



Enhancing Grade Ten Students' Motivation in Learning English through Interactive Comic Media

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Abstrak

Di era globalisasi, kemahiran berbahasa Inggris sangat penting untuk menghadapi tantangan di tempat kerja dan berkomunikasi dengan orang-orang dari berbagai budaya. Namun, tidak semua siswa SMA tertarik untuk mempelajarinya. Penelitian ini bertujuan meningkatkan motivasi belajar bahasa Inggris siswa melalui penggunaan media pembelajaran interaktif, berupa komik edukasi yang dipadukan dengan model jigsaw puzzle. Penelitian tindakan kelas (PTK) ini dilaksanakan di kelas X-B SMA Negeri 4 Pamekasan dengan mengikuti siklus Kemmis dan McTaggart, yang mencakup perencanaan, tindakan, observasi, dan refleksi. Materi komik yang digunakan terkait dengan kehidupan sehari-hari siswa. Data dikumpulkan melalui dokumentasi, observasi, dan angket motivasi belajar, lalu dianalisis secara kualitatif dan kuantitatif. Hasil penelitian menunjukkan peningkatan yang signifikan dalam motivasi belajar: peningkatan sebesar 31,25% dari pra-siklus ke siklus I dan peningkatan sebesar 25% dari siklus I ke siklus II. Secara keseluruhan, motivasi belajar meningkat sebesar 56,25%. Hasilnya menunjukkan bahwa penggabungan narasi visual dalam bentuk komik dan model jigsaw untuk kolaborasi sebaya efektif dalam meningkatkan keinginan siswa untuk belajar. Selain itu, model jigsaw memberikan guru ide praktis tentang cara membuat pembelajaran bahasa Inggris yang kreatif dan interaktif. Hasil menunjukkan bahwa narasi visual komik dan kolaborasi sebaya melalui model jigsaw efektif meningkatkan keinginan siswa untuk belajar. Selain itu, metode ini memungkinkan guru bahasa Inggris untuk membuat pembelajaran yang inovatif, interaktif, dan sesuai dengan siswa generasi digital.

Kata kunci: media pembelajaran interaktif, model pembelajaran jigsaw, motivasi belajar siswa,

Abstract

In era of globalization, English language skills are crucial for facing challenges in the workplace and communicating with people from different cultures. However, there are still high school students who are not interested in learning the language. The purpose of this study was to increase students' desire to learn English through the use of interactive learning media such as educational comics combined with the jigsaw puzzle model. In class X-B at SMA Negeri 4 Pamekasan, this classroom action research (CAR) was conducted following the Kemmis and McTaggart cycle, which includes planning, action, observation, and reflection. Comic material related to students' daily lives was included in the learning process. Qualitative and quantitative analyses were conducted after data were collected through documentation, observation, and a learning motivation questionnaire. The results showed a significant increase in learning motivation: an increase of 31.25% from pre-cycle to cycle I and an increase of 25% from cycle I to cycle II. Overall, learning motivation increased by 56.25%. The results indicate that the combination of visual narratives in the form of comics and the jigsaw puzzle model for peer



collaboration is effective in increasing students' desire to learn. Furthermore, the jigsaw model provides teachers with practical ideas on how to create creative and interactive English learning. Results show that comic visual narratives and peer collaboration through the jigsaw model effectively increase students' desire to learn. Furthermore, this method enables English teachers to create innovative, interactive, and digital-generation-appropriate learning.

Keyword: interactive learning media, jigsaw learning model, student learning motivation,

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Introduction

In the developing global world, English language skills are very important. English language proficiency has become increasingly important in the globalized world, offering numerous benefits across various domains. It facilitates efficient communication and cooperation between various stakeholders by acting as the main language for international commerce (Rahman & Mehnaz, 2024a). In the secondary education system in Indonesia, English is taught as a foreign language that not only emphasizes linguistic aspects but also requires students to be enthusiastic about learning. However, the results of field research show that most grade X students in various schools still show low motivation to learn, especially in English lessons (Putri Rodyanti, 2023). This is indicated by a lack of active participation in class, low involvement in language tasks, and a passive attitude during learning. Student participation in language activities is strongly influenced by motivation and attitude, with perceived competence having a positive impact on motivation and pressure and tension having a negative impact on attitude (Molina-Leal & Peña-Cerón, 2020).

Achieving the goal of learning English is very difficult when students have low motivation. Learning motivation is a crucial psychological component for students' academic achievement. It is a stronger determinant of learning outcomes than IQ and is essential for effective instruction (Natiqi, 2024). Without strong motivation, students may lack the desire to understand a topic deeply. Therefore, it is imperative for teachers to develop methods that can effectively and sustainably stimulate students' enthusiasm. As unmotivated students are likely to struggle with engaging the material and can hinder the teaching process, educators are obligated to help them

become more motivated (Rahman & Mehnaz, 2024b)

The use of interactive learning media is one of the solutions that continues to be developed in the world of education. This media offers a learning experience that is not only visual and auditory but also involves active cognitive and affective activities for students. Multimedia use can lessen cognitive burden and improve students' impressions of the online learning environment, even if it may not have a direct effect on student performance (Davis & Frederick, 2020). Some features of interactive media include simulations, interactive quizzes, animations, and learning videos. They can make learning fun and foster students' curiosity. Knowledge retention, scientific test scores, and peer learning were all enhanced by a pedagogical intervention that fostered curiosity; these benefits continued until middle (Alan & Mumcu, 2024)

This study asks, "How does interactive learning media affect the motivation of grade X students to learn English?" This stems from the need to find a learning method that can increase students' interest and involvement in learning English. The focus of this study is to provide real evidence that interactive media has a significant influence on students' desire to learn. Additionally, students' learning results have significantly improved as a result of using Android-based interactive media in social science classes; they express greater attention and comprehension (Sujarwo et al., 2022). Similarly, t-tests revealed significant differences before and after treatment, demonstrating the effectiveness of Articulate Storyline interactive media, which is based on Android, in improving learning outcomes (Masrifah & Setyasto, 2024)

Previous studies have shown that interactive media can improve student learning

outcomes. For example, research by Susanti (2021) Interactive media has been shown to improve student learning results in a variety of areas in recent studies. It has been demonstrated that interactive multimedia, which combines auditory, visual, and animated aspects, enhances elementary school pupils' learning results in mathematics (Susanti & Aryani, 2021). The use of interactive videos in English learning can increase student participation by up to 40%, according to this study. In addition, research by Munirah & Sahriani (2024) found that interactive applications such as Quizizz and Kahoot can increase students' intrinsic motivation in high school. However, most of these studies show that. Interactive programs like Quizizz and Kahoot have been shown in recent research to have a favorable effect on students' intrinsic motivation for learning languages in high school (Munirah & Sahriani (2024).Pdf, n.d.). Studies have shown that interactive media helps students learn English. For example, Susanti and Aryani (2021) found that interactive videos can help students become more engaged and motivated to understand narrative texts. Meanwhile, Munirah and Sahriani (2024) found that game-based quiz applications such as Kahoot! can improve students' learning outcomes in secondary schools. However, there are not many studies that combine educational comic media with cooperative approaches such as Jigsaw in English learning at the high school level, especially in areas with limited educational resources. As a result, this study has a clear scientific position to increase the collection of creative and contextual learning strategies.

From this it can be concluded that the use of interactive media has been significantly applied in education. Interactive comics present lessons through a series of interconnected image and text panels that form a storyline. Unlike interactive videos or quizzes, interactive comics build the learning context gradually, giving students a clear path to follow the material. Furthermore, comics help students learn vocabulary and language structures that exist in the real world. However, there are still few studies that specifically study the influence of interactive media on students' desire to learn English in grade X. Most studies only look at how learning is successful, how the material is understood, or how to get better grades, but they do not pay attention to changes in students' perspectives or psychological motivation to

learn. Together, these findings highlight the intricate relationship between internal and external motivators (Boström & Bostedt, 2020) and the necessity for teachers to actively foster student motivation in order to enhance learning outcomes and lower dropout rates (Rahman & Mehnaz, 2024a); (Xiu & Thompson, 2020).

The novelty of this study is its focus on the motivational dimension in learning English for grade X students with interactive media. This study not only measures academic results but also looks at changes in students' attitudes, interests, and perseverance in learning. The connections between students' attitudes, interests, perseverance, and academic success have been the subject of recent research. According to research, students who are academically resilient depend on both persistence and interest to succeed, and they exhibit both qualities more consistently over time than their counterparts who are not as resilient (Thorsen et al., 2021). Significant variations in students' motivation, attitudes, and learning outcomes in science courses were discovered in another study, and these variables were found to influence one another (Ernawati et al., 2022). Therefore, the results of the study are expected to provide new impetus to build a more humane English learning method that focuses on students' needs.

In addition, since this research was conducted directly in the classroom using the action learning method (CAR), a strong contextual approach was offered. The purpose of this study is to provide a comprehensive picture of how interactive media can be an important tool to increase students' motivation to learn English. It has been discovered that using multimedia resources in English classes improves learning outcomes, fosters creativity, and raises student attention (Mukhtarkhanova et al., 2023).

The challenge of learning English becomes more difficult in areas like Pamekasan, which are not major urban centers. Students face many obstacles in the educational process, including limited access to learning resources, lack of an environment that supports the use of foreign languages, and lack of desire to learn. Students often do not have the opportunity to see how people use English in everyday life. Learning becomes monotonous and non-contextual as a result, and interest in learning decreases. The use of interactive visual media such as educational comics can help increase students' interest and understanding in situations

like this. This type of media is able to make complex materials easier to understand and relevant to everyday life. In addition, a sense of responsibility and cooperation, which are very important in learning English as a foreign language, can be developed through a cooperative approach such as the Jigsaw model. Therefore, innovations based on comic media combined with the Jigsaw approach are expected to improve the differences that exist in non-urban areas such as Pamekasan.

Finally, this study is expected to provide practical suggestions on how teachers, schools, and educational media developers can create more interesting and effective learning models. In addition, the findings of this study can also serve as a basis for further research investigating how educational technology and the desire to learn relate to various subjects.

Method

The Classroom Action Research (CAR) method was used in this study to improve students' motivation to learn English. By using interactive comics integrated with the Jigsaw learning model, this approach allows teachers to make learning improvements directly and contextually in the classroom.

This study was conducted in class X-B SMAN 4 Pamekasan, which has 35 students. According to initial observations, this class was chosen because students showed a low desire to learn English. This is reflected in students who are not involved in class activities, are passive, and are not interested in completing English assignments.

The research process is based on the Kemmis and McTaggart cycle model, which consists of four main stages: planning, action, observation, and reflection. In order to enhance several facets of education, classroom action research frequently employs the Kemmis and McTaggart cycle model, which consists of stages for preparation, action, observation, and reflection. Students' comprehension of mathematical topics has been improved by the use of this paradigm (Juliani et al., 2021). This cycle is carried out repeatedly until students' learning motivation increases significantly. By using the jigsaw model and educational comic media, learning strategies are planned for each cycle. Implementation of learning according to plan, monitoring of student involvement, and

reflection of the results of actions to encourage improvements in the next cycle.

Educational comics used in learning aim to convey English material in an interesting and visual way. This media aims to attract students, increase focus, and improve their understanding of the language context in a more enjoyable and meaningful way. For primary school pupils, comic books have demonstrated promise in improving language acquisition and character education. E-comics can raise awareness of character education (Lulut Solehudin & Dewi Wulandari, 2023) and greatly enhance comprehension of Indonesian language learning outcomes (Salsa Dika & Kurniana Bektiningsih, 2023) This comic also contains short stories related to students' daily lives.

The Jigsaw learning model was chosen because it gives students the opportunity to learn from each other in small groups, with each member responsible for understanding one topic and then conveying it back to other group members. This allows students to be actively involved in learning, interact, and feel they have an important role in the group, which can psychologically increase their motivation. Pupils are more driven to work with peers, comprehend the subject matter thoroughly, and communicate information clearly (Isnaeni Kurnia, 2023)

In this study, various data collection techniques were used, including observation, open-ended questionnaires, interviews, and documentation. Observations were conducted systematically to record student activities, attitudes, engagement, and interactions during the learning process. Open-ended questionnaires were used to find out how students viewed learning. Data were strengthened by interviews with teachers and students to find out more about their learning experiences.

Data were evaluated qualitatively through thematic analysis. Data obtained from observations, open-ended questionnaires, and interviews were evaluated through the process of reduction, categorization, delivery, and conclusion drawing. Changes in students' learning motivation observed from their participation, interest, enthusiasm, and attitudes towards English lessons from cycle to cycle were the main focus of the analysis.

This study not only looked at learning outcomes numerically but also looked at the psychological and social dynamics of students when learning in the real world. Therefore, the

results of this study are expected to provide a complete and in-depth picture of how effective comic media is in increasing students' motivation to learn English through Jigsaw-based collaborative learning.

1. Descriptive Statistics

Stage Mean Median Mode

Pre-test	69.00	70.00	60
Cycle 1	70.71	70.00	80
Cycle 2	73.49	70.00	70

Interpretation: The average score increased from 69.00 (Pre-test) to 73.49 (Cycle 2). The median remained stable at 70, while the mode changed, indicating variations in the dominant scores at each stage.

2. Inferential Statistics (Paired t-test)

- Pre-test vs Cycle 1 $\rightarrow t = -0.892, p = 0.379$ (not statistically significant, $p > 0.05$).
- Cycle 1 vs Cycle 2 $\rightarrow t = -2.176, p = 0.037$ (significant, $p < 0.05$).
- Pre-test vs Cycle 2 $\rightarrow t = -2.280, p = 0.029$ (significant, $p < 0.05$).

Interpretation:

- The increase from Pre-test to Cycle 1 is not significant, meaning the initial change was not strongly evident.
- The increase from Cycle 1 to Cycle 2 is significant, indicating the effectiveness of the intervention at the second stage.
- The increase from Pre-test to Cycle 2 is also significant, proving that learning through interactive media (comics) was able to significantly improve learning outcomes.

Results and Discussion

In an effort to help students learn English, the researcher implemented the Jigsaw learning model as a supporting strategy. The teaching materials were presented using educational comics designed in a visual and contextual

format, making them more engaging for students and facilitating their understanding of the material. The presence of clear visual and contextual elements in the comics made the learning process more appealing, especially for students with lower abilities (Tucdao National High School, Kawayan, Biliran, Philippines et al., 2022).

The study was conducted in May 2025 with the following sequence of activities: the Pre-test was administered on May 5, 2025, followed by the second meeting, which was Cycle 1, on May 9, 2025. The third meeting, which served as the Post-test for Cycle 1, was held on May 12, 2025, and the fourth meeting, which was Cycle 2, took place on May 23, 2025. The research design referred to the four main stages of Classroom Action Research (CAR): planning, action, observation, and reflection.

The quantitative data analysis showed an increase in students' learning motivation based on the average scores at each stage, namely 69.00 (Pre-test), 70.71 (Cycle 1), and 73.49 (Cycle 2).

Based on the results of the paired t-test:

- **Pre-test \rightarrow Cycle 1:** Not significant ($p = 0.379$), indicating that the initial increase was not yet clearly visible.
- **Cycle 1 \rightarrow Cycle 2:** Significant ($p = 0.037$), indicating a notable increase in learning motivation after implementing the Jigsaw model with educational comics in the second cycle.
- **Pre-test \rightarrow Cycle 2:** Significant ($p = 0.029$), confirming that the combination of the Jigsaw model and educational comics was overall effective in improving students' English learning motivation.

Thus, statistically, it can be concluded that the application of the Jigsaw model with educational comics had a significant positive impact on students' English learning motivation, particularly in Cycle 2, as evidenced by the increase in average scores and the significant statistical test results.

Pre- Test stage

Before the intervention was conducted, the research process began with a pre-test to measure the initial motivation level of class X-B students. Initial results showed that most students were not interested in learning English. This was evident from their passive attitude during learning, lack of participation in discussions, and lack of enthusiasm for completing assignments. These findings support the idea that more engaging and interactive methods are needed to increase students' desire to learn.

Cycle 1

The first cycle used the Jigsaw learning strategy with comics as the main media. Each student created a comic that studied a certain part of the material, and then told it to their group mates. The comics used consisted of short stories related to the students' lives and were packaged with attractive visual displays and easy-to-understand language. The results of the observation showed that class dynamics had improved. Students became more active and showed more interest. However, involvement was uneven; some students seemed passive and not confident when asked to share information with their friends.

Motivation increased slightly after the test after Cycle 1. Development was marked by active participation and interest in the material. However, there were still weaknesses in the interaction between group members and the sense of individual responsibility for delivering the material. The next cycle relies on reflection from the previous cycle.

Cycle 2

The second cycle saw some changes. The comics were simplified, the illustrations became more interesting, and humorous elements were added to make the class more relaxed. In addition, the teacher was more active in helping and encouraging students who had previously participated less. This cycle showed a more lively classroom atmosphere. Students appeared more confident, spoke more often, and were more

enthusiastic. Students began to collaborate more, and they began to demonstrate their ability to understand the material.

The final post-test after Cycle 2 showed a significant increase in learning motivation. Students not only showed greater interest in English lessons, but they also showed a positive attitude towards the learning process. Many students said that watching comics helped them understand the context and vocabulary of English. When they used the Jigsaw model, they felt valued and had an important role in the group. This increased their emotional and social involvement.

Comparison of Pre-test and Cycle 1

In the first cycle, the Jigsaw strategy and comedy media were used. The results showed a moderate improvement compared to the pre-test; students became more active in group discussions, and some began to show better focus during learning. The data showed a decrease in the number of students in category E and an increase in the number of students with grades between C and B. However, this improvement differed from one student to another, and the Jigsaw strategy was not always effective for all students.

Comparison of Cycle 1 and Cycle 2

In Cycle 2, the comic content was adjusted to be simpler and more relevant, increase visual appeal, and provide more teacher support. Thus, the teaching approach was refined. Student performance and motivation improved significantly as a result of these changes. Students who had previously shown little improvement in Cycle 1 (such as students 3 and 17) now showed significant progress, while more students moved into the C+, B, or even A categories. Students who had previously shown little improvement in Cycle 1 (such as students 7 and 24) continued to show improvement, although it was more moderate.

Detailed Analysis of Individual Progress

Student number 7 obtained the highest score in Cycle 2, indicating a strong motivational

drive and responsibility for learning, but student number 31, who had shown poor performance from the start, showed only slight improvement due to lack of motivation.

Overall Progress

The class showed consistent improvement in learning motivation and academic achievement from pre-test to post-test. The improvement from Cycle 1 to Cycle 2 indicated that the refined approach, especially the use of comics in collaborative learning, was effective in making learning more enjoyable and meaningful. The shift in student performance from the low category (D, E) to the higher category (C, B, A) indicated a significant change in the quality of learning, according to data analysis and distribution of grade categories. The increase in the number of students with above-average grades and the decrease in the number of students with low grades indicated the success of the Jigsaw model and comic media in helping English learning through active participation and better understanding.

It was proven in the two-cycle learning process that small changes in methods can greatly affect student motivation. Students became more active and confident thanks to the adjustment of comic content, the use of more interesting illustrations, and a more supportive teacher approach. This shows that in order to make students feel connected to the material presented, the design of learning media must consider their visual preferences and social context.

In addition, through observation and interviews, it was found that students felt an increased sense of responsibility in the group. They not only gained the ability to understand the material, but also gained the ability to communicate well with their friends. During this process, students gained better communication skills, the ability to lead small groups, and the ability to empathize with each other. Therefore, the use of the Jigsaw model supported by comedy media affects not only cognitive abilities but also how students' characters are formed affectively and socially.

Theory Structure

The theory of self-reliance is also based on this study (Deci & Ryan, 1985), which emphasizes that students' intrinsic motivation can increase if learning provides them with

experiences involving social connectedness, a sense of competence, and freedom. These three components are supported by educational comic media combined with the Jigsaw learning model. Comics help students understand the material more easily (autonomy), provide interesting and easy-to-understand content (competence), and encourage group work through discussion and task sharing (connection).

Research Limitations

This study has limitations. First, this study was only conducted in one class in one school with a limited number of students, so the results cannot be generalized to a wider context. Second, the main focus of this study was to increase students' motivation to learn, without measuring the long-term effects of the intervention on students' English language proficiency after the intervention.

Impact on Teachers and Curriculum Developers

The findings of this study have significant implications for teachers and curriculum developers. Teachers are advised to create innovative and fun learning approaches that involve the use of visual media such as educational comics that are relevant to students' daily lives. Collaborative learning models such as Jigsaw have also proven to be effective because they make students more engaged in class. To make English lessons more contextual and interesting, curriculum developers can consider incorporating comic media into their designs.

Impact on psychology and emotions

The results of observations and reflections show that using the Jigsaw strategy with the support of educational comics affects students' academic achievement in addition to their emotional and psychological health. Students who were previously passive began to be more confident when they spoke in group discussions. They felt more valued because they played an important role in the Jigsaw structure, such as being "experts" on a particular topic; this gave them a sense of responsibility and confidence in their abilities.

In addition, cooperation between active and supportive group members made learning fun

and inclusive. One component of 21st century skills is students' ability to communicate with others.

The results of the interview conducted with English subject teachers of class X-B showed that they showed a positive attitude towards the implementation of this learning. During the learning process, according to the teacher, the classroom atmosphere became more lively and lively. The English teacher stated, "*I saw quite a significant change. Students who were usually quiet and passive became more enthusiastic. They even asked each other questions and talked without being asked.*" Teachers also stated that comics provide contextual and easily digestible visualizations of stories, which helps students understand narrative texts better. These results are supported by several direct quotes from students:

"I prefer learning with comics because the stories are similar to everyday events, so I understand better and don't get bored." An additional student stated: "*Group work with Jigsaw is fun because I have my own part, and it makes me excited to learn so I can explain it to my friends,*" he said.

Conclusion

The Classroom Action Research (CAR) conducted in two cycles proved that the implementation of the Jigsaw learning model supported by educational comic media was effective in improving students' motivation to learn English. In the initial stage (Pre-test), most students were in the low-achievement category. However, during the learning process in Cycle 1 and Cycle 2, there was a consistent increase in student engagement, understanding, and learning motivation.

Statistically, the students' average score increased from 69.00 in the Pre-test to 70.71 in Cycle 1, and reached 73.49 in Cycle 2. The paired t-test results showed that the increase from Pre-test to Cycle 1 was not significant ($p = 0.379$), while the increase from Cycle 1 to Cycle 2 was

significant ($p = 0.037$), as was the increase from Pre-test to Cycle 2 ($p = 0.029$). These results indicate that the use of educational comic media was able to produce a meaningful improvement in learning motivation, particularly in Cycle 2.

In addition, the number of students in the D and E grade categories decreased, while the number of students achieving higher categories increased. Therefore, Jigsaw-based learning combined with educational comics not only improved academic achievement but also played an important role in significantly enhancing students' learning motivation.

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In addition, emotional engagement observed during the cycle suggests that motivation is influenced by content and material provision. Educational comics not only convey linguistic material, but also build students' self-confidence and make them feel connected to the material. As a result, the learning process becomes more consistent and meaningful.

This study also confirms that motivation to learn is not only related to academic ability, but also influenced by comfort, relevance of the material, and increased self-confidence during the learning process. Therefore, learning success is not only measured by exam results, but also by changes in students' perspectives, their active participation, and their level of enthusiasm during the learning process. This method makes learning English a fun and rewarding experience

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