The Effectiveness of E-Learning with the Assistance of Linktree and Whatwall on Science Learning Outcomes for Fifth Grade Students at Karangreja 01 Elementary School in Cimanggu

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ABSTRACT

Study This aiming For measure effectiveness assisted e-learning Linktree and WhatWall to results Study students on the material properties light in class V SDN Karangreja 01 Cimanggu. The method used in study This is experiment with pretest-posttest control group design. Subjects study consists of from two groups, namely group experiments using assisted e-learning Linktree and WhatWall as well as group control that uses method learning conventional. Research result show that there is significant improvement in results Study students who use assisted e-learning Linktree and WhatWall compared to with group control. Students in group experiment more active in follow learning, discussing, and access material through Linktree and WhatWall. In addition , the response student to the use of this media is very positive, because they feel more easy understand materials and more motivated in Study. Conclusion from study This is that learning based on e-learning with help Linktree and WhatWall effective in increase results Study as well as involvement student in science learning , especially on the material properties light. Therefore that, it is recommended for teachers to utilise this digital technology in the learning process use increase effectiveness and results Study student.

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1. INTRODUCTION

Development digital technology has give impact significant in the world of education, include in the learning process at school Basic. Learning e-learning based increasingly Lots used as alternative in increase effectiveness learning, especially in the digital era moment This . One of approaches that can applied in learning is utilization of digital platforms such as Linktree and WhatWall as an interactive learning medium.

IPA is eye demanding lessons understanding draft in a way deep through experience concrete learning . One of material in grade V science is "Properties of Light", which requires approach learning that can facilitate exploration student visually and interactively . However , in in practice , still found a number of constraint in learning conventional , such as limitations source learning , low involvement active students , as well as lack of variety of media that supports understanding draft in a way deep .

Use of assisted e-learning Linktree and WhatWall in learning can become solution in overcome constraint those . Linktree allows teachers to manage various source Study in One easy link accessed by students , such as learning videos , articles , simulations interactive , and exercises question . Meanwhile that ,

WhatWall functioning as an interactive media that encourages involvement active student through discussion , ask answer , and share results exploration they about properties light .

Through application of learning models this , it is expected student Class V of SDN Karangreja 01 Cimanggu can to obtain experience learn more interesting , improve understanding to draft properties light , and increase results Study they in a way significant . Therefore that , it is necessary done study For measure effectiveness assisted e- learning Linktree and WhatWall to results learning science on the material properties light in class V of SDN Karangreja 01 Cimanggu.

2. RESEARCH METHODS

Study This use method experiment with pretest- posttest control group design . Subject study is student Class V of SDN Karangreja 01 Cimanggu as group experiments using assisted e- learning Linktree and WhatWall as well as SDN Karangreja 05 Cimanggu as group control that uses method learning conventional .

Instrument research used covering test results learning (pretest and posttest), sheet observation involvement students , as well as questionnaire response student to use of digital learning media . Data analysis was carried out with statistical tests For know difference results Study between group experiments and groups control .
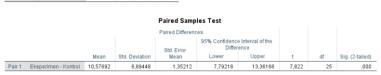
Study This aiming For know to what extent does the use of e-learning help? Linktree and WhatWall can increase results Study student in understand material properties light as well as How the effectiveness of the media in increase involvement active student during the learning process.

3. RESULTS AND DISCUSSIONS

Study This aiming For know effectiveness assisted e- learning Linktree and Whatwall to results learning science on the material properties light student Class V of SDN Karangreja 01 Cimanggu . Subject study consists of from 2 classes , namely class experiments that use Linktree and Whatwall , as well as class control that uses method learning conventional (face to face) advance normal). Following is summary of results data Study :

Table 1.

Class	Amount Student	Pretest Average Score	Posttest Mean Value	Improvement
Experiment	26 students	57.26	82.73	26.3
Control	26 students	57.46	72.15	15.4

Normality and homogeneity test show that the data is normally distributed and homogeneous. Furthermore **independent t-test** was conducted to mark posttest second class.

Figure 1. **T-test results:**

Sig. value (2-tailed) = 0.000 < 0.05 This means that there is a significant difference between the learning outcomes of students in the experimental class and the control class.

Research result show that there is improvement results significant learning in groups experiment compared to with group control . The average value of the posttest group experiment more tall compared to with group control , which shows that use of assisted e-learning Linktree and WhatWall capable increase understanding student to material properties light .

In addition , the results observation show that students who use assisted e-learning Linktree and WhatWall more active in follow learning. They more enthusiastic in discuss, access material through Linktree, as well as interact use WhatWall. This is show that this digital learning media capable increase involvement student in the learning process.

Response student to learning based on e-learning is also very positive. Most of student feel more easy understand draft properties light with help various source learning provided through Linktree, as well as feel more motivated with existence interaction through WhatWall .

With Thus, it can concluded that assisted e- learning Linktree and WhatWall effective in increase results Study student as well as involvement they in science learning material properties light in class V of SDN Karangreja 01 Cimanggu.

4. CONCLUSIONS

Based on results research, can concluded that use of assisted e-learning Linktree and WhatWall own impact positive to results Study student Class V of SDN Karangreja 01 Cimanggu in material properties light . Students who study using this media show improvement better understanding Good compared to with method conventional. In addition, involvement active student in the learning process also increases with existence interaction through WhatWall and access easy to source Study through Linktree. Learning become more interesting , interactive , and capable increase motivation student. With Thus, it is suggested for teachers to utilise digital technologies such as Linktree and WhatWall in learning, especially in subjects science lessons, use increase effectiveness learning and results Study student .

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