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Development Of A Mission-X Game-Oriented Number Head Together Learning Type To Improve Students' Social Skills In Elementary School

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Abstract

Social skills are an important part of learners' lives in order to interact with their environment. so this needs to be taught and trained to children from an early age. The social skills of students today are felt by educators to be weak, which causes them to have difficulty in interacting with their surroundings, so that students become inferior. Less interesting and rigid learning in the classroom makes learning social skills very difficult to implement, resulting in low social skills of students.

This development research aims to describe the needs analysis of developing the NHT-MX learning type to improve students' social skills in elementary schools; (ii) Know the description of the NHT-MX learning type for students in elementary schools; (iii) Know the level of validity and practicality of the NHT-MX learning type for students in elementary schools; (iv) Know the level of practicality of the NHT-MX learning type for students in elementary schools; (v) Know the effectiveness of the NHT-MX learning type to improve students' social skills in elementary schools. This research is a development research with validation, observation, and questionnaire data collection techniques.

The results showed that (i) The Number Head Together learning type model oriented to the Mission-X game (NHT-MX) was declared "valid" based on the results of the expert team's validation of the model both from the supporting theoretical basis, the components of the learning model, and the learning device; (ii) The Number Head Together learning type learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills is declared "practical" based on the results of observations of the implementation of the model, learning management,

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and improving social skills, all of which are well implemented, easy and fun to use; (iii) The Number Head Together learning type learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills is declared effective based on the results of testing students' social skills, and responded positively by students and teachers.

Keywords: Number head together, skills

INTRODUCTION

Humans are social creatures who interact with each other to fulfill their needs and live comfortably. Good interaction requires social skills. According to Sjamsuddin and Maryani (2008), social skills include the ability to communicate, manage information, and adapt in society. Social skills contain aspects of life skills, namely interaction skills in a social environment, verbal and non-verbal communication skills, cooperation skills to control themselves and others, and skills to exchange ideas and experiences so as to create a pleasant atmosphere in a social environment.

Social skills are essential for learners to interact well in society. Most educators today observe that learners' social skills are weakening. This leads to difficulties in interacting, which can make them feel inferior and alienated, even leading to deviant behaviors such as juvenile delinquency. A clear example is bullying behavior in schools, such as what happened in Tuban junior high school and Pasuruan senior high school. Lack of communication skills makes it difficult for children to vent their emotions violently, resolve conflicts, and worsen relationships with others.

Deviant behavior can arise because children cannot interact well and find it difficult to understand the feelings of others. Robert K. Merton's Social Stress Theory states that a lack of social skills such as interacting with friends and participating in social activities can cause stress. This pressure can lead to deviant behavior, such as aggression or isolation. In addition, Albert Bandura's social learning theory explains that behavior is learned from observation. If children are not taught how to interact well, they may develop deviant behaviors. Therefore, it is important to teach social skills early on.

This is in line with Law No. 20 of 2003 concerning the National Education System, which states that the purpose of national education is to develop the potential of students to become human beings who are faithful and devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

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This shows that the purpose of education is not only directed at improving children's cognitive skills but also at improving children's social and spiritual skills.

Likewise, several elementary schools in Makassar city with all the advantages they have, have now implemented character education and the implementation of the 2013 curriculum as a whole. However, the social skills of students in some schools are still not encouraging, especially in thematic learning which requires students to discuss, work in groups, and present. The results of observations and interviews of researchers in class IVb UPT SPF SD Inpres Panaikang 11 showed that out of 12 students, only 2 people (16.67%) were actively involved in small group discussions. In addition, 3 people (25%) solve problems, 1 person (8.3%) asks questions, and 1 person (8.3%) dares to present.

This is caused by several factors, including: a classroom environment that does not support learners in developing their potential due to a lack of harmonious relationships with their friends; learners' emotional disturbances where mood has an important role for concentration and motivation of learners. Learning models that are considered inappropriate for the development of elementary school-age children, especially grade IV, who are still very happy to play. The conditions described above have implications for the social skills of students who also experience problems, especially the skills of interaction, communication, group work, responsibility, empathy and self-control. This is evidenced by the grade IV daily test scores in the first semester of several schools which are still very low in the 2020/2021 school year.

Various efforts have been made to overcome the problems faced by students, especially social skills and learning outcomes, so it is felt that there is a need for learning and development with a paradigm that emphasizes students as humans who have the potential to learn and work. One of the learning models that is appropriate and supports the development of students' social skills is the Number Head Together type cooperative learning model.

The NHT learning model has limitations, especially when the number of learners in a group is large, so the time required becomes long and not all members can report the results of the discussion. However, this model also has the advantage of increasing learners' involvement in learning. NHT emphasizes the activity of finding and sharing ideas and reporting information. To overcome this limitation, a modification was made with the Mission X Game technique, which involves two teams completing challenges in a specific mission with rewards and punishments.

Based on the results of interviews with teachers and students, the Number Head Together (NHT) learning model can improve social skills, although there are still students who like to play or disturb during learning. According to some teachers, this often happens because elementary

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school children, especially grade IV, still like to play. This condition can affect the concentration of other students in learning.

Based on the problem of not maximizing the development of social skills in elementary school students and not maximizing the Number Head Together (NHT) learning model in facilitating the development of students' social skills, it is important to conduct a study that focuses on developing a learning type Number Head Together oriented Mission-X game (NHT-MX) to improve students' social skills in elementary schools.

METHOD

This research is a Research and Development (R & D) study that has specific characteristics and objectives. Gay (1991) Development Research is an attempt to develop an effective product for school use, not to test a theory. This research is intended to develop a Number Head Together Oriented Mission-X Game (NHT-MX) type learning model intended to improve the social skills of elementary school students

The model used in the development of learning model Number Head Together. Oriented Mission-X Game (NHT-MX) to improve students' social skills in elementary school is 4-D (Four-D). (Trianto, 2014) This 4-D development model is a learning development model developed by Thiagarajan and Semmel, consisting of 4 stages of development, namely defining, designing, developing, and disseminating. The implementation of research on the development of the NHT-MX type learning model on students' social skills in elementary schools was carried out at UPT SPF SD Inpres Panaikang 11 in the 2022/2023 academic year.

The target of the development of the NHT-MX type learning model on social skills which became the subject of research was grade IV elementary school students in Makassar City which was determined by purposive sampling of 61 students divided into three classes, namely class 4A as many as 21 students, class 4B as many as 20 students, and class 4C as many as 20 students. Data collection techniques used in the implementation of this study consisted of observation techniques, and questionnaire techniques. This study uses qualitative descriptive data analysis techniques and quantitative analysis.

RESULT AND DISCUSSION

1. Goal attainment; Needs Analysis of *Number Head Together* Learning Type Oriented Mission-X Game (NHT-MX) Model Development

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The purpose of needs analysis is to set the boundaries in the development of learning models. In the early stages of the research, an analysis was conducted of the needs in the learning process as well as the collection of information related to the product to be developed. The needs analysis of the learning model is carried out by looking at several learning objectives through theoretical, empirical, and needs analysis studies

The analysis of lesson plans shows that teachers generally apply cooperative learning models. Interviews with several teachers revealed several findings. First, teachers have implemented learning with models that can activate learners, but preparation for social skills is still lacking. Second, teachers have used the Number Head Together (NHT) model which can train social skills, but many learners are still passive because they feel bored if the learning is too traditional. Third, some teachers think social skills can develop naturally without direct teaching, although the environment also influences. Fourth, teachers are interested in innovations to improve learners' social skills, such as communication and interaction, which are important for creating a harmonious classroom. Fifth, teachers are very interested in the Mission-X game-oriented NHT learning model (NHT-MX) to improve learners' social skills.

The results of observations and interviews with teachers show that learning at UPT SPF SD Inpres Panaikang 11, especially in class IV, has implemented the Number Head Together (NHT) model. However, this learning has not made all learners active, only the smart ones are seen participating. Many learners are less active in discussions, especially those who are shy, and not all understand the concepts taught. Johnson & Johnson stated that the NHT model can make learners dependent on more active members, thus reducing the opportunity to think independently.

The formulation of learning concepts by identifying indicators and objectives refers to the syllabus of UPT SPF SD Inpres Panaikang 11. Learning semester 1, theme 3, sub-theme 1, is carried out in five meetings. Task formulation is carried out by mapping the material based on concept analysis which is divided into several subject matters. Each material is given several tasks so that students can master learning in depth. The tasks given are in the form of discussion and completion in groups. The formulation of learning objectives is based on the basic competencies listed in the syllabus used by teachers at UPT SPF SD Inpres Panaikang 11. Discussion of problem solving, learners are able to identify environmental balance problems correctly, explain the technique of making collages correctly, observe pictures and learning videos. Learners identify the parts of plants and their functions correctly, can make a plan to carry out obligations to plants that are maintained in detail, can identify the characteristics of good questions for interviews correctly.

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2. Design of *Number Head Together* Learning Type Model Oriented with Mission-X Game (NHT-MX) to improve students' social skills

Learning models are essential to achieving learning objectives. This presents a challenge to learners, who must be prepared for it. Learners need to have cognitive abilities, social skills, attitudes, and mastery of learning. All this can be achieved through development in learning with various innovative models and methods, including the NHT-MX model that combines Number Head Together and the Mission-X game. The way the NHT-MX model is presented is developed based on the learning objectives to be actualized. The application of the Number Head Together model based on the Mission-X game (NHT-MX) can arouse students' spirit of competition, encourage active participation, and help them solve problems both individually and in groups. This model also creates a fun learning environment to develop social skills. According to Fajriyah (2014), NHT is effective in helping learners master the material. Hasmyati (Wati, 2020) added that NHT encourages cooperation. Mesch (Jagust, et. al. 2018) and Zeng et. al (Lopez-Faican & Jaen, 2020) emphasize the benefits of games in increasing learner motivation and engagement. Gracia et. al (Lopez-Faican & Jaen, 2020) state games create a fun learning environment and improve learner performance.

Mission-X game-oriented Number Head Together learning model (NHT-MX) is a combination of NHT cooperative learning and Mission-X game. This model aims to involve all learners, make them happy during learning, reduce boredom, and increase interaction and communication between learners. It also helps them exchange ideas and respect others' opinions well. The design of this model combines the 4 phases of NHT with the 5 steps of Mission-X game to improve social skills.

There are several things that characterize this learning, namely the ability of students to be active in learning, build teams, communicate, interact with other students, and solve problems during learning. Through the Mission X game, students are expected to be more active, creative, happy, and excited in learning because learning is done while playing. The NHT MX learning model is a combination of the NHT model and the Mission X game. The characteristics of NHT-MX are a fun learning atmosphere, giving freedom to interact, and improving students' social skills.

The main difference between the Number Head Together (NHT) learning model and the Number Head Together Oriented Mission-X game (NHT-MX) is the Reinforcement phase in NHT-MX. This phase involves rewards and punishments which are important for motivating learners. According to B. F. Skinner, rewards reinforce positive behaviors such as cooperation, while punishments aim to reduce negative behaviors. Cognitive theory also supports the idea that

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rewards can reinforce learners' understanding. Punishment is used for reflection and error correction. The implementation of gemification with scores and rewards, can encourage learner engagement. Overall, learners' social skills at UPT SPF SD Inpres Panaikang 11 improved through NHT-MX.

3. Validity of Number Head Together Learning Model Oriented with Mission-X Game (NHT-MX)

The average result of the validity value of the Number Head Together type learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills is 3.65, which indicates that this model is valid. All components of the model were declared "highly valid" by the validator team. There are five important components in this model: (1) syntax, (2) social system, (3) reaction principle, (4) support system, and (5) instructional and accompanying impacts. The model aims to improve learners' social skills with a focus on learning activities. The determination of the model components is based on Constructivism theory and Piaget's learning theory, which emphasizes the formation of knowledge through experience and the integration of new information into existing schemes.

4. The practicality of the Number Head Together Learning Type Learning Model Oriented with Mission-X Games (NHT-MX) to improve students' social skills can be seen through the implementation of the model in learning.

The level of practicality of the Number Head Together learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills is seen in its implementation. This model is well implemented based on teacher and learner responses. Teaching activities using the NHT-MX model were declared "very good" and "practical" after several revisions were made. From the first trial, there are some improvements that need to be made, including: (1) teachers need to pay attention to each stage of learning, (2) optimize material content, (3) improve social skills at each stage, (4) provide the right stimulus during knowledge reconstruction, and (5) make good use of model books and guidebooks before the meeting. The teacher's response to the NHT-MX model showed an average value of 92.50% with the Practical category. While the response of students is worth an average of 92.00%, also with the Practical category. The NHT-MX model as a whole is well implemented from various aspects such as syntax, social systems, reaction principles, and support systems.

5. Effectiveness of *Number Head Together* Learning Type Oriented Mission-X Game (NHT-MX) to improve students' social skills

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The effectiveness of the Mission-X game-oriented Number Head Together (NHT-MX) learning model can be seen from its positive impact on students' social skills and learning outcomes. Data analysis showed an increase in social skills and learning outcomes after the application of this model. The improvement can be seen from the normalized gain analysis which shows an average gain index of 0.72, included in the "medium" category. Learners are considered successful if they get a minimum score of 75 and learning is considered classically successful if 80% of learners reach that score. The NHT-MX model has been proven effective in improving learners' social skills and learning outcomes as well as attracting their interest in the material being taught.

CONCLUSION

Based on the analysis and description of needs, through the results of interviews and observations, the Number Head Together learning model oriented to the Mission-X game (NHT-MX) to improve social skills is needed to develop a Number Head Together learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills. The design of the Number Head Together learning model oriented to the Mission-X game (NHT-MX) is designed with the stages of numbering, assignment, think together (thinking together to solve problems), task reporting and reinforcement. The Number Head Together learning model oriented to the Mission-X game (NHT-MX) was declared "valid" based on the results of the expert team validation of the supporting theoretical basis, the components of the learning model, and the learning device were declared valid. The Number Head Together learning model oriented to the Mission-X (NHT-MX) game to improve students' social skills is declared "practical" because the Number Head Together learning type learning model oriented to the Mission-X (NHT-MX) game is easy and fun to use. The Number Head Together learning model oriented to the Mission-X game (NHT-MX) to improve students' social skills is declared effective based on the results of testing students' social skills, and responded positively by students and teachers.

REFERENCES

Bern and Ericson. 2001. Cooperative Learning Methods in Crowded Classrooms. Educational: Preparing Students for the New Economy. The Higlight Zone

Gay, L.R. 1991. Educational Evaluation and Measurement: Competencies for Analysis and Application. Second edition. New York: Macmillan Publishing Compan.

Joyce, B. and Marsha Well. 2000. *Models of Teaching*. London: Allyn & Bacon.

Haydon, T. Maheady, L. & Hunter, W. 2010. Effects of Numbered Heads Together on the Daily Quiz

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Scores and On-Task Behavior of Students with Disabilities. *Journal Behavior Education*. Vol 19: 222-238.

Jagušt, T., Botički, I., & So, H.-J. 2018. Examining competitive, collaborative and adaptive gamification in young learners' math learning. *Computers & Education*, *125*, 444-457. https://doi.org/10.1016/j.compedu.2018.06.022

López-Faican, L., & Jaen, J. 2020. EmoFindAR: Evaluation of a mobile multiplayer augmented reality game for primary school children. *Computers & Education*, *149*, 103814. https://doi.org/10.1016/j.compedu.2020.103814

Marasiwi, M. 2017. Application of Cooperative Learning Model Type Numbered Heads Together (NHT) to Improve Students' Mathematics Learning Achievement. *Premiere Educandum: Journal of Basic Education and Learning*, *7*(01), 19-27. https://doi.org/10.25273/pe.v7i01.1140

Maryani, Enok, 2011. *Social Studies Learning Program Development for Social Skills Improvement*. Alfabeta. Bandung.

Setiani, Tita. 2014. Social Skills of Learners in Social Studies Learning. Jakarta: State University of Yogyakarta, Volume 4/June 2014, p.18.

Shoimin, Aris. 2014. 68 Innovative Learning Models in the 2013 Curriculum. Yogjakarta: ArRuzz Media

Solikhin, F., Sari, W. I., & Dewi, K. (2021). The Application of Numbered Heads Together (NHT) in Online Learning. *IJCER (International Journal of Chemistry Education Research)*, *5*(2), 84-90. https://doi.org/10.20885/ijcer.vol5.iss2.art6

Trianto. 2012. *Designing Innovative-Progressive Learning Models*. Jakarta: *Kencana Prenada Media Group*.

Sjamsuddin and Maryani E. 2008. "*Development of Social Studies Learning Program to Improve Social Skills Competency.*" Makasar: Paper at the National Seminar.

Wati, N. K. S., & Suarni, N. K. (2020). Social Studies Learning with Numbered Head Together Model Improves Learning Outcomes Viewed from Student Learning Motivation. *International Journal of Elementary Education*, *4*(2), 244-254. https://doi.org/10.23887/ijee.v4i2.25250

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