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Effectiveness Test Application *Lectora Inspire* as Science Learning Media for Upgrade Concept understanding Student

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Abstract: This study aim for test effectiveness application lectora inspire to understanding draft student. Research design this use design study quasi experiment with one group pretest posttest design. Sample in research this that is class VIII C with the number of 29 students and taking sample using cluster sampling technique. Instruments used is an instrument of understanding draft with material system digestion human. Data collection is carried out with use test understanding form concept _ *pretest* and *posttest*. Understanding results draft analyzed using paired sample t-test. Research results shows the average obtained of -13,428 that there is enhancement understanding draft participant educate. Then, application *lectora inspire* very effectiveness as learning media.

Keywords: Learning media; *Lectora inspire;* Understanding Draft

Introduction

The realization of good quality education requires a big effort to always improve the quality of education. A teacher should be able to create meaningful learning (meaningful), a student does not only learn to know something (learning to know) but also learn to do (learning to do). Learning through experience (learning by doing) in the form of exploration and manipulation will make the student easy to remember what did learned for a long time (long-term memory) (Reffiane et al., 2019).

Interactive multimedia has several advantages so that it can be used as one of the online learning media in schools. First, the use of interactive multimedia makes learning more innovative and interactive. Interactivity in multimedia supports learning to increase understanding of the material presented (Sartono et al., 2022). Along with the times, science and technology have also developed. The development of science and technology from day to day is becoming more sophisticated (Buchanan et al., 2019). Technology implementation in education includes using ICT (Information Communication and Technology) to create and develop exciting media, methods, and teaching materials (Arrosagaray et al., 2019).

Along development technology and information increasingly fast, inclined will influence all life social, economic, political, cultural, as well education and training. In field education, innovation is absolute thing done, because without innovation will occur lagging behind in education then will impact on the elements another life like political, economic, social and others (Sari and Susanti, 2016).

The use of learning media is expected to increase Self Motivated Learning and Self Regulated Learning. The role of using technology in the educational aspect can be making interactive and innovative learning media that can be accessed anytime and anywhere (Buchanan et al., 2019; Weng & Chen, 2020). Media is an important component in learning. Currently the government is concentrate on building infrastructure in order to support learning in the classroom . In-school programs have been carried out on an ongoing basis, these efforts need the support of teachers to implement the learning in school. The media expected is the one that

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can explain the abstract subject into the concrete one visualized into more meaningful and attractive images (Akbarini et al., 2018). Learning media is a means of delivering learning material more straightly and attractively, thereby generating reciprocal relation between teacher and students. The use of learning media can improve the students' interest and willingness in a subject (Wirawan et al., 2017).

Progress knowledge knowledge and technology have very big influence in various field life human . Education as one the part that doesn't inseparable from the maturation process man sure on one side have big fair or development knowledge knowledge and technology, but on the other hand education is also necessary utilise progress knowledge knowledge and technology to be able reach the goal in a manner effective and efficient .

Medium is intermediary or introduction message from sender to recipient message. Learning media could interpreted as stone tools used in the learning process . With the intended media could make it easy in delivery teaching material from the teacher to students , so student could with easy and efficient in reach aim learning. Media works too for individual learning where media status completely serve need study student.

Science concept understanding is defined as the students' cognitive ability in understanding and mastering the science concepts through a phenomenon, event, object, or activity related to the science material (Tursinawati, 2016). The teaching strategy of science concept understanding is generally carried out by giving examples and explaining the science concepts (Widiawati et al., 2015). However, the results of research on the science concept understanding of elementary school students in some regions of Indonesia are generally still low (Artayasa et al., 2018). The weak science concept understanding of the students was also reflected on the results of the evaluation of the Program for International Student Assessment (PISA) from 2009 to 2015 on the science literacy of Indonesian students. The results showed that the score of the Indonesian students' science literacy was still below in the average of the countries evaluated (Kemendikbud, 2013; OECD, 2016).

Educational media as one means for Upgrade quality education as one means for Upgrade quality education is very important its use in the learning process. Use of learning media could help the learning process student in the learning process teach that in turn could heighten results achieved learning. Learning media interactive this could expected will motivating student for study independent, creative, effective, and efficient. Besides that , with learning media interactive this, can reduce saturation students (Taufiq et al., 2014).

Learning media ICT -based (Website) assisted *Software Lectora Inspire* is one possible solution used for Upgrade understanding draft student. Learning media ICT based (Website) assisted *Software Lectora Inspire* capable create atmosphere activity interesting, creative and effective learning in reach aim learning. Learning media ICT based (Website) assisted *Lectora Inspire software* also has ability as ingredient study independent students who can accessed anywhere and anytime by students. Lectora inspire is an electronic learning development software (elearning) that is relatively easy to apply or implement because it does not require understanding sophisticated programming languages. Because Lectora inspire has a familiar interface with those who are familiar with or master Microsoft Office. Other research also states that Lectora media can be used in the learning process to improve students' abilities (Widiastuti & Wangid, 2015; Windarny & Mustadi, 2019)

One multimedia applications used in development of learning media is *lecturer inspire*. *Lectora Inspire* is a computer program that is development *tools* study electronic (*e-learning*). Lectora Inspire is authoring tool for the development of e-learning content developed by Trivantis Corporation. Lectora Inspire is able to create online training courses, assessments, and presentations quickly, effectively, and efficiently. In addition, sased on these basic thoughts, it becomes a reference for implementing video-assisted learning with Lectora Inspire andit is expected to improve critical thinking skills and help learners understand the material.

Learning media is one of the tools to improve the quality of education in the learning process. The use of learning media creatively will increase the ability of students to learn more to understand what is learned well. Good learning media can encourage student learning motivation, clarify and facilitate abstract concepts, and enhance the absorption of the subject matter

Learning Media based Lectora Inspire is an easy learning medium used and practical (Ulfatuzzahara, 2020). Lectora Inspire is device soft development learning relative electronics easy applied or implemented because no need understanding language sophisticated programming. In other words, Lectora Inspire is a capable program creating interactive, innovative, and creative learning media because could displays text, images, audio, music, videos and various unique templates in one mutual view support for reach learning. goals (Atiyah, 2018).

By using Lectora, students can actively learn and develop knowledge through the content provided by the lecture application in Lectora. Besides being able to help students master learning materials independently through various applications and content provided in Lectora, through this media, students can

simultaneously develop good character values in themselves in face-to-face and distance learning activities.

Lectora Inspire got used in online and offline learning that can used with easy (Kadwa & Alshenqeeti, 2020). According to Audia et al. (2021), Learning media Lectora Inspire got used in learning for Upgrade character student . The use of learning media in essence function in education. Learning media actually already Becomes the part that can give experience meaning in the learning process . kindly general learning media function is as tool communication in the learning process (Zuraida, 2020).

Success learning is greatly influenced completeness means or the media used. Because the more various media used, messages or material learning will the more optimally received participant educate. this caused variety and diversity modality study participant educate can accommodated from various media in learning. Until moment this is a learning medium interactive not yet develop optimally. one constraint media development learning interactive is not enough mastered technology interactive media development with computer sub optimal.

Understanding is something related abilities about intellectual property student. Draft could defined as something related tightly with intellectual students, abilities apply the lowered from facts, experiences and events that occurred. So that understanding IPA concept can interpreted as ability student in understand a mean in a manner scientific, fine in a manner draft nor in a manner theory for capable break problem (Suhartono et al., 2019) .

Understanding draft is essential thing, factor for reach expected goals and conditions must for reach success study (Suhartono et al., 2019) . Besides that's the indicator understanding draft covers seven aspect cognitive process: ability interpret, give example, classify, summarize, draw conclusion/conclude, compare, and explain (Anderson & Krathwoh, 2001). Lectora Inspire is device soft development learning electronic (elearning) which is relatively easy applied or implemented because no need understanding of advanced programming languages (Wibawa, 2017).

Use of learning media could help teachers cope limitations delivery material . because that is, research development of learning media needed in the world of education, the goal developing media for effectively used in schools. One of the learning media multimedia based is Lectora Inspire. Lectora Inspire is device Authoring Tool software for development e-learning content developed by Trivantis Corporation. Lectora Inspire got used for need learning good online or offline that can made with fast and easy. Lectora Inspire got used for combines flash, video, images, and screen capture (Linda et al., 2016).

Based on results observation found that understanding draft from part big student to material system digestion in humans still low. understanding draft concerns with Knowledge (cognitive) includes remembering, understanding, applying still low. Learning media used in material system digestion man use book package. Learning media form application not yet once used by the teacher, and not prepared by the teacher. In the learning process sometimes still abstract, so ability student in understand problem, solve problem, solve problem and check return settlement problems given by the teacher yet it worked. This is also due because in finish problem needed ability understanding draft as prerequisites and abilities do connection between concept and readiness mentally (Ahmad et al, 2013). That an increase in student interest in learning after the end of the action by using the media Lectora Inspire. The material presented through Lectora Inspire is equipped with various animations, images, colours and sounds, so it does not make students bored (Mudinillah, 2019).

Understanding draft have definition varies, depending from field study each other's knowledge. Definition understanding draft in IPA context based expert opinion is ability student in understand connection draft one each other so can applied for solve problem. understanding less concept established could be marked with no understand mean content knowledge, definitions, and reasons from part mutual knowledge related (Sevina et al, 2022).

Based on background behind problem that has described, researcher try give method alternative the use of appropriate learning media with development modern technology that can used by educators to student in science learning on the material system pollution man with introduce learning media based lecturer.

Method

Study this including study quantitative, with method *quasi experiment* (experiment pseudo), the selected research design is *one group pretest posttest*. Draft study presented in table 1.

Table 1 . Research design

Class	Pretest	Treatment	Posttest
Experiment	O_1	X	O_2

Description :
O_1 : Pretest for class experiment
O_2 : Posttest for class experiment
X : Treatment class experiment (using application lecturer inspire)

Population from study this is whole student class VIII consisting from 5 class then chosen one class with *cluster random sampling* technique so that got class VIII C as sample study with total 29 students. Instruments used in study this is a test instrument understanding draft material system digestion man with type the test form about choice multiples containing 15 items of questions.

Results and Discussion

Study this implemented with give test the so called start *pretest* with total test understanding draft totaling 15 numbers, then teaching to participant educate class VIII C which discusses about substance testing ingredient food using learning media that is application *lecturer inspire*. After that, at the meeting next researcher give test understanding draft to participant educate with total same matter totaling 15 numbers, that is 15 choices double. Giving test this aim for knowing enhancement understanding draft participant educate with using learning media that is application *leectora inspire*.

Application lecturer inspire can accessed without must install application that, students could access his with the link already prepared. at the moment student use application it, at first student will look page initial on the application lecturer.

Figure 1 . Start page

After that student directed for clicking knob next so you can look appearance next that is instruction about what only loaded on the application this . Where are students could clicking section on display this without must clicking knob next.

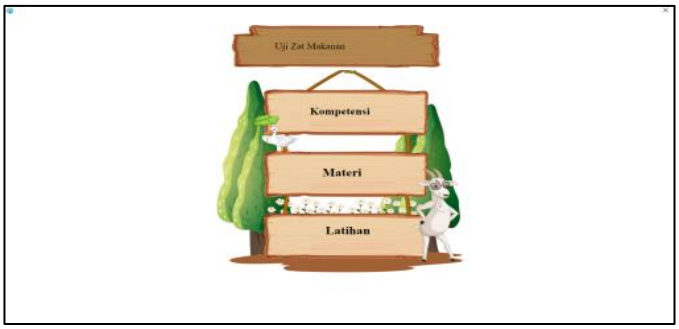

Figure 2 . Instruction

When the teacher wants start learning, then will directed for clicking part material. With clicking part that, students live look content from material.

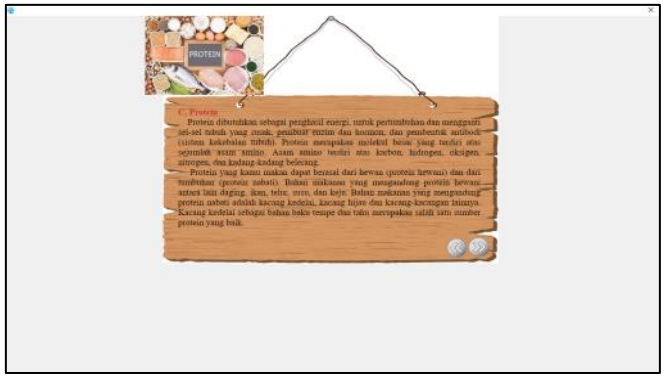

Figure 3 . Appearance Material

This medium is also available part practice questions. Where are students can live work practice questions in this medium with form different questions.

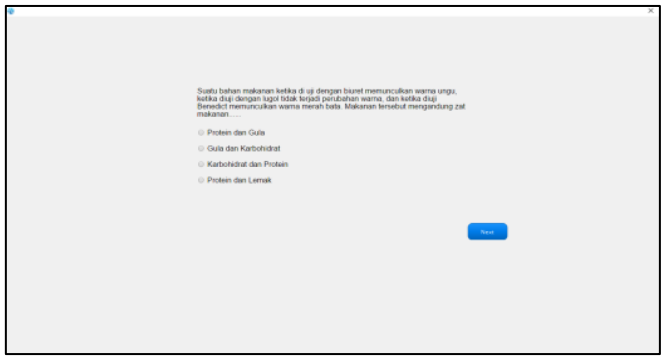

Figure 4 . Show About

After get results research, next done his for test hypothesis in study here, the result data study tested with using the t-test, the selected t- test uses the paired sample t-test. This is a must fulfilled but before do test the data must be normal and homogeneous. Data normality test was performed for look is the data for Upgrade understanding draft normally distributed or no. Normality test performed with using the Kolmogorov-Smirnov test with significance level 0.05. Criteria the test is as following: If Sig. > 0.05 then the data is normally distributed.

Based on from normality test results that have been done with spss 26 experienced enhancement understanding draft where mark significance for class experiment is 0.065. After normality test is carried out , then sample tested using the paired sample t-test with t-test use significance level 0.05. Test this done for prove that occur influence after he did treatment.

Table 2 . Paired Sample t-test

Pretest - Posttest	Means	std. Deviation	std. Error Means	t	df	Sig. (2-tailed)
	-13,428	5,951	1.105	-12,151	29	.000

Based on table above, the data increase understanding draft participant teach in class sig experiment. 2-tailed < 0.005, which is 0.000 means occur enhancement understanding draft participant educate.

This because learning with utilise use application *lecturer inspire* as one of the internal media learning this could implemented no limited by time so that study could done where course and the teacher can guide in a manner direct. Graham (2018) with use application expected for change role from passive normal Becomes now changed role for Becomes active and more independently, however that success control draft the material is also very much determined by the activity in learning.

On learning using learning media application *lecturer inspire* participant educate demanded capable solve problem with method discuss with friend group, participant educate brave put forward idea and believe yourself at the moment present results discussion group. On class experiment completeness study participant educate increase. With thereby learning with using learning media application *lecturer inspire* could Upgrade understanding draft participant educate.

Conclusion

Results and discussion research that has described in chap previously have a number of conclusion in study this including : Research results regarding learning media interactive based Lectora Inspire on the eyes sub system science lesson digestion man to understanding draft student obtained very effective results . Obtained on average from t test results paired sample t-test of -13,428 with sig. (2-tailed) of 0.000, p this state that occur enhancement understanding draft student class VIII C.

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Lead author Agrielsa Alphasati Sinaga contributed designing research, conducting research, and writing research article. The second author, Jumadi Jumadi, plays a role in guiding research to write articles. third author, Suyanta played a role in guiding research to write articles. The fourth author, Nina Khaerunnisa played a role in helping the implementation research and prepare the research instruments used data collection. Fifth author, Sri Rejeki Dwi Astuti contributed to guiding the writing of the article. All the author has read and agrees to the published version of script.

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