpat	39
Kota Bharu	37
Tanah Merah	6
Pasir Mas	4
Bachok	1
Lain-lain	27

2.4 Research Tools

A systematic questionnaire created in Google Form was used to collect the data to evaluate the effectiveness of the Inside-Outside Circle strategy [16]. The study's goals and related material served as the basis for the instrument's construction. All items were measured using a 5-point Likert scale:

Table 2
Scale and 5 level of agreement

Scale	Level of Agreement
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

2.5 Instrument Validity

The questionnaire underwent content validation through expert review by a supervising lecturer. The reviewer examined the items' clarity, applicability, and compatibility with the goals of the study. Due to limited time, no pilot test was carried out. Nonetheless, in order to guarantee clarity and suitability for data collection, the instrument was improved based on expert input.

2.6 Data Collection Procedure

The data collection procedure for this study was carried out systematically using an online approach. A questionnaire was developed using Google Forms to enable efficient distribution and easy access for respondents. The link to the questionnaire was then disseminated to school teachers in Kelantan through Telegram and WhatsApp, allowing respondents to complete the survey at their convenience. The data collection period took approximately two weeks, during which teachers were given sufficient time to respond. Once the responses were received, all data were automatically recorded in Google Forms and subsequently transferred into SPSS for further analysis and interpretation.

2.7 Data Analysis

The data collected were analysed using descriptive statistical techniques, including mean, standard deviation, and percentage. These statistical methods were selected to provide a clear and comprehensive summary of the respondents' perceptions and experiences. The analysis was

organised according to the three research objectives of the study: i. to examine teachers' perceptions of the effectiveness of the Inside–Outside Circle strategy; ii. to assess the level of active student engagement when the strategy is implemented; and iii. to identify the challenges influencing its implementation in schools across Kelantan. This structured approach ensured that the findings were directly aligned with the aims of the study.

3. Results and Discussions

The questionnaire consisted of four main sections which are section A, Section B, Section C and Section D. In Section A, an analysis is conducted on the demographic characteristics of the respondents, which comprise their age, gender, years of experience in the teaching profession, and their earlier utilisation of the inside–outside circle pedagogical method in the classroom. Figure 2 and Figure 3 show the results of the respondents' demographic analysis.

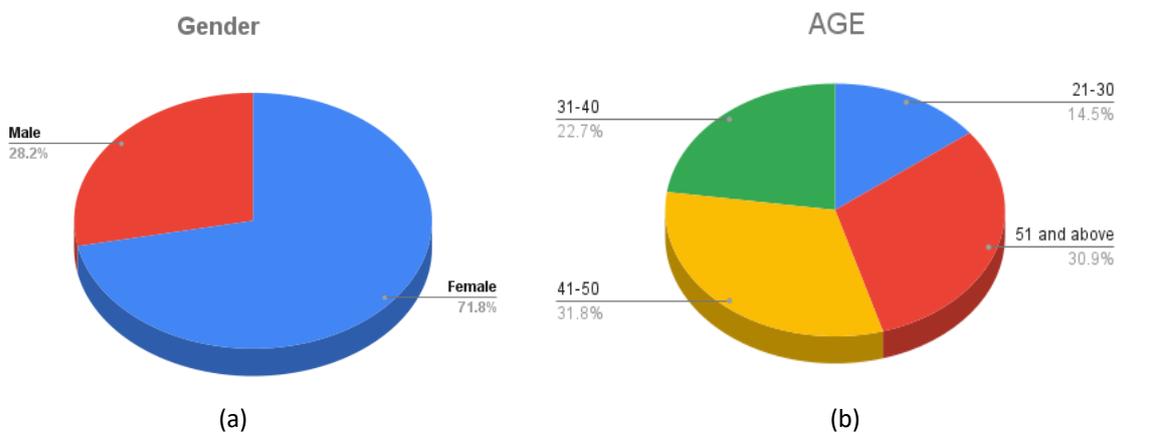


Fig. 2. Figure (a) Respondents' gender (b) Respondents' age

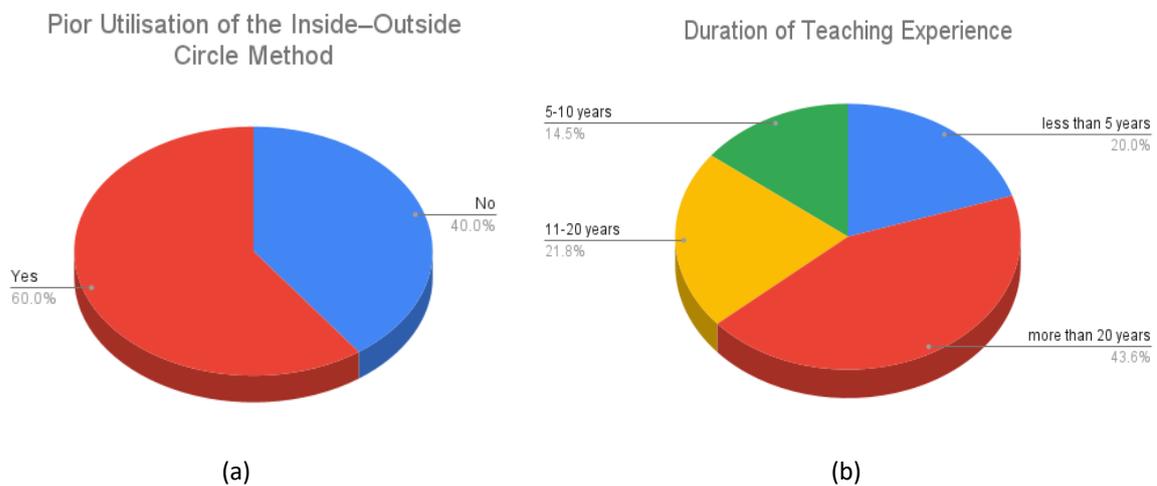


Fig. 3. Figure (a) Respondents' prior utilisation of IOC method (b) Duration of teaching experience

As indicated in Figure 2(a), the demographic composition of the sample reveals that 71.8% of the respondents were female, markedly exceeding the 28.2% of male respondents. With respect to age shown in Figure 2(b), the highest percentage was recorded among individuals aged 41–50 years (31.8%), followed closely by those aged 51 and above (30.9%). Respondents aged 31–40 years constituted 22.7% of the sample, whereas those aged 21–30 years represented the smallest age cohort at 14.5%. Figure 3(a) illustrates the analytical findings related to respondents' teaching experience and their prior utilisation of the Inside–Outside Circle technique. The analysis reveals

that 60% of the respondents had previously implemented this technique in their classroom practice, while the remaining 40% had never employed it. In terms of teaching experience shown in Figure 3(b), 43.6% of the respondents reported having more than 20 years of experience, followed by 21.8% with 11 to 20 years of experience. Furthermore, 20% had less than 5 years of teaching experience, whereas 14.5% possessed between 5 and 10 years of experience.

In Section B, 10 items are presented that pertain to the first objective of this research, which aims to evaluate the perceived effectiveness of the Inside–Outside Circle strategy in enhancing students’ interactive and collaborative engagement. A five-point Likert scale, as shown in Table 2, was used for all questionnaire items. The results of the analysis for Section B are presented in Table 3.

Table 3
 Results of the analysis item for section B

Item Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
The Inside-Outside Circle method helps students interact actively during learning sessions.	0.0	0.0	12.7	48.2	39.1	4.26	.673
The Inside-Outside Circle activity encourages students to openly share their views and ideas.	0.0	0.0	10.0	50.0	40.0	4.30	.643
Students appear more cooperative and supportive of one another when using the Inside-Outside Circle method.	0.0	0.0	10.9	49.1	40.0	4.29	.654
The Inside-Outside Circle method is effective in increasing the participation of previously passive students.	0.0	0.0	12.7	51.8	35.5	4.23	.659
The Inside-Outside Circle activity creates a more active and enjoyable learning environment.	0.0	0.0	10.0	46.4	43.6	4.34	.654
The Inside-Outside Circle activity helps students remember lesson content better.	0.0	0.0	7.3	60.9	31.8	4.25	.578
This method can increase students’ motivation to learn	0.0	0.0	10.0	51.8	38.2	4.28	.637
This method can help improve students’ oral communication skills.	0.0	0.0	7.3	48.2	44.5	4.37	.619
This method helps students become better listeners.	0.0	0.0	9.1	49.1	41.8	4.33	.637
The Inside-Outside Circle activity helps reduce students’ shyness or fear of speaking in a group.	0.0	0.0	8.2	50.0	41.8	4.34	.625
Total Mean Score						4.30	.638

Based on Table 3, the result of item 1 is “the majority of teachers agreed that the Inside–Outside Circle method facilitates active student interaction during learning sessions”, with 48.2% of respondents indicating agreement, 39.1% of respondents indicating strongly agreed compared to 12.7% who chose a neutral response. The mean score for this item was 4.26, with a standard deviation of 0.673. In addition, as indicated in the findings, teachers reported that item 2 “the Inside–Outside Circle activity encourages students to openly share their views and ideas”, with half of the respondents (50%) expressing agreement, 40% expressing strongly agreed and 10% providing a neutral response. This item recorded a mean of 4.30 and a standard deviation of 0.643. Subsequently, the results for Item 3, “Students appear more cooperative and supportive of one another when using the Inside–Outside Circle method,” indicate that 49.1% of respondents agreed with the statement, while 40% strongly agreed, and 10% selected a neutral response. The item achieved a high mean score of 4.29 with a standard deviation of 0.654. With regard to Item 4, “The Inside–Outside Circle method is effective in increasing the participation of previously passive students,” the analysis reveals a strong positive response from the respondents. A majority of

participants (51.8%) indicated agreement, while 35.5% expressed strong agreement, and only 12.7% selected a neutral response. The item yielded a high mean score of 4.23 with a standard deviation of 0.659. In addition, teachers agreed that the question in item 5 “the Inside–Outside Circle activity creates a more active and enjoyable learning environment”, as reflected by 46.4% of respondents indicating agreement and 43.6% strongly agreed while 10% selected a neutral response. Total mean for this item is 4.34 with a standard deviation 0.654. Furthermore, teachers perceived that “the Inside-Outside Circle activity helps students to remember lesson content better”, with 60.9% of respondents agreeing, 31.8% strongly agreed and 7.3% providing a neutral response. The mean score for this item was 4.25, with a standard deviation of 0.578. The analysis of the questionnaire of item 7 “this method can increase students’ motivation to learn” makes the teacher believe it, as 51.8% of respondents agreed, 38.2% of respondents strongly agreed and 10% remained neutral. While the mean for this item is 4.28 with standard deviation 0.637. The next analysis focuses on item 8 examining whether “this method can help enhance students’ oral communication skills”. A total of 48.2% of respondents agreed with this statement, 44.5% respondents strongly agreed while 7.3% indicated a neutral response. The mean score for this item was 4.37, with a standard deviation of 0.619. The item 9 assessing whether “this method helps students to become better listeners” yielded notably positive results. Specifically, 49.1% of respondents agreed with the statement, a proportion that differs by only 7.3% from those who reported “strongly agree” (41.8%). Meanwhile, 9.1% of respondents selected a neutral response. The mean score of 4.33 and standard deviation of 0.637. The final item in this section examined is “the inside–outside activity helps reduce students’ feelings of shyness or fear of speaking in group”. The results revealed that 50% of teachers agreed with the statement, 41.8% of teachers strongly agreed while 8.2% selected a neutral response. Mean for this item is 4.34 with a standard deviation 0.625. Overall, the results presented in Table 3 indicate a high level of agreement among respondents, with an overall mean score of 4.30 and an average standard deviation of 0.638.

Based on the analysis recorded in Table 3, the findings indicate an overall positive perception of the Inside–Outside Circle method, demonstrating that the strategy successfully achieved its intended objective. The majority of respondents selected either “agree” or “strongly agree,” with only a small proportion indicating a neutral response. These results suggest that the Inside–Outside Circle method effectively enhances students’ communication skills by providing engaging opportunities for structured interaction and peer-to-peer communication. This finding is consistent with the work of Taher *et al.*, [12], who emphasised that educational practices should prioritise the systematic development of communication skills through interactive and collaborative learning environments. In addition, studies by Mitro [9] and Tadesse *et al.*, [10] also reported that the Inside–Outside Circle method is effective in enhancing students’ communication skills as well as their level of confidence during learning sessions in which this strategy is implemented. Furthermore, the Inside–Outside Circle method fosters a cooperative and supportive atmosphere among students during learning activities, encouraging them to become more open and confident in sharing their ideas. This aligns with the assertion by Noge *et al.*, [7,13], which highlights that cooperative learning has been shown to enhance students’ motivation, interaction, confidence, and collaborative skills. Moreover, the method contributes to the creation of a harmonious learning environment and promotes constructive interaction among students during the problem-solving process. Furthermore, respondents agreed that the Inside–Outside Circle method encourages students to become more active participants, develop better listening skills, and reduce feelings of apprehension during learning sessions. This is because the method involves all students in interacting with their peers to collaboratively solve problems, thereby boosting their self-confidence. This finding aligns with Aliyu *et al.*, [2], who stated that cooperative and active learning

approaches significantly enhance students' cognitive, behavioural, and emotional engagement in the classroom. When students engage in purposeful dialogue using this method, they not only improve their clarity, confidence, and fluency in communication but also cultivate essential interpersonal skills that enhance their readiness for future academic and professional demands.

Table 4
 Level of active student engagement when using the Inside-Outside Circle Method

Item Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
The Inside-Outside Circle method increase students' motivation to learn.	0.0	0.0	10.0	50.9	39.1	4.29	.640
Students are more active in responding to the teacher's questions during the Inside-Outside Circle activity.	0.0	0.0	10.0	51.8	38.2	4.28	.637
Students contribute ideas and opinions during the activity.	0.0	0.0	9.1	55.5	35.5	4.26	.616
Students are able to maintain focus during the lesson.	0.0	0.0	12.7	50.0	37.3	4.25	.666
Students listen attentively to the views of their peers.	0.0	0.0	10.9	50.0	39.1	4.28	.651
Students cooperate in understanding the discussion topic.	0.0	0.0	10.9	48.2	40.9	4.30	.657
Students are able to respect their peers' differing viewpoints.	0.0	0.0	13.6	51.8	34.5	4.21	.665
The activity helps students communicate effectively.	0.0	0.0	10.0	48.2	41.8	4.32	.649
Students gain opportunities to communicate with many peers through this method.	0.0	0.0	10.0	50.0	40.0	4.30	.643
Students gain a better understanding of the lesson through this activity.	0.0	0.9	10.0	51.8	37.3	4.25	.670
Total Mean Score						4.274	.590

The findings in Table 4 show the level of active student engagement among students when the Inside-Outside Circle (IOC) cooperative learning method was employed. The overall mean score for student engagement was 4.274 with a standard deviation 0.590, indicating a high level of active participation during the learning activities. Individually, the item scores ranged from 4.21 to 4.32, demonstrating consistent engagement across various aspects of student involvement. The highest mean score was recorded for Item 8, "The activity helps students communicate effectively," with a value of 4.32. The percentage distribution of respondents' responses showed that 48.2% agreed and 41.8% strongly agreed, yielding a combined positive response rate of 90.0%. No respondents selected "Disagree," "Strongly Disagree," or "Neutral" options, indicating strong consensus among students regarding the effectiveness of the IOC method in enhancing communication skills. This finding demonstrates that students perceive structured peer interactions through the Inside-Outside Circle (IOC) method as highly effective for improving their ability to communicate ideas and interact collaboratively with classmates. The overwhelming positive response underscores the method's strength in promoting active verbal engagement and interpersonal competence within cooperative learning activities. Similarly, items related to peer communication and cooperative understanding "Students gain opportunities to communicate with many peers through this method" with mean 4.30 and "Students cooperate in understanding the discussion topic" with mean 4.30 also scored highly, reflecting the method's effectiveness in fostering collaborative learning. Students' attentiveness and motivation were also positively impacted. The item, "The Inside-Outside Circle method increases students' motivation to learn", obtained a mean score of 4.29, indicating that structured peer interactions enhance intrinsic motivation. Moreover, students were observed to actively respond to teacher questions with mean score 4.28 and contribute ideas and opinions

during discussions obtained a mean score 4.26, highlighting the method’s role in promoting active cognitive engagement. The lowest mean score was recorded for Item 7, “Students are able to respect their peers’ differing viewpoints,” with a value of 4.21 among all items. Percentage analysis of respondents’ responses showed that 51.8% agreed and 34.5% strongly agreed, resulting in a combined positive response rate of 86.3%. Meanwhile, 13.6% of respondents disagreed, and no participants selected neutral or strongly disagree options. Although this item received the lowest mean score, the data indicates that the majority of students still perceive the Inside–Outside Circle (IOC) method as effective in fostering respect for differing opinions among peers Overall, the high mean scores across all items indicate that the IOC method is effective in promoting active engagement, attentiveness, collaborative skills, and communicative competence in classroom settings.

The results of this study confirm that the Inside-Outside Circle method is an effective cooperative learning strategy for enhancing students’ active engagement, communication, motivation, and collaboration. The consistently high levels of engagement align with existing literature, which emphasizes that dynamic and cooperative learning environments substantially improve students’ cognitive, behavioral, and emotional involvement in classroom learning [1,2]. The structured rotation and pairing inherent in the IOC method facilitate systematic peer interaction, idea exchange, and immediate feedback, thereby contributing to the development of communication skills and collaborative competence [9,10,12]. Although the item related to respecting differing viewpoints received a comparatively lower mean score, the overall high levels indicate that interpersonal and social skills can be further strengthened through continuous implementation and teacher facilitation within cooperative learning contexts [7]. Based on the findings, it can be concluded that the Inside-Outside Circle (IOC) method provides a structured yet flexible learning environment that supports both academic engagement and social interaction. The results of this study indicate that the IOC method is a practical and pedagogically sound instructional strategy for promoting active student engagement and collaborative learning in Malaysian classrooms, particularly in contexts where student participation has previously been reported as limited [1,13]. In addition, the positive effects on students’ motivation and attentiveness support previous findings that student-centered instructional approaches foster greater motivation, confidence, and willingness to participate actively in learning activities [5,8]. Therefore, this method has the potential not only to enhance students’ academic and social skills but also to cultivate a learning culture that is more interactive, communicative, and highly motivated.

Table 5

The challenges or factors that influence the effectiveness of the Inside-Outside Circle Method among students in Kelantan

Item Statement	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
Large class sizes make it difficult for teachers to manage the implementation of the Inside-Outside Circle method.	0.9	5.5	21.8	40.9	30.9	3.95	.913
Passive student attitudes or a lack of self-confidence are major factors that hinder the effectiveness of the Inside-Outside Circle method.	0.9	2.7	23.6	39.1	33.6	4.02	.878
Time constraints in the teaching and learning schedule make it difficult to conduct the Inside-Outside Circle activity thoroughly.	0.0	3.6	20.9	44.5	30.9	4.03	.818

Limited teacher expertise in understanding the Inside-Outside Circle procedures and classroom management.	0.0	8.2	25.5	41.8	24.5	3.83	.897
The Inside-Outside Circle activity takes more time compared to other methods.	0.9	7.3	23.6	43.6	24.5	3.84	.914
Total Mean Score						3.93	.722

Based on the descriptive analysis of the five items related to challenges or factors influencing the effectiveness of the Inside-Outside Circle (IOC) method among students in Kelantan, as presented in Table 5, the overall mean score was 3.93 with a standard deviation of 0.72, indicating a generally high level of agreement among respondents regarding the existence of implementation challenges. The highest mean score was recorded for Item 3, "Time constraints in the teaching and learning schedule make it difficult to implement IOC activities comprehensively," with a mean of 4.03. Percentage responses show that 44.5% of respondents agreed and 30.9% strongly agreed, resulting in a combined positive response rate of 75.4%. This finding suggests that limited instructional time is perceived as the primary barrier to the effective application of the IOC method. Similarly, Item 2, "Passive student attitudes or low self-confidence become the main factor hindering the effectiveness of IOC," obtained a mean of 4.02, with 39.1% agreeing and 33.6% strongly agreeing, highlighting the impact of student readiness and confidence on successful cooperative learning. In contrast, the lowest mean score was reported for Item 4, "Limited teacher expertise in understanding IOC procedures and classroom management," which had a mean of 3.83. Percentage responses indicate that 41.8% agreed and 24.5% strongly agreed, with a notable 8.2% of respondents selecting "Strongly Disagree." This suggests that while teacher expertise is recognized as a challenge, it is slightly less critical compared to time constraints and student-related factors. Other items such as Item 1, "Large class sizes make it difficult for teachers to manage IOC implementation" (M = 3.95), and Item 5, "IOC activities take longer than other methods" (M = 3.84), also received relatively high agreement, confirming that structural and procedural constraints influence the effectiveness of IOC activities. Overall, the percentage-based analysis demonstrates that both instructional and organizational factors are considered significant by students in the context of cooperative learning implementation.

The findings of this study demonstrate that while the Inside-Outside Circle (IOC) method has strong potential to enhance active student engagement, its effectiveness is influenced by a combination of structural and human factors, as anticipated in the introduction. The prominence of time constraints and large class sizes supports earlier studies which reported that despite policy emphasis on active and student-centred learning, classroom-level implementation remains challenging due to workload, limited instructional time, and reliance on traditional teaching methods [3,4,11]. Furthermore, the identification of passive student attitudes and low self-confidence as key challenges reflects concerns raised in previous research regarding examination-oriented learning cultures that restrict students' willingness to communicate and participate actively [5,12]. These findings are consistent with the view that cooperative learning requires not only appropriate instructional strategies but also student readiness and supportive classroom environments [6,7]. In addition, the issue of limited teacher expertise highlights the need for professional training, as effective cooperative learning implementation depends on teachers' ability to manage interaction, structure activities, and facilitate engagement [8]. Overall, these results provide empirical support for the argument that the successful implementation of the IOC method in Kelantan requires adequate instructional time, manageable class sizes, teacher preparedness, and deliberate efforts to cultivate students' confidence and participation. This reinforces the necessity of further institutional support and targeted professional development to ensure that cooperative

learning strategies such as IOC can effectively address student passivity and contribute to more active, collaborative, and meaningful learning experiences in Malaysian classrooms [1,13].

4. Conclusions

This study was carried out to assess how effectively the Inside-Outside Circle (IOC) approach increases active student involvement in Kelantan based on three objectives. The study's primary findings demonstrate that the IOC approach is a successful cooperative learning technique with significant potential to enhance student engagement, motivation, and communication during instruction. The analysis results indicate that teachers have a very favourable opinion of the IOC method's efficacy based on the first objectives. The majority of respondents concurred that IOC can boost student engagement, promote direct idea exchange, improve communication skills, and assist passive students in becoming more actively involved. Additionally, the learning environment becomes more engaging, comfortable, and enjoyable, which enhances pupils' retention of the content. For the second objective, there was a high degree of active student participation when using IOC. Pupils were shown to be more motivated, concentrated, and fearless while expressing their thoughts. Students can engage with several friends in a short amount of time because of the pair movement and peer exchange framework, which fosters collaboration, clear communication, and critical thinking. This result is consistent with earlier research that demonstrates the cooperative approach can enhance social skills and active learning. Meanwhile, the third objective pointed up a number of issues that would compromise IOC's efficacy. These include teaching time limits, big class sizes, low student confidence, and inadequate teacher abilities to oversee this approach's execution. These obstacles can still be addressed, though, with professional development for educators, more adaptable time management, and support techniques that encourage students' bravery and competence. Overall, this study demonstrates that the Inside-Outside Circle approach can positively affect classroom dynamics, communication skill development, and active student involvement. In order to encourage 21st century learning practices that are more interactive, collaborative, and student-centered. This approach should be expanded in the context of education in schools, particularly in Kelantan.

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