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The Effectiveness of the Jigsaw Cooperative Learning Approach in Enhancing Written Communication Skills among form 6 History

Students

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Abstract

The present work aims to investigate students' performances in cooperative learning with particular emphasis given to Jigsaw method's effectiveness in improving written communication skills of Form 6 students in History Education. Taking into consideration a well-grounded literature review from several research studies on this matter, the paper explores the attitudes toward cooperative learning and the Jigsaw method in diverse educational settings. The findings underscore the significant positive impact of cooperative learning approaches on student engagement and communication skills development. Specifically, the study reveals that students exhibit a strong preference for collaborative learning methods like the Jigsaw technique, highlighting its effectiveness in promoting active participation and fostering a conducive learning environment. The results are in favour of the fact that students hold high regard for these modes of learning, indicating how critical they are in ensuring that collaborative learning takes place and equally helps in developing communication skills. Using the results from students' feedback and empirical evidence, this study provides crucial information on the Jigsaw technique as one of the best ways of excelling students in Form 6 in their written communication skills.

Keywords: Cooperative Learning, Jigsaw Method, Written Communication Skills, Student Perceptions, Pedagogical Approaches.

Introduction

The domain of education particularly stresses nurturing the art of writing which is highly significant for students' academic success and future profession. Written communication skills are important especially for students who studying difficult subjects like history. For Form 6 students who studying history, they are most overcome with the particular difficulty or precisely and clearly communicating complex historical analyses as they prepare to further study in university or get the professional jobs. Studying subject history is not just a school assignment for Form 6 students, but more to a crucial ability that will determine their success

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

in the future. Collaborative learning strategies such as the Jigsaw method have been used for their capacity to improve students' abilities to express themselves in writing which is a pedagogical strategy that encourages peer teaching and collaborative learning. However, the most research on cooperative learning strategies had been done for other subjects, but there is not much research done on how the strategies specifically affect writing communication in history curriculum for Form 6 students. In order to close the gap, this research will examine how well Jigsaw method work to enhance students' written communication abilities in Form 6 history learning. Education policymakers can use the research's findings to inform curriculum development, teachers can gain evidence-based strategies to improve their teaching methods. Meanwhile, students can develop continuous abilities that strengthen their academic and professional prospects. Researchers in the fields of education and cognitive science also can gain valuable insights into the mechanisms of skills transfer in collaborative learning environments. The potential benefits of this research may improve the classroom environments. This study aims to fill a gap in the literature by examining the use of Jigsaw method in historical education. It also explains how collaborative learning may be applied to a topic that requires complicated written representations. The research's practical implications have the potential to completely transform the way we teach written communication in history and possibly for other humanitarian subjects also. This will ultimately help to produce students who are more meaningful, analytically knowledgeable, collaborative, and prepared for the challenges of the twenty-first century. This study on the Jigsaw Collaborative Learning Approach's effectiveness in enhancing Form 6 History students' written communication skills exposes itself as a significant contribution to research and educational practice by addressing these numerous areas. These findings are an important contribution to the field of historical education and pedagogy since they may have an impact on wider educational techniques and policies in addition to individual student outcomes.

In the same time, the paper will explore theory behind cooperative learning, investigate empirical evidence from different cases and put everything together to understand the effectiveness of Jigsaw method for the purpose of developing written communication skills of Form 6 students. Exploring students' views on cooperative learning contributes to the development of teachers' approaches in their efforts to facilitate constructive learning processes.

Literature Review

Cooperative Learning and the Jigsaw Method

One of the most useful methods of ensuring that students are actively engaged in learning experiences is cooperative learning (Johnson & Johnson, 2018). Cooperative learning, a common pedagogical method, involves the use of interactive instruction where students operate in small groups, and are tasked with the collective attainment of educational goals. This is based on the social interdependence theory, which holds that the members of a group collaborate with each other contributing from their competencies with the aim of succeeding together (Butera & Buchs, 2019). In the same token, the framework explained by Johnson and Johnson (2018) spells out five principles that are fundamental to the success of collaborative learning.

First, positive interdependence ascertains team members that their accomplishment is interlinked with that of their partners which fosters a sense of commitment. It creates here a collaborative environment in which mutual support and shared success are most crucial.

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Secondly, individual accountability plays a role in ensuring that everyone within the group is held accountable for their tasks which in turn addresses the free-rider issues and enhances commitment and engagement. In this way, students will learn together so that they can lead to improved individual performance. According to Johnson & Johnson (2018), to make sure individual responsibility can be make through (a) observing students as they work together and record the contributions of each member, (b) having each student explain what they have learned with classmate; or (c) giving an individual test to each student.

Additionally, personal contacts give the foundation of collaborative classrooms, which allows students to take part in interpersonal communication, active discussions, and the exchange of various viewpoints. The co-creation of knowledge and the development of high-quality communication skills is achieved through these interactions. In the same vein, developing interpersonal skills like explaining to others how to solve problems, teaching one's knowledge to classmates, challenging each other's reasoning and conclusions, and connecting present with past learning are the key factors in attaining harmonious group relations and resolving conflicts in a constructive way (Johnson & Johnson, 2018).

Lastly, the method of working together helps to promote group reflecting techniques that seek to strengthen group cohesion and effectiveness. Group processing can be defined as the examination of the effectiveness of the process members use to maximize their own and each other's learning, so that ways to improve the process may be identified (Johnson & Johnson, 2018). Through this process, group members create a culture of lifelong learning and shared responsibility within the group.

With these five key components, teachers may arrange any session to maximise student participation and activity in the classroom. Students get actively involved in the class and it becomes really cooperative only when these five elements are thoughtfully included into the design of the session. Cooperative learning in the class encourages students to participate in meaningful interactions, exchange support and work together; therefore, they develop their communicative competence, which is one of the most important skills for academic endeavours and real-life situations (Johnson & Johnson, 2018; Butera & Buchs, 2019).

The study conducted by Baken et al (2022), on the impact of the Jigsaw method on student learning outcomes revealed some important findings that the Jigsaw method, is a distinctive cooperative learning technique which has made a name for itself in the learning circles for its ability to create a platform for teamwork and interdependent learning. According to Baken et al (2022), the Jigsaw method led to a substantial improvement in average quiz scores for students involved in the Jigsaw teaching method across two years and several instructors while the class using traditional taught are more passive manner. This novel method carries out in two different stages. At the beginning of this process, the students are split into sub-groups, a quite sizeable fragments termed as 'Expert Groups'. This groups are given a particular section of class material to study and to become an expert of it. During this phase the students enhance their independence and discover how their individual mastery can be applied to collaborative work. Next, the working groups are restructured as the Learning Groups with the same composition of members from each of the Expert Group. Doing this helps to guarantee that each Learning Group has a diverse range of expertise.

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

Similarly, during this period, every student is allowed to act as a teacher, passing the learned knowledge to the rest of the class. The interaction between the students takes place through peer-to-peer teaching, which promotes comprehensive understanding, reinforces learning and creates a sense of shared responsibility for academic excellence. These findings in Baken et al (2022), study demonstrated that the general trend of improved learning and retention when the Jigsaw method was implemented, highlighting the potential impact of active learning methods in enhancing student understanding and memory retention. Students are able to strengthen their critical thinking and communicative skills through this constructive collaborative learning model and consequently grow a deep understanding of participation in collaborative learning (Dhull & Verma, 2019; Sarifuddin & Ahmad, 2023).

Written Communication Skills in History: Importance and Roles

Written communication involves the use of different types of symbols, images and graphics for the conveyance of information. It displays data or the message visually via written or typed text. This is a very crucial form of communication as it can be used to communicate detailed information which cannot otherwise be conveyed through dialogue or talking, for example, data which is complex. Through written communication, information is written down and can be used in the future, or can be referred to multiple times. Others prefer to call it visual communication instead. Conciseness and clarity are two essential qualities of good written communication as it enables one to paraphrase the intended message accurately. A good written report uses grammar correctly and with minimal or no unnecessary words to efficiently convey the most critical details. The written communication in organizations consists of various written forms such as letters, minutes, memos, various other documents (Institut Aminuddin Baki, 2020). Accordingly, the writing communication skills in History Education are, in particular, the abilities of expressing contextual ideas, arguments, and interpretations via writing. This incorporates abilities such as the production of concise, logical and coherent essays, the usage of historical sources, the combination of information, and presenting the arguments by the provision of evidence.

Pertaining to its importance, Sparks et al (2014), had considered written communication is one of the most critical competencies for academic and career success in both educational and professional life. Results of studies with the participation of both academic staff and the employers show that the role of strong writing skills cannot be underestimated. This stress on proficiency in writing is crucial for the development and implementation of next-generation test measures that will evaluate and improve students' writing skills. Sparks et al (2014), offer an extensive narration on the different definitions of writing competence among higher education and workplace environments. They identify four essential skills strands crucial for assessing writing proficiency: the ability to apply both on social and rhetorical level, as well as domain knowledge and conceptual strategies, language use, and conventions, and writing process. The authors propose to use different assessment forms that go from selected-response to constructed-response tasks in order to cover each writing element and retain the reliability of the test. In addition to this, they emphasize the need for taking authenticity and psychometric quality seriously since universities and faculty could use the findings for enhancing the assessment practices. The information and the operational definition by Sparks et al (2014), are important resource for institutions that seek to either adopt or design an assessment of students' writing proficiency.

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

Rios et al (2020), put researchers in the 21st-century learning skills box by employing a competent empirical method to interpret employers' communication through job advertisements. The study of 142,000 job ads uncovers some knowledge about the current demand for skills in the modern work environment. Significantly, the research points to the top four skills: oral and written communication, collaboration, and problem-solving as the most sought-after ones by the employers. The highlight on the oral and written communication reflects the fact that practical written communication skills are increasingly necessary in the workplace of the modern days. This study highlights the differences between the skills presented in researches and the ones needed by employers during hiring process. Skills like social responsibility may be focused in educational setups, but they consistently find that these are in low demand in labour market. Moreover, the study draws attention to variations in skill required, depending on job nature, such as differences based on educational level and degree field. It has been shown that the existing educational standards need to be overhauled with the main focus on the development of 21st-century skills, preeminently written communication, in line with the constantly changing needs of the workforce.

Delving into its role, students are able to develop the meanings of historical concepts through the use of written communication as such skill gives them a platform to voice their opinions and form themselves as well as comprehend history. Ecker (2022), provides a deep insight into the use of analogue and digital forms of communication in History Education in teacher education institutions where history, social studies, and civics/citizenship education at university level are studied. With the use of a digital tool named Planungsmatrix, students are led through the process of designing case studies and taking part in historical learning inside the context of historical courses. Through the Planungsmatrix, there is a laid down procedure for planning, noting and evaluating historical mind processes. It focuses on the expertise of historical thinking. The author elucidates the necessity of feedback and selfreflection for learning, enabling students to contest existing interpretations and refine the historical narratives that connect to their personal experience. Students, by writing collaboratively and giving each other feedback, can solidify and develop their historical knowledge; and by working together, they can strengthen their sense of identity. The Planungsmatrix represents a very complicated structure, through which students can organise their thoughts, assessments, and reflections about historical learning processes.

Integration of Written Communication in History Curriculum

The research done by Kaviza (2019), deals with the relationship between using the historical thinking skills in classroom instruction and students' attainment in history subjects. Adopting a survey method with the correlation design, the research samples consisted of 521 students from 23 secondary schools in northern Malaysia. The results show a statistically notable moderate negative relation between students' mastery of historical thinking skills and history subject attainment. Furthermore, the study finds out that the historical thinking has five main competences that particularly improve the history subject score. The results highlight the fact that history teachers need to develop their students' historical thinking competence, especially written communication, in their curriculum. The framework emphasizes historical thinking as a tool for critical thinking which involves the evaluation of historical evidence and making the links between past and present events. By building in the written communication skills as well as other competencies into the curriculum along with the learning, the educators can help students understand the history topics better thus improving their achievements.

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Conventional Teaching Method versus Cooperative Learning

Traditionally, the teaching methods in History Education have been mainly lecture-based and the textbooks serve as the main learning resources. However, this is recently changing with digital learning and educational technology. In these conventional methods, teachers usually become the major source of information, providing content through long monologues and relying on written materials almost exclusively for the whole curriculum. They adhere to stepby-step instructions, which more often than not translate to dispensing core information rather than creating fun and exciting discussion-based or experience-filled learning opportunities. Moreover, teachers relying on the traditional techniques in the teaching process frequently assess students through written assignments, quizzes, and exams that just test their ability to recollect historical facts and their knowledge. Although these strategies have been employed in education for a long time, they may face difficulties in the levels of engagement from students and also the depth of information about historical subjects they provide. Talib et al. (2019) draws attention to the limitations and drawbacks of the traditional approaches, suggesting the imperative of adopting new teaching techniques that will allow for effective instruction of diverse learners in History Education. As educators look to increase the effectiveness of history teaching, the exploration of alternative teaching methods is necessitated so that the participants can get more active, think critically and thus have a deeper historical understanding.

In fact, Lui and Ahmad (2021), have a valuable contribution to the ongoing discussion of conventional teaching methods in History Education. Through the exploration of the constraints incorporated in these traditional techniques, they offer helpful recommendations on how to overcome instructors' difficulties in capturing their students' attention. Besides, their approach to boosting students' curiosity and involvement using advanced teaching approaches shows the changing face of History Education. This is a strong indication that educators ought to move beyond the old teaching methods and develop more collaborative ones to promote active students' participation, independent thinking, and a deeper connection to historical subjects. Through this approach, teachers will be able to implement an enriched learning experience in History Education, driving towards a broader awareness and appreciation of historical issues among students. To add to that, a recent study by Sarifuddin and Ahmad (2023), emphasizes on the fact that traditional teaching methodologies which the history teachers give, seem to be dull and boring to the students. Hence, the use of appropriate teaching strategies and approaches that are designed to enhance students' abilities and knowledge levels will result to adequate level of teaching effectiveness. The teachers' capability to differentiate their teaching strategies is an effective way of improving the quality of education and also enhance the students' interest and performance.

Cooperative learning, on the other hand, may be advantageous regardless of the subject and course as opposed to the traditional method. For example, article by Tran (2019), has important findings concerning benefits of cooperative learning in comparison with traditional teaching methods, especially in higher education. When analyzing the effects of cooperative learning on the motivation of second-year students in the field of education at a higher education institution in Vietnam, Tran designed 72 students into two groups (one that experiences cooperative learning and the other receiving a lecture-based teaching). The outcome suggested that students who took part in cooperative learning group were motivated to learn more than the students in the control group. This illustrates that

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

cooperative learning can be applied to effectively boost students' engagement and motivation, which explain the reason for its practical applicability as innovative teaching approach in contradistinction to traditional ones. The outcomes of such studies prove the paramount significance of experimenting with alternative pedagogical strategies and the necessity of further research to promote large-scale application of cooperative learning methods for better learning outcomes in diverse educational environments.

Moreover, Seyhan (2021), ran a study to measure the effectiveness of these teaching methods by comparing the academic success levels of jigsaw groups in the subjects where they were experts and the subjects where they were not. The sample consisted of 24 middle school students, 15 boys and 9 girls, and collected data using a pretest-posttest experimental design without a control group. A "science, technology, and society accomplishment test" containing 20 questions, 5 questions on each of the topics assigned to the groups, acted as the tool for collecting data. This test obtained 0.85 reliability coefficient. The pretest and posttest assessments were conducted using the Jigsaw II technique. The Wilcoxon Signed-Rank test and the Kruskal-Wallis were used to test the non-normally distributed data-based analysis. The Mann-Whitney U test with the Bonferroni correction indicated that there were significant differences between the groups. Outcomes demonstrated the effectiveness of the jigsaw II method in students' positive academic performance in all the test dimensions. Nevertheless, a marked difference was noted in the jigsaw groups' achievement levels in various test dimensions as students generally performed better in the subjects assigned to them than in the others.

In History Education, Sarifuddin and Ahmad (2023), did a research work on appraising the effectiveness of the Jigsaw technique II in accomplishing better essay writing using the cooperative learning among the learners at the upper secondary level. The aforementioned study consisted of four classes with 51 students among them to find out to what extent would Jigsaw II facilitate the improvement of students' academic achievement in essay writing by using pre-and post-test data and students' perception survey. The study revealed that the application of the cooperative learning approach using the Jigsaw II method improved the creative essay writing of the students from the pre-post test data. Jigsaw II was also found to be very easy to understand, helpful in essay writing and promotion of cooperation and communication values among students. The study demonstrates the high success rate of the Jigsaw II method in history education, by descriptive analysis using survey questionnaires. It hereby provides valuable insights based on the practical implications and provides suggestions for future researchers who want to implement this method in teaching and learning contexts.

Nurweda (2023), delivers the same story as the Sarifuddin and Ahmad (2023); Nurweda (2022), undertook action research in the classroom to improve the history lesson outcomes of class X students at SMK Muhammadiyah Watansoppeng by adopting the jigsaw cooperative learning model. The study, conducted during the odd semester of 2021/2022, involved 17 students (9 males and 8 females) and followed a four-stage research procedure: planning, doing, looking, and thinking. This was done through the implementation of two cycles, each with four meetings. The data acquisition incorporated both tests and non-tests (observation and recording) to measure students' performances in history learning tasks. Data validation was performed through saturation and triangulation, while qualitative and

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

quantitative data analysis techniques were applied. Findings revealed favourably for student learning outcomes, as the average percentage improved from the initial evaluation (70.00%) to the final revising (78.53%). Also, the percent of the students reaching the criterion went from 64.71% in the first cycle to 94.12% in the next cycle. Observational research has proved the second cycle to be an auxiliary in enhanced learning activities, as evidenced by improved attendance, participation, and group engagement. The research came to the conclusion that jigsaw cooperative learning model effectively improved the learning performance of class X history subjects at SMK Muhammadiyah Watansoppeng in the 2021/2022 school year.

In conclusion, previous studies have adequately shown that cooperative learning approaches which are jigsaw work better than classical teaching methods. They have proven to be efficient in different educational settings, including higher education, ELF courses, and middle schools. In fact, the results highlight the benefit of cooperative learning in students' motivation, participation and grades in the various disciplines besides history. Collaborative learning is possible through the creation of an interactive and collaborative environment, playing a role in enriching the learning process and the development of more stimulating and insightful education. Such observations highlight the significance of incorporating new teaching methodologies into education to cater for the needs of all learners and to ensure that learning is meaningful.

Students' Attitudes Towards Cooperative Learning

The findings show that most students have a strong view of cooperative learning. Chen and Yu (2019), reveal how students' attitudes unite with the collaborative encounters, especially in case of writing tasks in second language (L2) or foreign language (FL) learning teaching. The research shows that the attitude towards this kind of work influences the interaction and the possibility for language learning when dealing with a collaborative writing. The research incorporates the role of attitudes in the efficiency of cooperative learning. The findings illustrated that students' attitudes were not only influenced by each other but they were also related to the frequency of language-related episodes (LREs) and the effectiveness of addressing language challenges in shared spaces. Moreover, the study consists of the important of students' beliefs about English learning, perception of peer assistance as well as group dynamics, in relation to their attitudes towards cooperative writing. Such data clarify the essential part of the students' attitudes in creating a pro-cooperative atmosphere. Teachers should cling to the mentioned strategies discovered while working on collaborative language writing tasks in order to make the most benefit.

This study of Hortigüela Alcalá et al (2019), centres around how cooperative learning affected secondary and primary school students (n=179). They were divided into two groups: Year 7 primary school students and Year 11 secondary school students, that is 96 and 83, respectively. Implementing convenience sampling, participants took part in three learning modules within 23 sessions consecutively. Post-analysis revealed a substantial rise in motivation for both the groups, with heightened social interaction that was more evident among secondary education students. Moreover, the qualitative data highlighted the teacher's strong stance on collaborative learning, including respect and harmonious thinking, mostly among the Primary Education students. Thus, the results highlight the positive effects of cooperative learning on student motivation, social interaction, and their attitude toward

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

learning at different educational levels, emphasizing its implementation as a practical pedagogical approach.

Sugino (2021), examined the perspectives of students' online learning during the COVID-19 pandemic, with a primary focus on their preferences towards synchronous online cooperative learning. Subjects were 61 female undergraduate students from a class in the 2020 fall semester and they participated in the study after the semester had ended on a voluntary basis. The participants in this study were full-time students aged 18 to 21, having, among others, four juniors, two sophomores, and those freshmen who had started their university adventure after them. Notably, all of the participants were new to online learning before the pandemic and some had no personal computers. Through qualitative content analysis of voluntary comments, three key factors emerged influencing students' decisions to participate in synchronous online classes: symbiotic nature of shared experience, their lives and learning being changed by the pandemic as well as the personal factors. Although the research is small-scale and does not include interaction quality analysis due to restrictions of the pandemic, it was found that students experienced enjoyment and encouragement by interacting, which made them more engaged in the discussion and participation. This positive interdependence created an inclusive environment, and students became more comfortable as they expressed themselves and listened to others, which guided collaborative interactions without any hesitation. The research highlights the significance of participation, cooperation, and active involvement when working to create an effective learning environment, even in the case of online education due to Covid-19. Research shows that students generally tend to have positive attitudes towards cooperative learning since it is good for raising motivation as well as improving social interaction and academic achievement across diverse educational settings.

Students' Perceptions of the Jigsaw Method

Jigsaw technique is frequently feted by the students because it is interactive and team integrated. The investigation reported by O'Leary et al (2019), was concerning the students' views relating to Physical Education with regard to the jigsaw technique of teaching. The research aimed to find out if learning via this method and different ways, as well as group creation affected students' view of the learning process. The results of experiments in most cases show positive feedback from studying, thus indicating the efficiency of jigsaw method to increase social and cognitive engagement What is more, students discerned that the technique is helpful to them as they noted that the method of learning is meaningful and that this works well with regards to understanding the material and interacting with each other. Nevertheless, the writers also brought out some stumbling blocks on the use of the jigsaw method to make psychomotor learning effective, this shows that there is a need to continuously work towards improving the method. Generally speaking, the study underlined the issue of differentiated approaches for creating groups or selecting activities for leading to the maximum achievement of social, cognitive or psychomotor learning. The usage of these types of strategic adjustments will add to the students' comprehension of the jigsaw method, thus making the learning experience more complete and fuller of resources.

Studies of Chopra et al (2023), showed jigsaw method is one such form of cooperative learning that enables students to develop critical-thinking and ability for effective communication and promotes positive student attitudes toward their own learning. This

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

research has performed a comprehensive cross-sectional study to examine the opinions of both scholars and students on applying the jigsaw method in medical education. The experiment with second-year MBBS students employed a collaborative learning style where the students were divided into random groups of ten each. In these groups, students were assigned the responsibility of researching particular topics which were related to the curriculum. Following that, students who shared the same subtopic were divided into the expert groups with the purpose of promoting collaborative exchanges and knowledge sharing. After the expert group meets, students went back to their parent groups to share their findings before the class did peer teaching, and therefore learning. The results of the study demonstrated an overwhelmingly positive attitude of students towards the method and that a substantial portion (81%) have claimed that the jigsaw strategy has significantly improved their communication proficiency. Furthermore, 75% of students admitted that activity led to overcoming shyness and hesitation in class, thus easing their classroom interactions. Tutors also noticed that jigsaw curriculum increased both students' engagement and learning outcomes. This research demonstrated that the jigsaw method can help create engaging, interactive and cooperative learning environments in medical education which are valuable for improving communication skills and for student peer interaction.

Costouros (2020), showed that jigsaw cooperative learning had a positive impact on student grades and enhanced their learning experience, as compared to the traditional lecture method. The study discovered that there was no statistically significant difference in student grades between standard lecture-based education and jigsaw cooperative learning. The experience of students differed, however; students which experienced traditional lecture method felt more competent with lecture-based learning, whereas foreign students reported feeling more autonomous and connected to others via jigsaw cooperative learning. Descriptive statistics and two-way ANOVA testing were employed to analyse the data collected from two student groups: a traditional college group and a group of Indian international students. The course was structured as lectures and jigsaw learning modules, with quizzes after each module as assessments for students' learning outcomes. The goal of the study was to find out whether these groups showed differences in the effectiveness of the teaching methods. The research results add to the growing body of knowledge of active learning in insurance education, especially, concerning jigsaw cooperative learning effectiveness, and provides insights on pedagogical strategies employed for diverse student groups and especially for international students. Hence, the study suggests that both pedagogical approaches have unique benefits and can be effectively integrated to enhance student engagement and learning outcomes.

In the studies by Asda (2022), shown that jigsaw cooperative models may enhance student learning through efficient processes such as enhanced learning activities, discussion skills, content comprehension, and learning motivation. By working together in groups, students are more engaged in the learning process since each one of them is accountable for comprehending and sharing the content with the other students in the group. Students may grasp difficult topics, improve their debate abilities, and react well to cooperative learning activities like Jigsaw. In addition to fostering an engaging and dynamic learning environment, this approach improves students' comprehension of the subject matter related to Islamic Cultural History and their ability to work with others.

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Theoretical Framework: Social Interdependence Theory and Constructivism

There are two theories underpinning the present work. They are social interdependence theory and social constructivism (Butera & Buchs, 2019). Social interdependence theory can serve as a solid basis when considering the complex factors present within a cooperative learning group. This theory posit that the members of the group are a contributing factor to each other, hence their success does not necessarily depend on their efforts but are impacted by the contributions and actions of the other groups members. Social interdependence theory appreciates the idea of positive interdependence, where one realises that the group and their accomplishment is a core component of one's personal achievement. This principle highlights the fact that cooperation and helping each other among group members are the basic factors to reach the determined goals. Positive social interdependence required individuals to work together towards a common goal, where participants are aware of the fact that their joint efforts and synergy is vital for maximised learning outcomes and attaining group goals (Butera & Buchs, 2019). Students will benefit from this in terms of responsibility, cooperation and mutual support.

On the other hand, constructivist point of view connects learning with active processes through which a person makes sense of his or her environment and consults with other people during knowledge construction. The basis of cooperative learning, as a pedagogical approach, are the principles of collaboration among students meant for a common purpose of creating meanings and understanding. Studies done by Butera & Buchs (2019), also stated that cooperative learning methods, such as group projects, discussions, and problem-solving activities, provide opportunities for students to engage in collaborative tasks that require them to share knowledge, skills, and resources. By working together in a cooperative setting, students can enhance their learning outcomes, develop social skills, and build positive relationships with their peers. Furthermore, cooperative learning allows for the development of communication skills that are indispensable for students as they partake in discussions, express their ideas, and participate in the exchange of productive debate with their peers. Students socialize and expand their understanding of the subject matter among themselves by working highly collaboratively in teams and developing the most important interpersonal communicational and professional life skills required for this purpose (Erbil, 2020). The combination of social interdependence and cooperative learning methods creates a supportive and interactive learning environment that promotes academic achievement, social adjustment, and positive relationships among students.

Conclusion

In conclusion, the findings from this study underscore the significance of cooperative learning, particularly the Jigsaw method, in enhancing Form 6 students' proficiency in written communication. Through an analysis of student perceptions and empirical evidence, it is evident that cooperative learning approaches create conducive environments for collaborative learning and foster the development of essential written communication competencies. Educators can leverage these insights to design pedagogical interventions that promote active students' engagement and facilitate meaningful learning experiences. Moving forward, further research is warranted to explore the long-term effects of cooperative learning on students' academic achievement and their transition to the workforce.

References

- Asda, Y. (2022). Efektivitas Pembelajaran Model Kooperatif Tipe Jigsaw Untuk Meningkatkan Hasil Belajar Sejarah Kebudayaan Islam Pada Siswa Man Model Banda Aceh. *PENDALAS: Jurnal Penelitian Tindakan Kelas Dan Pengabdian Masyarakat*, 2(3), 160-174.
- Baken, E. K., Adams, D. C., & Rentz, M. S. (2022). Jigsaw method improves learning and retention for observation-based undergraduate biology laboratory activities. *Journal of Biological Education*, 56(3), 317-322. https://doi.org/10.1080/00219266.2020.1796757
- Butera, F., & Buchs, C. (2019). Social interdependence and the promotion of cooperative learning. Social psychology in action: Evidence-based interventions from theory to practice, 111-127. https://link.springer.com/chapter/10.1007/978-3-030-13788-5_8
- Chen, W., & Yu, S. (2019). A longitudinal case study of changes in students' attitudes, participation, and learning in collaborative writing. *System*, 82, 83-96. https://doi.org/10.1016/j.system.2019.03.005
- Chopra, D., Kwatra, G., Bhandari, B., Sidhu, J. K., Rai, J., & Tripathi, C. D. (2023). Jigsaw classroom: perceptions of students and teachers. *Medical Science Educator*, 33(4), 853-859. https://link.springer.com/article/10.1007/s40670-023-01805-z
- Costouros, T. (2020). Jigsaw Cooperative Learning versus Traditional Lectures: Impact on Student Grades and Learning Experience. *Teaching & Learning Inquiry*, 8(1), 154-172. https://eric.ed.gov/?id=EJ1251258
- Dhull, P., & Verma, G. (2019). Jigsaw teaching technique for teaching science. *International Journal of Research and Analytical Reviews (IJRAR)*, 6(2), 809-15. www.ijrar.org
- Ecker, A. (2022). Communications on History. Building Identity and "Making Sense of History" in the History Course—A Matrix for Empowering Historical Thinking. *Creative Education*, 13(8), 2680-2710. DOI: 10.4236/ce.2022.138170
- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in psychology,* 11, 539791. https://doi.org/10.3389/fpsyg.2020.01157
- Harahap, R. R., Makhroji, M., Zulida, E., Fadlia, F., & Chairuddin, C. (2021). A Study of Effectiveness Cooperative Learning Models in Efl Classroom. *Journal of Education, Linguistics, Literature and Language Teaching,* 4(02), 6-24. https://doi.org/10.33059/ellite.v5i02.3166
- Hortiguela Alcala, D., Hernando Garijo, A., Pérez-Pueyo, Á., & Fernández-Río, J. (2019). Cooperative learning and students' motivation, social interactions and attitudes: Perspectives from two different educational stages. *Sustainability*, 11(24), 7005. https://doi.org/10.3390/su11247005
- Johnson, D. W., & Johnson, R. T. (2018). Cooperative learning: The foundation for active learning. *Active learning—Beyond the future*, 59-71. https://www.doi.org/10.5772/intechopen.81086
- Kaviza, M. (2019). Hubungan penerapan elemen kemahiran pemikiran sejarah dalam proses pengajaran dan pembelajaran terhadap pencapaian mata pelajaran sejarah dalam kalangan murid. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik,* 7(1), 30-38. https://jice.um.edu.my/index.php/JUKU/article/view/17859/10029
- Lui, M. Z. M., & Ahmad, A. (2021). Minat murid terhadap gaya, kaedah pengajaran dan pembelajaran guru dalam pendidikan Sejarah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(2), 211-221. https://doi.org/10.47405/mjssh.v6i2 .676

Vol. 13, No. 3, 2024, E-ISSN: 2226-6348 © 2024

- Nurweda, N. (2022). Penerapan Model Pembelajaran Kooperatif Tipe Jigsaw dalam meningkatkan hasil belajar siswa pada mata pelajaran Sejarah. *VOCATIONAL: Jurnal Inovasi Pendidikan Kejuruan,* 2(1), 19-26. https://doi.org/10.51878/vocational.v2i1.835
- O'Leary, N., Barber, A., & Keane, H. (2019). Physical education undergraduate students' perceptions of their learning using the jigsaw learning method. *European Physical Education Review*, 25(3), 713-730. doi.org/10.1177/1356336X18767302
- Rios, J. A., Ling, G., Pugh, R., Becker, D., & Bacall, A. (2020). Identifying critical 21st-century skills for workplace success: A content analysis of job advertisements. *Educational Researcher*, 49(2), 80-89. https://doi.org/10.3102/0013189X19890600
- Sarifuddin, N., & Ahmad, A. (2023). Keberkesanan Pembelajaran Koperatif Menggunakan Kaedah Jigsaw II dalam Penulisan Esei Sejarah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(1), e002030-e002030. https://doi.org/10.47405/mjssh.v8i1.2030
- Seyhan, A. (2021). Examination of the Structural Effectiveness of the Jigsaw Method on Students. *African Educational Research Journal*, 9(4), 963-974. DOI: 10.30918/AERJ.94.21.144
- Sparks, J. R., Song, Y., Brantley, W., & Liu, O. L. (2014). Assessing written communication in higher education: Review and recommendations for next-generation assessment (ETS Research Report No. RR-14-37). *Princeton, NJ: Educational Testing Service*. doi:10.1002/ets2.12035
- Sugino, C. (2021). Student perceptions of a synchronous online cooperative learning course in a Japanese women's university during the COVID-19 pandemic. *Education Sciences*, 11(5), 231. https://doi.org/10.3390/educsci11050231
- Talib, N. S. A., Awang, M. M., Ghani, K. A., & Yusuff, N. A. (2019). Penggunaan multimedia dalam mata pelajaran sejarah. *International Online Journal of Language, Communication, and Humanities,* 2(2), 86-98. http://103.101.244.124/journal/index.php/insaniah/article/view/57/34
- Tran, V. D. (2019). Does Cooperative Learning Increase Students' Motivation in Learning?. *International Journal of Higher Education*, 8(5), 12-20. https://eric.ed.gov/?id=EJ1224129