Interactive video media and podcast model to improve motivation and critical thinking class IX students SMPN 1 Purwanegara

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Abstract. *In addition to having teaching skills in delivering learning content, teachers must also have knowledge and skills in developing technology-based learning resources for learner-centered learning. The utilization of information and communication technology that contributes to preparing 21st century learning is video-based learning media. Many research results state that the use of video media and podcast models can increase learning motivation and critical thinking of students. Critical thinking skills need to be possessed by students to equip them to live in the 21st century. Initial observation data, students who have high and very high learning motivation are only 26.09% and their critical thinking skills are only 56.32% of students with high and very high categories. The purpose of this study is to describe the results of learning innovation research in the form of using interactive video media and podcast models to increase learning motivation and critical thinking of class IX students of SMPN 1 Purwanegara. The method used was Classroom Action Research (PTK) which was conducted at SMP Negeri 1 Purwanegara. The population was all ninth grade students of SMP Negeri 1 Purwanegara which amounted to 272 students. The sample in this study were students of class IX F. Learning media in the form of interactive videos and podcast models used in this learning research were made to familiarize and train students to think critically and have high learning motivation. The results of research activities are that students experience an increase in their learning motivation of 91.31% in the high and very high categories. Students have been able to follow the learning process by using interactive video media and podcast models very well. Based on the results of the research conducted, it can be concluded that the learning process using interactive learning videos and podcast models can increase students' learning motivation. Interactive video media and podcast models can be an alternative learning innovation that makes students more actively involved in learning activities and increases students' learning motivation.*

Keywords: *Interactive video media, Podcast models, Learning motivation, Critical thinking*

INTRODUCTION

Technology can never replace the role of a teacher, but teachers who do not utilise technology will soon be replaced. The wise sentence that is now being discussed among teachers must be addressed positively and wisely. One of the positive attitudes that can be done by teachers or lecturers is by always being updated on various technological developments. In addition to having teaching skills in delivering learning content, teachers must also have knowledge and skills in developing technology-based learning resources for learner-centred learning.

This is in line with the opinion of Soleh (2015) which states that at the classroom and learning level teachers are required to be literate to technological developments and enrich learning methods so that social studies learning materials are richer. Dwiyogo (2016) also provides an explanation, teachers in this day and age should also be able to utilise a variety of technological products that exist in the school environment to be used as a learning resource and learning media for students.

Furthermore Dwiyogo (2016) states the form of learning today and the future one of them is learning that uses learning media and learning resources innovation of the development of information technology and communication. Visionary learning in the 21st century and the century of information technology, teachers must be able to utilise technological products such as computers, mobile phones, and social media and the products they produce as learning resources for students.

Daryanto (2017) states that the appropriate use of information technology not only spurs motivation, creativity, expands freedom, and allows flexibility for teachers and learners, but more importantly changes several dimensions of the teaching and learning process. Furthermore, it is explained that the form of information and communication technology utilisation that contributes to preparing 21st century learning is video-based learning media.

Syaparuddin (2020) stated in his research that learning by using videos as learning media can increase students' learning motivation and learning outcomes. In his research, the results of using video as a learning media can increase motivation and learning outcomes by 73.75%. Malvigie (2023) in a study conducted on students of SMP N 1 Mlati obtained the results that the use of audio-visual media can increase student learning motivation by 100%. Meanwhile, Fajriyatun (2018) in the research conducted obtained the results that the use of learning media can improve student learning outcomes by 93%.

Syarifah (2017) in the learning innovation carried out at SMP N 8 Salatiga uses a learning media innovation for certain purposes. The learning media used can increase students' learning motivation by 35% and increase their learning outcomes by 91%. Another relevant innovation is Sulistyowati (2016). The innovation of the learning model applied can increase the ability to think at a higher level by 8% and can improve student learning outcomes by 72%.

Critical thinking skills can be trained and familiarised by teachers in the learning process in the classroom. Schools or classes are required to be able to equip students to master these skills. Activities that can be carried out by teachers in training students to always think critically, creatively, have the knowledge and skills is to train high-level thinking skills through a rich and meaningful learning process.

Training and familiarising learners to use higher-order thinking skills in the learning process is a strategic choice or the right approach. The strategy of developing learning by using higher-order thinking skills is in accordance with the Ministry of Education and Culture's policy (2018) which states that argumentation regarding the use of higher-order thinking skills and the externalisation of cognitive processes in students is a basic character that must be actively learned. Such habituation can be through rich and meaningful learning.

According to Abidin (2015), learning by using learning media that is conventional, digital or innovative creativity is one way that teachers can develop rich and meaningful learning. This not only makes the learning process fun, but at the same time the learning media used can realise the indicators and values desired in the learning objectives.

In principle, the learning process using media will make the learning experience of students more important than just memorising subject matter (Ashar, 2016). If you see this opinion, it means that as a social studies teacher, you must realise that learning that utilises learning media will be more effective. Another benefit of using learning media according to Daryanto (2016) is to make it easier for students to construct more meaningful knowledge so that the competencies possessed by students will be explored optimally.

SMP Negeri 1 Purwanegara is one of the schools that in the 2022/2023 academic year implemented the Merdeka Curriculum. Based on observations made, as a school that has implemented the Merdeka Curriculum, the learning process that takes place is generally varied. Subject teachers have begun to use learning strategies, methods and media. This can be seen in the Learning Implementation Plan (RPP) and also in the teaching modules used by teachers in teaching.

However, the use of strategies, methods, models and media used by teachers in the learning process is only the usual discussion and presentation methods and seems still teacher-dominated, not yet seen lesson plans and teaching modules that use strategies, methods or use of media that make students' learning motivation better. The media and methods used also do not invite or accustom students to practice using higher-level thinking skills. These conditions cause mastery of each scope of material is not optimal, student

motivation is still low and has not trained students' critical thinking. Data on initial observations, students who have high and very high learning motivation categories are only 26.09% and their critical thinking skills are only 56.32% of students with high and very high categories.

The use of methods that are still dominated by teachers can be seen in the results of the 2023 education report card, where the results state that in the learning process the teacher has not used varied models. The use of simple learning media has also not been able to solve problems that require higher-level thinking skills. Learning videos have not been widely used in the social studies learning process. Social studies teachers have not innovated to make learning videos independently and have not used a varied learning model.

The various problems found in SMP Negeri 1 Purwanegara motivate the author to improve and create a rich and meaningful learning process. This is done to increase learning motivation and bring out the competencies of students needed in the 21st century, namely critical thinking. The author makes learning innovations by making two interactive learning videos on the material of the Australian continent and seasons in Europe uploaded on the author's youtube channel. The author also uses a podcast model used in social studies learning.

These learning media and models are media and models that can be used to increase learning motivation to get students to practice critical thinking skills. By using innovative learning media and models made by the author is expected to increase the motivation of students and train students' critical thinking skills.

The use of learning media innovations made by the author is also in accordance with one of the principles of the development and implementation of strengthening character education in the concept and guidelines for strengthening classroom-based character education according to the Ministry of Education and Culture (2016: 11), namely the facilities or media used should develop the skills needed by students to live in the 21st century.

Rich and meaningful learning using innovative media and learning models carried out by the author is visionary learning developed by the author as a teacher. This learning is in accordance with the opinion of Dwiyogo (2016:14), which states that learning by using various source channels, one of which is the latest and innovative media, is visionary learning. Such learning can be used in the future and is one of the ways that can be used in 21st century learning and has the potential to increase student motivation.

Habituation in practicing using critical thinking skills carried out by the author also agrees with Nugroho (2018: 14) who states that mastering high-level thinking skills or critical thinking is not as easy as memorising subject matter. These skills are obtained through habituation. By getting used to practising using high-level thinking skills through the use of media innovations and learning models made by teachers.

Learners will be involved in happy learning activities while optimising competence, knowledge, always thinking critically and creatively because they are used to practicing using higher-order thinking skills, communicating and collaborating well, good learning motivation, good learning outcomes, as well as having a strong character.

According to Nugroho (2018) critical thinking or HOTS has a distinctive characteristic, namely level. This level of ability includes students' abilities or skills in analysing (analyse), evaluating (evaluate), and creating (create). Indicators of analysing, evaluating and creating skills are based on the theory presented in the revised Bloom's Taxonomy. If synergised with Bloom's taxonomy, the HOTS indicators that can be used are:

1) Level of analysis, which is breaking down material into its constituent parts and determining their relationship, both between parts and as a whole. This level consists of the ability or skill to distinguish, organise and connect.
2) Evaluation level, in principle this level is the ability to make decisions based on criteria. This level consists of checking and criticising skills.
3) Creating level, this level is the highest level. Learners are trained to form something new, coherent, and original. Creative or innovative thinking skills are increasingly tested at this level. This level of creating consists of formulating (generating), planning (planning), and producing (producing).

Seeing the background that high-level or critical thinking skills and also learning motivation are needed in 21st century learning as well as the condition of the problems found at SMP Negeri 1 Purwanegara, the author makes appropriate and learner-centred learning innovations. Furthermore, writing an article entitled "Interactive Video Media and Podcast Model to Increase Learning Motivation and Critical Thinking Skills of Class IX Students of SMP N 1 Purwanegara in 2023".

METHOD

The method used in this research is Classroom Action Research (PTK) which was conducted at SMP Negeri 1 Purwanegara. The population was all students of class IX SMP Negeri 1 Purwanegara which amounted to 272 students. The sample in this study was students of class IX F. The research sample was carried out using random sampling which was carried out randomly. All classes IX in SMP N1 Purwanegara have the same ability and there is no superior class.

The instruments in this study were a motivation questionnaire and a critical thinking skills essay test. This questionnaire was given to students whose classes were selected as research classes. This questionnaire uses a Likert scale type and is in the form of a checklist which has a positive scale and a negative scale. Data collection techniques using tests and questionnaires. Test is a technique used for data collection where its use is done by giving a set of questions in writing in the form of essay questions to respondents who will do it. However, in this study, researchers will provide questions in the form of description questions that can see how well students understand the material as a question (pretest) and description questions that will be given after the action (posttest). Another instrument, namely documentation, is a research instrument that uses media in the form of goods or images as a source of research data. The data analysis technique is descriptive quantitative from the results of questionnaires, observations and student scores. The indicator of the success of this study if students have >80% motivation and have critical thinking skills >80%.

RESULTS AND DISCUSSION
Result

From the research that has been carried out starting from pre-cycle to cycle II, the results of the percentage of motivation and critical thinking skills of students are obtained. The use of interactive videos and podcast models in class IX students of SMP N 1 Purwanegara proved effective in increasing motivation and critical thinking. The results of this increase contribute to the improvement of the social studies learning process.
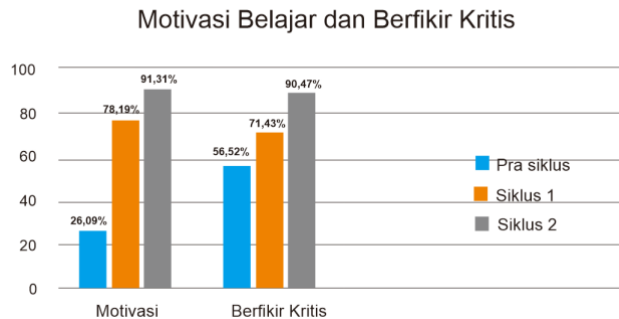
The increase in the percentage of motivation and critical thinking skills at the pre-cycle, cycle 1 and cycle 2 stages.

Learners who have a high level of learning motivation can be seen in their learning activities. They make an extra effort to understand the material by being serious in viewing the learning video. The seriousness of learners can also be seen from the number of times they see the video. Most learners watch the video over and over again until the learners understand the material.

Learners who have high learning motivation can also be seen from their interaction with the worksheets that accompany the learning videos. All instructions contained in the learning video worksheets can be completed well. High learning motivation tends to create a more productive environment and has a good impact on critical thinking skills.

Good critical thinking skills of the learners can be seen when they make presentations and solve problems contained in worksheets and questionnaires. The podcast model used in the learning process provides its own challenges for students. Various critical questions, critical answers, reasoning, assessing, criticising, analysing, evaluating, and creating emerged from students, both when learning using interactive videos and podcast models.

The interactive video and podcast model not only helped learners understand the material better, but also developed critical thinking skills, problem solving and helped increase learners' confidence. All of these contribute to a better learner-centred learning process.

The results of the learning motivation questionnaire at the pre-cycle stage showed that only 26.09% of learners were categorised as high and very high motivation. The learning that took place at the pre-cycle stage did not seem to be able to arouse students' motivation to learn better and more enthusiastically. Learners still look bored and less enthusiastic in participating in learning. In fact, they tend to be very passive and do more activities on their own. When learners are asked to discuss and present they are more reluctant to do and more silent.

In cycle 1 there began to be a significant increase. The increase in learner motivation reached 78.19% in the high and very high categories. In the learning process, students have begun to look active, enthusiastic and challenged, especially when they complete interactive video worksheets. Presentations made using the podcast model have begun to look smooth. Learners' confidence has started to build. Although students' learning motivation had increased, it had not yet reached 80%, and the research continued in cycle 2. In cycle 2, very positive data were obtained, namely students experienced an increase in their learning motivation of 91.31% in the high and very high categories. Learners have been able to follow the learning process by using interactive video media and podcast models very well.

Discussion

The significant increase in students' learning motivation from the pre-cycle stage to cycle 1 and to cycle 2 occurred because there were causes. One of the factors causing the increase is the good role of the teacher. Teachers always provide motivation, direction, and good assistance to students. Teachers provide more intervention for students who need material explanation so that students can more easily understand the material better. In addition, video media and podcast models make students more challenged in their learning. This is in accordance with the opinion of Muratin (2011) that the use of interesting media and models in learning makes students more interested and easy to understand the concepts being studied, so that it will encourage students' learning activeness and motivation in the learning process in class.

In addition, the video media and podcast model make the learning experience of students in the learning process more meaningful. In this case, students' learning activities are not just memorising but students creatively construct their knowledge related to the concepts found when they watch videos and do podcasts. Learning methods are also one of the external factors that influence students' learning motivation in social studies subjects (Marjito & Nurhalipah, 2018).

Based on the results of the research conducted, it can be concluded that the learning process using interactive learning videos and podcast models can increase students' learning motivation. Interactive video media and podcast models can be an alternative learning innovation that makes students more actively involved in learning activities and increases students' learning motivation. The results of this study are in line with Esa (2023) which states that learning with the help of podcast models has an impact in addition to improving learning outcomes and learning motivation as well as other positive impacts on students. These impacts include students becoming more confident and practising their ability to speak and communicate well. This is trained when students do podcast presentations in front of the class.

In addition, Diana (2020) smamita podcast media was successfully implemented at SMA Muhammadiyah 1 Taman and could increase students' interest and motivation to learn. The use of this podcast should be varied again with more challenging learning activities to avoid boredom of students, so that this podcast model will always be interesting and challenge students' critical thinking.

The results of the questionnaire and also observations at the pre-cycle stage found that the critical thinking ability of new students was 56.52% in the good category. Most learners are still at the stage of thinking ability to recall and restate. Learners tend to be inactive, silent and have not responded to the stimulus given by the teacher. Learners tend to be silent and only follow the opinions of other friends during discussions and presentations.

In cycle 1, positive activities from learners have begun to appear. Interactive video media and podcast models can be followed well by students. Learning activities have been dominated by students. The teacher is only a good facilitator and companion for students. Questions, answers, opinions and ideas from students have begun to appear. and the well-developed classroom conditions have an impact on improving critical thinking skills, namely 71.43%.

Cycle 2 there was a significant increase in the ability of critical thinking skills, which was 90.47%. Learners already seem used to practising critical thinking. Reasoning after receiving information instead of just recalling it has been built in most learners, even assessing and providing positive criticism of the opinions and attitudes of other friends has been done by students. Analysing, evaluating and creating have

been done by students in their learning activities both during discussions after viewing videos or during podcast presentations.

Several factors became the success of improving critical thinking skills in cycle 2, namely interactive video media and podcast models that were appropriately used in learning by students, the role of good teachers by providing more guidance, assistance and intervention to all students in learning activities in cycle 2. Another thing also contributed positively to the improvement of critical thinking skills, namely the awareness that came from the learners to learn better.

The success in cycle 2 is in line with Intan (2022) who stated that the use of podcast-based audio media makes collaboration and sharing of ideas or information that can direct students to think critically in solving problems. Sae (2023) also stated in his research that the animated video used in his learning successfully improved students' thinking skills. Video is a valid, practical, and effective learning tool in improving students' critical thinking skills in school learning. In addition, video media has the potential to improve students' understanding of the subject matter.

Similar to the results of the above research, there are still the same research results, namely Maulana et all (2022) that video media can improve students' critical thinking skills. Putri's research (2022) also proves that audio-visual media in the form of videos can improve students' critical thinking skills in social studies class VIII SMP N 2 Tambang.

CONCLUSIONS AND SUGGESTIONS

Besides having teaching skills in delivering learning content, teachers must also have knowledge and skills in developing technology-based learning resources, one of which is making interactive video media. Learning motivation and critical thinking skills of students in social studies class VIII SMP N 1 Purwanegara can be improved by using interactive video media and podcast models. This can be seen from the data from the learning motivation questionnaire at the pre-cycle stage which was only 26.09% of students in the high and very high categories, increasing in cycle 1 to 78.19% of students with high and very high motivation categories, then increasing again in cycle 2 to 91.31% of students with high and very high motivation categories. The data from the critical thinking ability questionnaire at the pre-cycle was only 56.32% of students with high and very high critical thinking categories, increased in cycle 1 to 71.43% of students with high and very high critical thinking categories. In cycle 2 it increased again to 90, 47%.

The results of this study can be used as inspiration for other social science teachers, to develop interactive video learning media and podcast models by modifying them to familiarize students with practicing critical thinking and increasing students' learning motivation. Teachers today are expected to be more creative and innovative in creating learning. Take advantage of everything that is around the school to be used as media that can improve the quality of learning.

REFERENCES

Abidin, Yunus. (2015). Pembelajaran Multiliterasi Sebuah Jawaban Atas Tantangan Pendidikan Abad Ke-21 Dalam Kontek Keindonesiaan. Bandung: Revika Aditama.

Azhar, Arsyad. (2016). Media Pembelajaran Edisi Revisi. Jakarta: PT Raja Grafindo Persada.

Daryanto, Drs & Karim Syaiful M.T, Drs. 2017. Pembelajaran Abad 21. Yogyakarta: Gava Media

Dwiyogo Wasis D. (2016). Pembelajaran Visioner. Jakarta: Bumi Aksara

Diana. (2020). Pengembangan Media Pembelajaran Podcast Smamita Bercakap dalam Pembelajaran Ekonomi di SMA Muhammadiyah 1 Taman. *Nusantara Jurnal Pendidikan dan Ilmu Sosial. Vol.2 No 3 November 2020.*

Esa Elhawa & Sukardi et all. (2023). Peningkatan Hasil Belajar Siswa Sebagai Pengaruh dari Penerapan Model Project Based Learning Berbantuan Media Podcsat. *Pendas: Jurnal Ilmiah Pendidikan Dasar, Vol.xx No.xx tahun 2023.*

Fajriyatun, & Saliman, S. (2018). Media Stupa Merah Putih Bermagnet untuk Meningkatkan Hots dan Hasil Belajar dalam Penguatan Pendidikan Karakter. *Jurnal Didaktika Pendidikan Dasar* , *2* (2), 319-340. Diambil dari https://ojsdikdas.kemdikbud.go.id/index.php/didaktika/article/view/80

Intan Rahmawati. (2022). Pengaruh Penggunaan Media Audio Berbasis Podcast dengan Model Problem Based Learning Terhadap Keterampilan Berfikir Kritis Pada Materi Perubahan Lingkungan. *Respositori unj,ac.id. diunduh pada hari Kamis 18 Januari 2024, Pukul 07.00 WIB.*

Kemendikbud. (2016). Konsep dan Pedoman Penguatan Pendidikan Karakter Tingkat Sekolah Dasar dan Sekolah Menengah Pertama. Jakarta: Kementerian Pendidikan dan Kebudayaan Republik Indonesia.

Kemendikbud. (2018). Materi Bimbingan Teknis Proses Pembelajaran Mata Pelajaran Ilmu Pengetahuan Sosial Jenjang Sekolah Menengah Pertama. Jakarta: Kementerian Pendidikan dan Kebudayaan Republik Indonesia.

Malvigie, C., Novianto, V., & Marzuki, SZS (2023). Model Pembelajaran Visual Auditori dan Kinestetik untuk Meningkatkan Motivasi, Kreativitas, dan Hasil Belajar Siswa. *Jurnal Penelitian dan Inovasi Pendidikan Ilmu Sosial (RISSEJ)* , *1* (2), 63–69. https://doi.org/10.30595/rissej.v1i2.128

Maulana, I, Budiarto, K, B, & Qord T,S,(2022). Penerapan Model PBL dan IBL Berbantuan Media Video untuk Meningkatkan Kemampuan Berfikir Kritis. *FAKTOR: Jurnal Ilmiah Kependidikan, 9(3), 277-288.*

Marjito, E. R., & Nurhalipah. (2018). Analisis Motivasi Belajar Siswa Pada Pembelajaran IPS di Kelas VIII MTs Mujahidin Pontianak Tahun Ajaran 2017/2018. *SOSIAL HORISON: Jurnal Pendidikan Sosial, 5(1),35-44.*

Muratin. (2011) Diktat Model-Model Pembelajaran. *Jakarta: Depdiknas.*

Nugroho, R. Arifin. 2018. HOTS Higher Order Thinking Skills Kemampuan Berfikir Tingkat Tinggi, Konsep, Pembelajaran, Penilaian Penyusunan Soal Sesuai HOTS. Jakarta: Gramedia Widiasarana Indonesia.

Putri, HT, Said, M., & Wahyuningsih, W. (2022). Penerapan Model Pembelajaran Problem Based Learning Dengan Media Audio Visual pada Mata Pelajaran IPS untuk Meningkatkan Kemampuan Berfikir Kritis Siswa Kelas VIII SMP Negeri 2 Tambang Kab. Kampar Riau. *JURNAL PEMIKIRAN DAN PENGEMBANGAN PEMBELAJARAN*, *4* (2), 369-377. Diambil dari https://ejournal-jp3.com/index.php/Pendidikan/article/view/423

Sae, H., & Radia, EH (2023). Media Video Animasi Dalam Pembelajaran IPA Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa SD. *Jurnal Pendidikan dan Ilmu Pengetahuan Sosial Indonesia*, *2* (2), 65–73. https://doi.org/10.56916/ijess.v2i2.474

Soleh Moh. Isu Global da Tantangan pembelajaran ios Prosiding KONASPIPSI [Konvensi Nasional Pendidikan IPS Indonesia] III: Tantangan IPS/IIS dalam Dinamika Sosial Budaya, di FPIPS UPI [Fakultas Pendidikan Ilmu Pengetahuan Sosial, Universitas pendidikan Indonesia] di Bandung, pada halaman 11-12 (2015)

Syaparuddin, S., & Elihami, E. (2020). MENINGKATKAN MOTIVASI BELAJAR SISWA MELALUI PEMANFAATAN MEDIA VIDEO PADA SISWA PENDIDIKAN. *JURNAL PENDIDIKAN NONFORMAL* , *1* (1), 228-235. Diambil dari https://ummaspul.e-journal.id/JENFOL/article/view/570

Sulistyowati, E. (2016). Penerapan Model Pembelajaran Literasi Saint Berbasis Proyek Pada Pembelajaran IPA untuk Meningkatkan Keterampilan Berfikir Tingkat Tinggi Siswa Kelas 8 OSN SMP N 1 Klaten. PTK hal. 47.

Syarifah, M. S.Pd. 2017. Melawan Petruk dan Gareng Pada Metode Estafet Berputar Dalam Upaya Peningkatan Keaktifan dan Hasil Belajar Siswa Melalui Penguatan Pendidikan Karakter Siswa SMP N 8 Salatiga. PTK Hal 52.