Utilization of Quizizz Educational Game Media to Increase Learning Interest and Achievement
利用 quizz 教育游戏媒体提高学习兴趣和成就

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Abstrak
Abstrak

Pada saat menjelaskan materi guru hanya menggunakan media pembelajaran papan tulis dan bersifat monoton. Hal ini berdampak pada hasil belajar siswa yang rendah. Tujuan penelitian ini yaitu menganalisis keefektifan media pembelajaran Game Quizizz dapat meningkatan semangat dan hasil belajar. Jenis penelitian ini adalah penelitian tindakan kelas. Subyek penelitian siswa kelas IV dengan jumlah siswa 23. Data dalam penelitian ini diperoleh melalui soal pretest, soal post test yang terdapat dalam aplikasi Game Quizizz dari hasil pengamatan dan dokumentasi. Instrument yang digunakan untuk mengumpulkan data yaitu kuesioner dan tes. Teknik yang digunakan untuk menganalisis data yaitu analisis deksriptif kualitatif dna kuantitatif. Hasil penelitian yaitu siswa memperoleh persentase ketuntasan belajar sebesar 43,47%. Setelah diberikan tindakan I mengalami peningkatan nilai rata-rata menjadi 72 dengan persentase ketuntasan belajar sebesar 60,86% pada Siklus I. Pada siklus II mengalami peningkatan nilai rata-rata menjadi 85 dengan persentase ketuntasan belajar sebesar 95,65%. Dari analisis di atas dapat disimpulkan bahwa penerapan media pembelajaran Game Quizizz dapat meningkatkan minat dan prestasi belajar siswa. Implikasi penelitian ini yaitu penerapan media pembelajaran Game Quizizz dapat digunakan oleh guru untuk meningkatkan minat dan hasil belajar siswa. .

帕达知道 *menjelaskan materi guru hanya menggunakan media pembelajaran papan tulis dan bersifat monton*。在这里我们可以看到他们的信仰，他们的信仰。土胡安·佩内利蒂安(*Tujuan penelitian*)和伊图·孟加拉人(*yaitu menganalisis kefektifan media pembelajaran*)一起玩游戏。*Jenis penelitian ini adalah penelitian tindakan kelas.Subyek penelitian siswa kelas IV dengan jumlah siswa 23.*数据达拉姆盘尼西亚人在 *diperoleh melalui* 测试，太阳后测试杨 *terdapat* 达拉姆 *aplikasi* 游戏测试达里哈西尔彭加马坦丹记录。*仪器 yang digunakan untuk mengumpulkan data yaitu kuesioner dan te*。*Teknik yang digunakan untuk menganananalysis data yaitu analysis deksriptif kuantatif dna kuantatif.Hasil penelitian yaitu siswa memperoleh persentase ketuntasan belajar sebesar 43,47%*.大鼠每天 72 个牙齿中，有60.86% 的牙齿中，有60.86% 的牙齿中，有85 个牙齿中，有95.65% 的牙齿中，有85 个牙齿中，有72 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中，有1 个牙齿中。达日分析报告指出，这些人不愿意接受媒体的采访，这是一个有趣的问题。这个问题可能会影响到媒体的报道，也可能会影响到媒体的报道。.

Kata kunci: Game Quizizz, Saintifik, Minat, Prestasi Belajar
Kata kunci: Game quizz，Saintifik，Minat，Prestasi Belajar

Abstract
摘要

When explaining the material, the teacher only uses blackboard learning media and is monotonous. This has an impact on student learning outcomes are low. This study aims to analyze the effectiveness of the Quizizz Game learning media in increasing enthusiasm and learning outcomes. This type of research is classroom action research. The research subjects were fourth-grade students with 23 students. The data in this study were obtained through pretest, post-test questions contained in the Quizizz Game application from observations and documentation. The instruments used to collect data are questionnaires and tests. The technique used to analyze the data is descriptive qualitative and quantitative analysis. The results of the study were that students obtained a percentage of learning completeness of 43.47%. After being given action I, the average score was 72, with a learning completeness percentage of 60.86% in Cycle I. In Cycle II, the average score increased to 85 with a learning completeness percentage of 95.65%. From the analysis above, it can be concluded that the application of the Quizizz Game learning media can increase students' interest and learning achievement. This research implies that teachers can use the application of the Quizizz Game learning media to increase student interest and learning outcomes.

在解释材料时，老师只使用黑板学习媒体，单调乏味。这对学生的学习效果影响很小。本研究旨在分析 quizz Game 学习媒体在提高学习热情和学习成果方面的有效性。这种类型的研究是课堂行动研究。研究对象是四年级的 23 名学生。本研究中的数据是通过观察和文档中的 quizz Game 应用程序中包含的预测试，测试后问题获得的。用于收集数据的工具是问卷和测试。用于分析数据的技术是描述性定性和定量分析。研究的结果是，学生获得了 43.47% 的学习完整性的百分比。在给予行动 i 后，平均分数为 72，在第一周期中学习完整性百分比为 60.86% 。在第二周期中，平均分增加到 85 分，学习完整性百分比为 95.65% 。从上面的分析可以得出结论，应用 quizz Game 学习媒体可以提高学生的兴趣和学习成绩。这项研究意味着教师可以使用问答游戏学习媒体的应用来提高学生的兴趣和学习成果。

Introduction
引言

Education is a universal aspect of human life. Education is also one of the efforts to improve the quality of human resources (Muhtar & Dallyono, 2020; Wu & Wu, 2020; Zhao et al., 2021). Without education, humans will never develop. The success of one's learning will be primarily determined by the ability to read it in understanding information (Dwigustini & Widiya, 2020; Jatmiko et al., 2018). In addition, reading activities can also increase knowledge and information and make it easier for someone to communicate (Le et al., 2019; Shih & Reynols, 2015). Learning is the main activity of the entire educational process in schools that aims to produce behavioral changes. These changes include cognitive, affective, and psychomotor (Yulando et al., 2019). Learning activities require active learning,

教育是人类生活的普遍方面。教育也是提高人力资源质量的努力之一(Muhtar & Dallyono，2020; Wu & Wu，2020; Zhao et al。，2021)。没有教育，人类永远不会发展。一个人学习的成功主要取决于他在理解信息时阅读的能力(Dwigustini & Widiya，2020; Jatmiko et al。，2018)。此外，阅读活动还可以增加知识和信息，使人们更容易交流(Le et al。，2019; Shih & Reynols，2015)。学习是学校整个教育过程的主要活动，旨在产生行为改变。这些变化包括认知，情感和精神运动(Yulando 等，2019)。学习活动需要主动学习，

participation, and interactive communication between teachers and students (Hermanto et al., 2021; Wu & Wu, 2020; Yusuf & Widyaningsih, 2020).

参与，以及师生之间的互动交流(Hermanto 等，2021; Wu & Wu，2020; Yusuf & Widyaningsih，2020)。

Innovatively designed learning activities will support the learning process (Huang et al., 2020; Smutny & Schreiberova, 2020) Success in the learning process can be seen from understanding concepts, mastery of the material, and learning achievement (Herbert et al., 2021; Turgut & Turgut, 2018).Students with a high conceptual understanding and mastery of the material have a higher achievement (Chiva-Bartoll et al., 2021; Ntobuo et al., 2018). In addition, the determining factor for learning success is the accuracy of the application of learning models and media (Ardini et al., 2020; Yusuf & Widyaningsih, 2020). In comparison, the benefits of learning media are to clarify the presentation of messages and information to clarify and improve learning processes and outcomes (Maryanti & Kurniawan, 2018; Shaik Alavudeen et al., 2021).

创新设计的学习活动将支持学习过程(Huang et al。，2020; Smutny & Schreiberova，2020)学习过程中的成功可以从理解概念、掌握材料和学习成就中看出(Herbert et al。，2021; Turgut & Turgut，2018)。对材料有较高概念理解和掌握的学生有较高的成就(Chiva-Bartoll 等，2021; Ntobuo 等，2018)。此外，学习成功的决定因素是学习模型和媒体应用的准确性(Ardini 等，2020; Yusuf & Widyaningsih，2020)。相比之下，学习媒体的好处是澄清信息和信息的表述，以澄清和改进学习过程和结果(Maryanti & Kurniawan，2018; Shaik Alavudeen 等，2021)。

However, the current problem is that many teachers have not used technology for learning (Ivanov et al., 2019; Utami et al., 2018). In addition, many students do not use technology for learning (Bettencourt et al., 2011; Wungguli & Yahya, 2020). This causes students to be lazy to study. Based on observations, students who have smartphones can only read various social media and play games. Students do not understand that smartphones are very useful in the world of education. Students must study at home for a relatively long time (Hermanto et al., 2021; Lim et al., 2021). Student learning at home is supervised by parents and online teachers (Karasmanaki & Tsantopoulos, 2021; Katz et al., 2020).

然而，目前的问题是许多教师没有使用技术进行学习(Ivanov 等，2019; Utami 等，2018)。此外，许多学生不使用技术进行学习(Bettencourt 等，2011; Wungguli & Yahya，2020)。这导致学生懒于学习。根据观察，拥有智能手机的学生只能阅读各种社交媒体和玩游戏。学生们不明白智能手机在教育领域是非常有用的。学生必须在家学习相对较长的时间(Hermanto 等，2021; Lim 等，2021)。家庭学生学习由家长和在线教师监督(Karasmanaki & tantopoulos，2021; Katz 等，2020)。

The thematic learning process in the 2013 curriculum in class IV at SDN Kauman 05 has not implemented learning using the thematic approach ideally. The apperception carried out by the teacher has not linked the material to be studied with the previously studied material, so that the apperception carried out by the teacher does not foster interest and motivate student learning. In the learning process, the teacher has tried to integrate between subject matter, although it is still clear that the shift from one subject to another and the lack of media in learning activities.

SDN Kauman 052013 年四年级课程的主题学习进程没有理想地采用主题方法进行学习。教师进行的领悟没有将要学的材料与以前学过的材料联系起来，因此，教师进行的领悟不能培养学生的兴趣和激发学生的学习。在学习过程中，教师试图整合各学科之间的关系，尽管仍然清楚地看到，从一个学科转向另一个学科，以及学习活动缺乏媒体。

When explaining the material, the teacher only uses blackboard learning media and is monotonous. It is still rare to use educational games to present in the delivery of subjects. Learning should also be supported by other learning media that can increase student

interaction in learning so that learning materials will be easier to understand and motivate students to take part in learning (Hardiyanti et al., 2019; Masturah et al., 2018). In addition, during the learning process, students still find it challenging to group it causes a high attitude of individualism—students who have low thinking skills in working on problems. Students do not want to try to work by asking their classmates or friends around them. For that, they need to be trained to think individually and in groups (Maryanti & Kurniawan, 2018; Yildiz

在解释材料时，老师只使用黑板学习媒体，而且单调乏味。在授课中使用教育游戏呈现的情况仍然很少。学习还应该得到其他学习媒体的支持，这些媒体可以增加学生在学习中的互动，从而使学习材料更容易理解并激励学生参与学习(Hardiyanti 等，2019; Masturah 等，2018)。此外，在学习过程中，学生仍然发现分组具有挑战性，这导致了高度的个人主义态度——学生在解决问题方面的思维能力较低。学生们不想通过询问他们周围的同学或朋友来尝试工作。为此，他们需要接受培训，学会独立思考和团队思考(Maryanti & Kurniawan，2018; Yildiz)

& Ersan, 2011). In addition, there are few opportunities for students to express their opinions, so it is difficult to show their participation to others, and their interest in learning is getting lower. Whereas in the 2013 curriculum, students are required to have a social character to socialize with others and achieve higher competitiveness.

Ersan，2011).此外，学生很少有机会表达自己的观点，因此很难向别人展示他们的参与，他们的学习兴趣越来越低。然而在 2013 年的课程中，学生被要求具有社会性格，以便与他人交往并获得更高的竞争力。

Improving the quality of education can be done by making updates in the learning process (Gabriele et al., 2016; Hanif, 2020). One of them is updating the approach or learning method (Huang et al., 2020; Turgut & Turgut, 2018). An exciting and fun learning atmosphere in the classroom needs to be realized so that the learning process can run well and educational goals can be achieved so that the quality of education increases (Anwar & Zulkifli, 2020; Hamid et al., 2013). Efforts to create an exciting and fun learning atmosphere in the classroom require several breakthroughs in curriculum development, learning media innovation, and fulfilling educational infrastructure (Chu et al., 2021; Hermawan et al., 2018). Aspects within the scope of the learning process, learning media innovation is

提高教育质量可以通过在学习过程中进行更新来实现(Gabriele 等，2016; Hanif, 2020)。其中之一是更新方法或学习方法(Huang 等，2020; Turgut & Turgut，2018)。需要在课堂上营造一种令人兴奋和有趣的学习氛围，以便学习过程能够顺利进行，实现教育目标，从而提高教育质量(Anwar & Zulkifli，2020; Hamid 等，2013)。为了在课堂上创造一种令人兴奋和有趣的学习氛围，需要在课程开发、学习媒体创新和实现教育基础设施方面取得一些突破(Chu 等，2021; Hermawan 等，2018)。在学习过程的范围内，学习媒体创新是

deemed necessary to increase student interest, motivation, and learning achievement (Saiboon et al., 2021; Wulandari et al., 2019).

被认为是提高学生兴趣、动机和学习成绩所必需的(Saiboon 等，2021; Wulandari 等，2019)。

One way to increase students' enthusiasm for learning is by using learning media (Andriyani & Suniasih, 2021; Priantini, 2020). Learning media that can be used by teachers are game media (Partovi & Razavi, 2019; Pratama et al., 2018). Currently students really like playing games so that learning innovation by playing games will increase students' enthusiasm for learning (Arifudin et al., 2019; Hwang et al., 2012). Games as learning media integrated with evaluation materials or questions are expected to make learning exciting and fun. The positive impact of using games is fun, and entertaining games and games provide exercises for problem-solving and logic (Albert, 2018; Kim et al., 2012).

增加学生学习热情的一种方法是使用学习媒体(Andriyani & Suniasih，2021; Priantini，2020)。教师可以使用的学习媒体是游戏媒体(Partovi & Razavi，2019; Pratama 等，2018)。目前学生真的很喜欢玩游戏，所以通过玩游戏来学习创新将会增加学生的学习热情。游戏作为学习媒介与评估材料或问题相结合，预计将使学习变得令人兴奋和有趣。使用游戏的积极影响是有趣的，娱乐性的游戏和游戏提供了解决问题和逻辑的练习(Albert，2018; Kim 等，2012)。

Previous research also stated that learning media could help students learn and increase students' learning motivation (Agung et al., 2017; Safitri, 2020). The findings of previous studies also state that game media can improve student learning outcomes (Li et al., 2021; Yildiz & Ersan, 2011). It can be concluded that the learning media will help students in learning. There is no study on the use of quiz educational game media to increase student interest and achievement. The difference between this research and previous research is that educational game media use quizzes. Quizizz is a web tool program for creating interactive quiz games that are used in learning activities. The created interactive quiz has up to 4 answer options, including the correct answer and an image that can be added to the background of the question. Based on this, this study aims to analyze the effectiveness of the Quizizz Game learning media in increasing enthusiasm for learning. It is hoped that this media can improve student learning outcomes.

此前的研究还表明，学习媒体可以帮助学生学习，并提高学生的学习动机(Agung 等，2017; Safitri，2020)。以前的研究结果也表明，游戏媒体可以改善学生的学习成果(Li et al。，2021; Yildiz & Ersan，2011)。可以得出结论，学习媒体将有助于学生的学习。目前还没有关于利用智力竞赛教育媒体来提高学生兴趣和成绩的研究。这项研究和以前的研究的不同之处在于教育游戏媒体使用测验。Quizz 是一个网络工具程序，用于创建用于学习活动的互动智力竞赛游戏。创建的互动测验有多达 4 个答案选项，包括正确答案和一个可以添加到问题背景的图片。基于此，本研究旨在分析问答游戏学习媒体在提高学习热情方面的有效性。希望这种媒体能够提高学生的学习效果。

Methods
方法

This type of research is classroom action research. This research was conducted at SD Negeri Kauman 05, Batang District, Batang Regency, Central Java. *Research procedures* are steps or methods that researchers must carry out regularly and systematically to achieve research objectives. Classroom action research is carried out in the form of an iterative cycle in which there are four main stages, namely: (a) planning, (b) action, (c) observation, and (d) reflection.

这种类型的研究是课堂行动研究。这项研究在 SD Negeri Kauman 05，Batang District，Batang Regency，Central Java 进行。研究程序是研究人员为了实现研究目标

必须定期系统地执行的步骤或方法。课堂行动研究是以一个迭代循环的形式进行的，其中有四个主要阶段，即: (a)计划，(b)行动，(c)观察，和(d)反思。

Planning is an activity carried out to make a plan used as a reference in taking action. Action implementation is an activity carried out by the teacher based on a design or plan that has been prepared. *Observation* is an action taken by the teacher to observe and record things that are needed and occur in implementing the action taking place. Reflection is a process to look back or review the changes that have occurred in the process of actions that have been taken. *Data collection instruments* are tools used to collect data and information.

计划是为了制定一个计划而进行的活动，作为采取行动的参考。行动实施是老师根据已经准备好的设计或计划进行的活动。观察是老师采取的行动，以观察和记录在实施行动过程中需要和发生的事情。反思是一个回顾或回顾在行动过程中所发生的变化的过程。数据收集工具是用来收集数据和信息的工具。

This study used several data collection instruments: Teacher Activity Observation, Student Activity Observation, and Test Instruments. The next step in this research is to analyze all the data obtained during the study. The purpose of this data analysis is to answer the research problems that have been formulated. The data analysis techniques used were qualitative and quantitative statistical analysis.

本研究采用了教师活动观察、学生活动观察、测试工具等多种数据采集工具。这项研究的下一步是分析研究期间获得的所有数据。这个数据分析的目的是回答已经形成的研究问题。使用的数据分析技术是定性和定量统计分析。

Results and Discussion
结果和讨论
Results
结果

The learning in class IV of SD Negeri Kauman 05, Batang District, Batang Regency, before using the Quizizz learning media, only used a conventional and teacher-centered model. The teacher dominates the learning process without involving students. The teacher only uses the lecture method so that students are less than optimal in exploring their abilities. Implementation tends to be monotonous and very boring for students in learning activities.

巴塘摄政区(Batang Regency)巴塘区 SD Negeri Kauman 05 四班在使用问答学习媒体前，仅采用传统的以教师为中心的学习模式。教师主导学习过程，而不涉及学生。老师只是使用授课方法，这样学生在探索他们的能力时就不是最理想的。对于学生来说，学习活动的实施往往是单调乏味的。

The initial state of the students include (1) students are less active in learning; (2) learning is carried out using the lecture method so that students' attention is low and easily bored; (3) low creativity and use of methods or media that support learning.

学生的初始状态包括: (1)学生学习不积极; (2)学习采用讲授方法, 使学生注意力不集中, 容易感到厌烦; (3)缺乏创造力和使用支持学习的方法或媒体。

Student learning outcomes in social studies learning on natural resource material before using the quiz game, namely the pre-cycle in class IV SD Negeri Kauman 05, Batang District, Batang Regency, have not been as expected. The pre-cycle test scores were obtained by researchers from the evaluation scores of student learning outcomes. Some of the fourth-grade students have not yet achieved complete learning. Only ten students (43.47%) out of 23 students reached the KKM of 70. In comparison, the other 13 students (56.53%) had not yet reached the KKM. The average value of the new class reached 67. The percentage value of learning completeness was lower than the percentage of students who had not finished. In social studies learning on natural resource material, students have not been maximal in learning. Most students are less active in participating in learning. So this results in the evaluation of student learning outcomes is low.

学生在社会研究方面的学习成果在使用问答游戏前学习自然资源材料, 即在巴塘摄政区巴塘区 SD Negeri Kauman 05 第四班的预习周期, 并没有达到预期的效果。周期前测试分数由研究人员从学生学习成果的评估分数中获得。一些四年级的学生还没有完成学习。23 名学生中只有 10 名(43.47%)达到了 70 分的 KKM。相比之下, 其他 13 名学生(56.53%)尚未达到 KKM。新班级的平均值达到了 67。学习完整性的百分比值低于没有完成学业的学生的百分比。在学习自然资源材料的社会研究中, 学生的学习并没有达到最大化。大多数学生参与学习的积极性较低。所以这导致了对学生学习成果的评价很低。

They were learning after the first cycle was carried out, with an average assessment of

他们在第一个周期实施后开始学习, 平均评估为

72. Fourteen students completed social studies learning from 23 students. To determine the level of mastery learning on the value of the first cycle, a value analysis was carried out by comparing the student's score against the minimum completeness criteria so that the number of students who had completed and had not completed was known. The following is a recapitulation table of complete learning cycle I.

14 名学生完成了 23 名学生的社会学研究。为了确定第一周期的掌握学习水平的价值, 通过比较学生的分数与最低完成度标准进行价值分析, 以便知道已完成和未完成的学生人数。以下是完整学习周期 i 的概述表。

Table 1. Recapitulation of Learning Completeness Cycle I
表 1. 学习完整性循环概述

No 不	Mastery learning 掌握学习	Skor Skor	The number of students 学生人数	Persentase (%) 百分比
1	Siswa Tuntas 西斯瓦 ·通塔斯 Siswa Belum Tuntas	≥ 70 ≥70	14	60,86% 6086%
2	Siswa Belum Tuntas 西斯 瓦 ·贝伦 ·通塔斯	≤ 70 ≤70	9	39,14% 39,14%
	Total 总计		23	100% 100%

It can be seen that the percentage value of learning completeness has started to increase from before using the Quizizz educational media in Cycle I. In social studies learning on natural resource materials, students have started to look optimal in learning. Most students

are already active in participating in learning. This can be seen when the researcher asks students to come forward. Many students are enthusiastic about coming forward. In addition, the condition of the class seemed active, and there were many responses from students because when the researcher asked questions, students answered in a voice filled with confidence. In this cycle, students were seen to be active and enthusiastic. The enthusiasm of students in participating in learning also began to be seen.

可以看出，从第一周期中使用 quizz 教育媒体之前开始，学习完整性的百分比值已经开始增加。在自然资源材料的社会研究学习中，学生们已经开始在学习中表现出最佳状态。大多数学生已经积极参与学习。当研究人员要求学生站出来的时候，就可以看出这一点。许多学生对站出来充满热情。此外，课堂的情况看起来很活跃，学生们的反应也很多，因为当研究人员问问题时，学生们的回答充满了自信。在这个周期中，学生们被认为是积极和热情的。学生参与学习的热情也开始显现出来。

Student participation in learning activities in the second cycle is one student included in the assessment criteria (less) with a score of 60-74 (unfinished). At the same time, the students who entered the assessment criteria (Good) were 22 students. The highest score is

学生参与第二轮学习活动的情况，是在评核准则(较少)中包括一名学生，得分为 60-74(未完成)。同时，进入评估标准(Good)的学生是 22 名学生。最高分是

90. In this case, it has been shown that student participation in learning in Cycle II has increased by reaching 95% active participation of students. Thus, researchers expected to increase participation in learning activities with a percentage of 80% has been achieved.

在这种情况下，已经显示，第二周期的学生参与学习的程度已经增加，学生积极参与的程度达到 95% 。因此，研究人员期望增加参与学习活动的百分比达到了 80% 。

Learning after the first cycle was carried out with an average assessment of 72, and the learning was carried out again, namely Cycle II. In Cycle II learning, the value of student learning outcomes increased significantly. In Cycle I, 14 students completed social studies learning on natural resources from 23 students. With learning in Cycle II, 22 students completed while the students who did not complete were only one child.

第一个周期后的学习平均评估为 72，学习再次进行，即第二个周期。在第二周期学习中，学生学习成果的价值显着增加。在第一周期中，14 名学生从 23 名学生那里完成了关于自然资源的社会学习。在第二阶段的学习中，22 名学生完成了学习，而那些没有完成学习的学生只有一个孩子。

The percentage value of learning completeness increases from before using the Quizizz learning media in Cycle I to Cycle II. In social studies learning on natural resource material, students have been very maximal in learning. Most students are already active in

学习完整性的百分比值从第一周期到第二周期使用 quizz 学习媒体之前开始增加。在学习自然资源材料的社会研究中，学生的学习能力是最强的。大多数学生已经积极参与

participating in learning. In addition, the condition of the class seemed very active compared to Cycle I learning, and there were many responses from students because when the researcher asked questions, students answered in a voice filled with confidence. In this Cycle, students are very active and enthusiastic. The enthusiasm of students in participating in learning is also evident, so that this resulted in the evaluation of student learning outcomes which continued to increase from Cycle I to Cycle II.

参与学习。此外，与第一周期学习相比，课堂的情况似乎非常活跃，学生们的反应也很多，因为当研究人员问问题时，学生们的回答充满了自信。在这个循环中，学生们非常积极和热情。学生参与学习的积极性也很明显，因此对学生学习成果的评价从第一周期持续增加到第二周期。

After using the educational media Quizizz game in social studies learning natural resource materials, student participation has begun to look significant compared to Cycle I. Scores of student participation in the activity. There is one student who gets the criteria (less) with a score of 60-74. While students who enter the assessment criteria. (Good) as many as 16 students with a value of 75-99 and only six students who fall into the (Very Good) criteria, namely getting a score of 100. finished. From the evaluation results obtained completeness of 95.65%, or a class average of 85. The results of the student learning mastery test have reached 95.65%. This has met the competency standards desired by the researcher, which is that more than 90% of all students scored above 90. So it has met the KKM, which is 70.

在社会研究中使用教育媒体小测验游戏学习自然资源材料后，学生的参与程度开始显著高于第一周期。有一个学生得到了 60-74 分的标准(更少)。然而，进入评估标准的学生。(很好)多达 16 名学生的值为 75-99，只有 6 名学生符合(非常好)的标准，即得到 100 分。完成。从评价结果中获得的完整性为 95.65%，即班级平均值为 85。学生学习掌握测试的结果达到了 95.65%。这已经达到了研究人员所期望的能力标准，即超过 90% 的学生得分超过 90 分。所以它已经达到了 KKM 的 70 分。
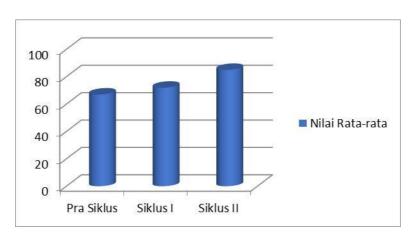

Figure 1. Graph of Improving Student Learning Outcomes
图 1。改善学生学习成果的图表

Based on the graph above, it is clear that there was an increase in student achievement and student learning completeness before and after the action was given. Before being given action with the Quizizz learning media, the average student only got a score of 67 with a learning completeness percentage of 43.47%. After being given action I, the average score was 72, with a learning completeness percentage of 60.86% in Cycle I. Similarly, in Cycle II, the average score increased to 85 with a learning completeness percentage of 95.65% of the total number of students. A total of 23 students.

基于上面的图表，很明显，在给予行动之前和之后，学生的学习成绩和学习完整性都有所提高。在使用 quizz 学习媒体之前，平均学生的学习完成率为 43.47%，得分仅为 67 分。第一阶段的学习完成度为 60.86%，第二阶段的学习完成度为 85%，占学生总数的 95.65%。共有 23 名学生。

Discussion
讨论

Improving the quality of education can be done by making updates in the learning process, one of which is learning media (Fauyan, 2019; Gunawam et al., 2015). Teachers must innovate in the application of learning media to increase student motivation and activity, which impacts learning outcomes ((Bergdahl et al., 2020; Hashim, 2018; Sert & Boynueğri, 2017). Quizizz educational game media to increase student interest and achievement in social studies lessons on natural resources. Social studies learning on natural resource materials using the Quizizz educational game media can increase students' interest and achievement in learning outcomes. Learning media can also direct students' attention to lead to learning motivation that has an impact on activity and learning outcomes (Dinayusadewi et al., 2020; Gunawan et al., 2017).

提高教育质量可以通过更新学习过程来实现，其中之一就是学习媒体(Fauyan，2019; Gunawam 等，2015)。教师必须在应用学习媒体方面进行创新，以提高学生的学习动机和活动，从而影响学习结果(Bergdahl 等，2020; Hashim，2018; Sert & boynue ri，2017)。Quizz 教育游戏媒体，以提高学生对自然资源社会研究课程的兴趣和成就。社会研究学习自然资源材料使用 quizz 教育游戏媒体可以提高学生的兴趣和学习成果的成就。学习媒体还可以引导学生的注意力导致学习动机，从而对活动和学习结果产生影响(Dinayusadewi 等，2020; Gunawan 等，2017)。

An exciting and fun learning atmosphere in the classroom is realized when the use of learning media is by the characteristics of students (Anwar & Zulkifli, 2020; Hamid et al., 2013). Learning media can create an exciting and fun learning atmosphere in the classroom (Chu et al., 2021; Hermawan et al., 2018). Game media is one media that is highly favored by students today (Partovi & Razavi, 2019; Pratama et al., 2018). Games are exciting for students to motivate students in learning (Arifudin et al., 2019; Hwang et al., 2012). Games as learning media that are developed are integrated with the material to make learning more exciting and fun. In addition, this game provides practice for problem solving and logic.

当学习媒体的使用是由学生的特点实现的时候，一个令人兴奋和有趣的学习气氛在课堂上(Anwar & Zulkifli，2020; Hamid 等，2013)。学习媒体可以在课堂上创造一个令人兴奋和有趣的学习氛围(Chu et al。，2021; Hermawan et al。，2018)。游戏媒体是当今学生非常喜欢的一种媒体(Partovi & Razavi，2019; Pratama 等，2018)。游戏对于学生来说是激励学生学习的激动人心的(Arifudin 等，2019; Hwang 等，2012)。游戏作为开发的学习媒体与材料整合，使学习更加令人兴奋和有趣。此外，这个游戏还提供了解决问题和逻辑的练习。

Previous research also stated that learning media could increase students' learning motivation so that the atmosphere becomes fun (Masturah et al., 2018; Wuryanti, 2016). Other research findings state that game media will increase students' enthusiasm for learning (Li et al., 2021; Yildiz & Ersan, 2011). So it can be concluded that the developed media can help students in learning. This research implies that Social Studies learning can use the Quiz educational game media to improve student learning outcomes.

此前的研究还表明，学习媒体可以增加学生的学习动机，使气氛变得有趣(Masturah 等，2018; Wuryanti，2016)。其他研究发现表明，游戏媒体将增加学生的学习热情(Li et al。，2021; Yildiz & Ersan，2011)。因此可以得出结论，发达的媒体可以帮助学生学习。这项研究表明，社会研究学习可以使用益智教育游戏媒体来提高学生的学习效果。

Conclusion
结论

Social studies learning on natural resource materials using the Quizizz educational game media can increase students' interest and achievement in learning outcomes. Utilizing educational game media Quizizz can help students learn to increase interest and achievement of student learning outcomes in social studies lessons.

利用自然资源材料进行社会研究学习，可以提高学生的学习兴趣和学习成绩。利用教育游戏媒体 quizz 可以帮助学生在社会研究课程中学习提高学生的兴趣和学习成果。

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