

Implementation of Talking Chips Type Cooperative Model to Improve Student Collaboration in Class X History Learning at SMA Negeri 7 Semarang

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Abstract

This study to overcome the lack of collaboration and student interest in learning history in class X SMA Negeri 7 Semarang by applying the Talking Chips cooperative learning model. The research method used is descriptive qualitative approach, this study collected data from grade X students and 1 history subject teacher for three meetings through observation, interview, Focus Group Discussion (FGD), and documentation. The results showed a significant increase in students' active participation (from 65% to 90%), a change in students' positive perception of history, and the development of critical thinking skills. The Talking Chips model contributes by providing empirical evidence regarding the effectiveness of innovative learning models in improving collaboration and creating a more interactive history learning experience that is relevant to 21st century skills.

Keywords: Cooperative Learning Model, History Learning, Student Collaboration, Talking Chips.

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INTRODUCTION

Education is the main foundation in shaping the quality of human resources, and the learning process is a crucial instrument in achieving educational goals. Law No. 20/2003 on the National Education System emphasizes education as a conscious effort to create a safe, comfortable, and student-centered learning atmosphere, in order to develop their potential holistically, including spiritual capacity, social-emotional intelligence, and other abilities essential for the nation and the individual. In line with Ki Hajar Dewantara's Tri Center of Education philosophy, education is based on three main environments: family, schools and community. Among the three, school plays a role as a formally structured learning environment.

Entering the 21st century, advances in information technology have brought significant transformations in various sectors, including education. Therefore, educational institutions, especially schools, are required to equip the younger generation with 21st century skills known as the 4Cs: Creative Thinking, Critical

Thinking and Problem Solving, Communication, and Collaboration (Almarzooq et al., 2020). Collaboration skills, which are defined as a form of cooperation between individuals to support each other in achieving a common goal, are crucial (Pribadi et al., 2022). Teachers do not only act as knowledge deliverers, but also as facilitators who equip students with learning skills (Hasanah et al., 2022). Collaboration allows students to help each other, share knowledge, and strengthen understanding of the material collectively and individually (Uswatun Nisa, 2019). The ability to collaborate also encourages students to balance knowledge and opinions, and actively contribute to discussions (Sunbanu et al., 2019).

The subject of history, which is taught from elementary to high schools, has a fundamental role in shaping students' cultural identity, national values, and critical thinking skills (Rohman et al., 2023). Although historical materials are closely related to social, political, and economic conditions, often the availability of materials such as photos, videos and physical artifacts in schools is limited, even though this is a challenge and increases students' involvement, cooperative learning models become one of the effective methods.

At SMA Negeri 7 Semarang, observations show that history learning is still dominated by conventional teacher-centered methods. This approach tends to make students passive, less motivated to interact and collaborate, resulting in low interest in learning and unsatisfactory learning outcomes. This condition indicates a gap between the demands of 21st century collaboration skills and existing history learning practices.

One innovation that has the potential to overcome these problems is the Talking Chips type cooperative learning model. Kagan in (Muhammad Fathurrohman, 2015) states that the Talking Chips model is a structural method that fosters close relationships between group members by recognizing common needs. In this model, each student is given a number of chips that are used to speak in discussions, ensuring every voice is heard and encouraging the sharing of ideas and opinions. This technique not only enhances learning but also builds students' confidence in expression. The application of Talking Chips in history learning is expected to train students to collaborate, communicate, negotiate, and work in teams, which in turn will increase motivation and a deeper understanding of historical material (Hasanah et al., 2022; Liang et al., 2023). This model is relevant for equipping students with contemporary skills as it encourages cooperation and utilization of various learning resources, including the environment and technology (Hasudungan, 2021).

Based on the above background, this study aims to analyze the application of Talking Chips type cooperative learning model in improving collaboration skills of grade X students in history subject at SMA Negeri 7 Semarang. It is expected that the results of this study will provide empirical evidence of the contribution of learning models that are more innovative and in accordance with the needs of students in the era of the 21st century.

RESEARCH METHOD

This study uses a descriptive qualitative approach to thoroughly understand the phenomenon of the application of Talking Chips type cooperative model in learning history in class X SMA Negeri 7 Semarang. Based on the definition of (John W. Creswell, 2017) and (Lexy J. Moleong, 2017), descriptive research was chosen to deeply describe students' experiences, interactions and group dynamics, as well as teachers' perceptions related to this learning model.

The main objective of the study is to explore students' engagement, group dynamics, and teachers' perspectives on the use of Talking Chips cooperative learning model in learning history in class X of SMA Negeri 7 Semarang. The research will involve history teachers and grade X students at SMA Negeri 7 Semarang who implement the Talking Chips model. The specific criteria for selecting participants will be explained further in the research methodology.

Data collection is conducted through four stages: participatory observation, interviews, Focus Group Discussions (FGDs), and documentation. Data analysis will be conducted using thematic analysis method. Data collected from these four stages will be transcribed, coded, and categorized to identify patterns, themes, and meanings that emerge from students' experiences, group interactions, and teachers' perceptions regarding the implementation of Talking Chips model.

RESULTS AND DISCUSSION

Students' Experience in Learning History with the Talking Chips Model

Based on the results of in-depth interviews and FGDs with students of class X SMA Negeri 7 Semarang, the following experiences were found in participating in learning history with the Talking Chips model:

a. Active Engagement in Learning

The majority of students (85%) stated that the Talking Chips model encouraged them to be more actively involved in learning history. Based on the results of interviews to find out how students' experiences in participating in learning history with the Talking Chips model, the author obtained findings from several student statements that illustrate this:

“Previously, I rarely spoke during group discussions. But with this Talking Chips model, I was forced to speak at least 2-3 times according to the number of buttons I have. Gradually I got used to it and became more confident to speak up for my opinion during group discussions.” (Student A, Class X-7, Interview, April 21, 2025).

“I feel that Talking Chips makes learning history more exciting, it is also more effective in working together with friend, although each of them must prepare good arguments before using the buttons/coins that each person has.” (Student F, Class X-2, FGD Group 1, April 29, 2025).

The results showed a significant increase in students' active participation, from 65% in the first meeting to 90% in the third meeting. This is in line with research (Muhyidin Nurzaelani & Wibowo, 2015) which emphasizes the relationship

between communication skills and student learning outcomes. The Talking Chips model inherently encourages every student to speak up and contribute to the discussion, ensuring equal participation and encouraging a variety of ideas and opinions. This supports the findings of (Hasanah et al., 2022) and (Liang et al., 2023) which show that this model trains students to collaborate, communicate, negotiate and work in teams. An increase in dynamic and constructive group interactions was also observed, in accordance with the interdependence theory (Johnson & Johnson, 2016) which states that cooperative learning generates positive relationships and individual success correlates with group success.

b. Changing Perceptions of History Learning

Most students (70%) claimed to have experienced a change in perception towards learning history after participating in the Talking Chips model. If they previously perceived history as a boring lesson that relies on memorization, they will get better after learning the Talking Chips model, they consider history as an interesting lesson and encourage critical thinking. Based on the results of interviews to find out whether there is a significant change in perception and how students' impressions of history lessons after using the Talking Chips model, the author gets the findings from students' statements, as follows:

“Before the Talking Chips model, I thought history lessons were boring, just memorizing and telling stories about events in the past. But after learning with the Talking Chips model, I discuss more about the meaning of historical events and relate them to life today. So, for me personally, the Talking Chips model make more sense and is not boring.” (Student I, Class X-2, Interview April 22, 2025).

This change is in line with the findings of (Han & Son, 2020) which states that collaborative learning can increase self-esteem and group cohesion. This can overcome the initial conditions at SMA Negeri 7 Semarang where history learning is still dominated by conventional methods that make students passive and motivated.

c. Challenges in Learning

Although most students had positive experiences, some students (30%) admitted to experiencing challenges in participating in learning with the Talking Chips model. These challenges include a) difficulty in expressing opinions briefly and concisely, b) anxiety because they must speak in front of friends, c) limited time to think about the arguments to be conveyed. Based on the results of interviews to find out how students' experiences at the beginning of using the Talking Chips model, whether there were difficulties. The author obtained findings from several student statements, as follows:

“At first I felt pressured because I had to speak in front of my friends. I was afraid that my opinion was wrong or not important.” (Student N, Class X-7, Interview April 21, 2025).

However, most students who experienced these challenges (70%) admitted that over time, they were able to overcome these challenges and felt more comfortable in participating in learning.

“I was nervous at first, but after a few meetings, I became more confident. My teachers and friends always, respect my opinion even though it is not always right.” (Student N, Class X-2, Follow-up interview, April 29, 2025).

d. Development of Critical Thinking Skills

The results of the analysis of student worksheet documents and observations showed that students experienced progress in critical thinking skills during learning with the Talking Chips model. At the initial meeting, most students tended to express opinions that were descriptive and superficial. However, at subsequent meetings, students began to be able to analyze historical events from various perspectives, identify cause-and-effect relationships, and make critical reflections on the material studied. Based on the results of interviews to find out how this Talking Chips model helps students in understanding history, the author obtained the following findings from student statements:

“Now I not only memorize that the Diponegoro War happened in 1825-1830, but I also understand the social, economic, and political context behind it. I can even see the similarities with conflicts that occur today.” (Student S, Class X-7, FGD Group 1, April 28, 2025).

This is supported by research (Syafrial, 2018) which found that cooperative models are effective in improving critical thinking and cognitive skills. This finding is also consistent with Vygotsky’s social constructivism theory, which emphasizes the importance of social interaction in constructing knowledge (Schunk & DiBenedetto, 2020). The improved quality of interaction is in line with research (Widyaningrum & Prihastari, 2018) which shows that the Talking Chips model can improve students’ environmental awareness and critical thinking skills.

Increasing students’ active participation in history learning has important implications for understanding the material. Students’ active involvement in learning can increase knowledge retention up to 90%, much higher than passive learning which only reaches 20% (Mulyasa, 2011). This statement shows that students should actively participate in the teaching process. There are many ways to get involved, such as group discussions, project work, or simulations. With active participation, students will feel more interested and motivated to learn, which can increase students’ understanding and enthusiasm for the material being taught. In the context of history learning, active participation allows students to connect historical knowledge with their own experiences and understanding, thus creating meaningful learning. Active participation also plays a role in developing higher order thinking skills. The ability to analyze, evaluate and create which are important components in history learning. This can be seen from the development of the

quality of students' opinions from merely descriptive to more analytical and evaluative.

Student Interaction and Group Dynamics in Learning with the Talking Chips Model

The Talking Chips model proved effective in creating equal participation and improving the quality of interaction within the group. This result is in line with the theory of interdependence (Johnson & Johnson, 2016), which says that cooperative learning methods can produce a positive relationship where individual success correlates with group success.

Equitable participation in groups is essential in learning history which requires diverse perspectives to understand complex events. According to (Hasan, 2019), a comprehensive understanding of history requires interpretation from multiple viewpoints, which is only possible if all students contribute to the discussion. The Talking Chips model provides a structure that forces each student to contribute their opinions, thus creating a richer and more diverse understanding of history.

Improving the quality of interaction in group also has an impact on the development of students' social skills. The ability to listen actively, respect different opinions, and express opinions assertively are important skills in democratic life. In the context of history learning, these skills are very relevant because one of the objectives of history learning is to encourage students to become part of a democratic and participating nation.

The observation showed that the quality of group interaction improved during the implementation of Talking Chips model. At the initial meeting, the interaction between students was still formal and rigid. However, in subsequent meetings, the interaction became more dynamic and constructive. Based on the results of interviews to find out more about students' experiences in learning history with the Talking Chips model, and how it feels to learn using this model. The author obtained findings from students' statements, as follows:

“I like the Talking Chips model of discussions because we not only talk in turn, but also respond to each other. When my friend expressed an incorrect opinion, I could give corrections in a good way.” (Student F, Interview April 22, 2025).

This improvement in the quality of interaction is in line with research (Widyaningrum & Prihastari, 2018), the Talking Chips learning model can improve students' environment care attitude and their ability to think critically. Therefore, this model can have a positive impact on students' affective during learning. Although Talking Chips chows many benefits, some challenges arise in its implementation. These challenges require appropriate adaptation strategies for this model to be effectively applied in history learning.

Time limitation is a major challenge faced by both students and teachers. The adaptation strategies developed by teachers at SMA Negeri 7 Semarang, such as combining the Talking Chips model with other learning models and using technology, show a pragmatic approach that is in line with optimizing cooperative learning models under time constraints. Another challenge relates to students'

readiness to actively participate in discussions, some students' still experience anxiety and lack of confidence in expressing opinions. This shows the importance of creating a safe and supportive learning environment as emphasized by Dewey in (Richard I. Arends, 2015) that effective learning is only possible in a supportive learning community. The teacher's adaptation strategy in designing structured worksheets and comprehensive assessment rubrics shows a systematic approach in overcoming these challenges.

Teachers' Perception of the Implementation of the Talking Chips Model in History Learning

The change in teacher's role from knowledge delivery to learning facilitator is an important aspect in the implementation of Talking Chips model. This change is in line with the constructivistic learning paradigm that views teachers as facilitators who help students construct their own knowledge.

In the context of history learning, teacher's role as a facilitator allows students to develop a more active and personalized historical understanding. Effective history learning does not simply transfer historical facts, but also helps students to "think like historians", that is, to analyze historical evidence, consider context, and make interpretations (Sam Wineburg, 2015). The teacher's role as a facilitator in the Talking Chips model allows students to develop these historical thinking skills in a more active and independent way.

The implementation of Talking Chips model has changed teachers' perception about their role in history learning. Before implementing this model, teachers tended to position themselves as the main source of information transferring historical knowledge to students. However, after implementing the Talking Chips model, teachers realize their more complex role as facilitators, monitors and guides of the learning process. Based on the results of the interview to find out how Mr. Rifa Irwan Sani, S.Pd. as a history subject teacher, stating that:

"Yes. I think the use of this method can be a variant in history learning activities. Because what, huh? Actually, if we talk about history learning, it's fun too. Not just the lecture, but there are certain activities. Yes. If we only use, what? Just telling stories, then using PowerPoint, I don't think I'm very interested, but with the Talking Chips, it makes us more varied in learning."

He added:

"Yes, because it was a chat, yes. So, it is actually to prioritize how the criteria of the students to be able to talk about this material. I think this makes students also think and look for more information, and later they can share it with their friends too. So, we can say that the future is good."

Based on the information data above reflects of the observations that have been made, from this it can be concluded that teachers have a positive perception of the effectiveness of Taking Chips model in learning history. It is important to increase student participation, enhancing critical thinking skills and creating more engaging learning environments. The result is in line with research findings (Firmansyah, 2024) which shows that history teachers have a positive perception of cooperative learning models because it can improve students' understanding and analytical

skills. Despite having positive perceptions, teachers also recognized some challenges in implementing the Talking Chips model. Based on the results of interviews to find out what challenges or obstacles faced in applying the Talking Chips model in learning history, the author gets the findings from Mr. Rifa Irwan Sani, S.Pd. explaining the challenges:

“Well, they are used to listening. Now we prepare ourselves to position them to master the material first. How do they want to read the book, after reading the book, how do they want to share it with their friends? Yes, the language is, how can you tell stories or gossip, but this gossip is gossip about learning materials. If you gossip, it’s fun. But now the well, that’s what makes us exciting, yes like that.”

The interview data above has challenge in implementing the Talking Chips model, including: 1) limited learning time, 2) difficulty in monitoring all groups simultaneously, 3) the need to prepare complex and interesting discussion materials, 4) adaptation to assessments that focuses more on process than outcome. To overcome the challenges by implementing the Talking Chips cooperative learning model has been proposed as an effective strategy for students’ critical thinking during history instruction. The approach involves working together in small groups, so that students can interact and discuss with each other usually between 2 to 4 students. In research (Firmansyah, 2024) in its application, each group member needs to work together to achieve the learning objectives together. Cooperative learning can be applied at various levels of education because of its dynamic and flexible nature, and is not tied to one particular direction. In this context, the teacher functions as a facilitator who guides the teaching and learning process, so that students are more asked to be active and participate during learning (Munawir et al., 2023). Based on the results of interviews to find out how solutions can be applied to overcome these challenges, the author get the findings from Mr. Rifa Irwan Sani, S.Pd. also conveyed his strategy:

“Yes, we first, yes, keep lecturing first, yes. First lecture first, the approach after that we open book. Heem. They are asked to read first, read, master. We know that literacy in children nowadays is not, we can’t read so much right away. We might start three to four paragraphs first. So, from there we ask them to, “Let’s tell a story.” To his friends how. In terms of, because if you’re asked to read three pages, and then asked later, you can’t, because what is the character now, huh? They prefer short things, like reading captions, and not long things.”

The interview data presented above is also based on observations made during the history learning process. From these observations, it is known that to overcome these challenges, the Talking Chips models can be combined with other learning models, such as using conventional models that still rely on traditional learning methods, such as lectures first to optimize time in reading and mastering the material being taught. Then, using the development of learning media technology to monitor group activities (such a Web school teaching materials for further discussion), designing structured worksheets to guide the discussion, then

developing a comprehensive assessment rubric to assess students' participation and quality of contribution.

The changing role of teachers also has implications for teacher professional development. Meanwhile (Hammond et al., 2017) identified several key elements of an effective professional development model. These collaboration, providing professional direction, and the possibility of retention and thinking. In addition, the duration of the development program should be continuous. It is content-focused that professional development needs to be geared towards teaching strategies related to curriculum materials to support teachers' learning capabilities. Learning that actively engages teachers provides opportunities for them to design and test teaching strategies. In addition, this approach also allows teachers to be directly involved in implementing the plans that have been made (Kasmawati, 2020).

For professional development to work well, collaborative support is essential, allowing teachers to exchange ideas and work together with learning. In addition to supporting collaboration, the use of effective practice models is also necessary. This means that teachers can convey a clear picture of best educational practices. Professional development requires expert guidance and support of expert knowledge exchange systems, through evidence-based content and practice focused on teachers' needs. Ultimately, professional development will succeed over a sustained period, giving teachers plenty of time to learn, apply and implement new strategies, supporting teacher change in their practice.

The Talking Chips model significantly increased students' active participation from (65% to 90% in the third meeting), changed students' positive perception of history (from boring to interesting and encouraging critical thinking), and developed critical thinking skills (from descriptive to analytical). The improvement is in line with previous research that shows a correlation between communication and learning outcomes (Muhyidin Nurzaelani & Wibowo, 2015), increased motivation from cooperative learning (Han & Son, 2020), as well as the effectiveness of cooperative models in improving critical thinking (Syafrial, 2018). This study specifically confirmed the effectiveness of Talking Chips in the context of history learning at SMA Negeri 7 Semarang, addressing the previous issues of low student collaboration and interest. Although the research was qualitative in nature and focused on the specific context of SMA Negeri 7 Semarang, the findings regarding the effectiveness of the Talking Chips model in increasing participation, collaboration, and critical thinking have the potential to be generalized at the principle level. That is, the basic mechanics of the model (e.g., equal distribution of speaking opportunities through buttons/chips) may lead to similar results in other cooperative learning environments. However, direct generalization of specific results (e.g., increased participation rates) to other schools or regions should be done with caution. Successful implementation of this model elsewhere will depend largely on adaptation to the local context, student characteristic and teacher commitment.

CONCLUSION

Based on this research, it can be concluded that the application of Talking Chips Cooperative Model in learning history in class X SMA Negeri 7 Semarang showed very positive results, effectively increasing students' active participation, equal

distribution of group interaction, and quality of discussion. This model also succeeded in changing students' perception of history to be more interesting and encouraged the development of their critical thinking and social skills. In addition, the teacher's role shifts to a facilitator, supporting more active and independent learning. Nonetheless, challenges such as time constraints and student's readiness were successfully overcome by teachers through the adaptation of learning strategies, including the combination of models, the utilization of technology, and the design of structured materials. Therefore, the Talking Chips Model is highly recommended to improve the standard of history education in high school, as it is able to change students' perceptions, develop important skills, and create a more interactive and meaningful learning process.

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