

# UTILIZATION OF SYIF'AR DENTAL TOOLS IN LEARNING THE INTRODUCTION OF DENTAL TOOLS TO THE SKILL OF IDENTIFYING TOOLS

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**Abstrak.** The dental health department is a vocational education that produces skilled graduates, so that in the learning process it requires strategies and methods that lead to practice to hone student skills by utilizing information technology. One of the effectiveness in learning can be done using the development of learning media through Augmented Reality technology. Produce the SYIF'AR Dental Tools model as a learning media for the skill of identifying tools. This type of research is a mix method, which is a combination of qualitative and quantitative approaches in producing products. The research collected data with descriptive methods while testing the effectiveness of the product with analytical methods. This research design is Research and Development. The research subjects were 2 groups: Intervention 40 people and Control 40 people. Test data using Wilcoxon and Mann-Whitney. The feasibility test of SYIF 'AR Dental Tools in learning the introduction of dental tools obtained 91% (very feasible). Test the effectiveness of the skill of identifying tools with a p-value of 0.000 (effective). The results of the effectiveness test of unpaired data change value  $\Delta$  26.73 and p value of 0.000 (effective). Augmented reality technology has been made whose application is feasible and effective on the skills of identifying tools in learning the introduction of dental tools in students. The use of augmented reality technology is more effective than the use of printed books.

**Keywords:** Skills, Augmented Reality, Identifying tools

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## INTRODUCTION

Current technological developments indirectly have an impact on people in Indonesia, especially in the development of information and communication technology. Information and communication technology in the digital era is currently developing very quickly which affects various existing media. This encourages humans to be more creative in managing science so that they are able to change the mindset of humans to be able to think effectively and efficiently to be able to keep pace with developments in the world of information and communication technology in the 4.0 era (digital era). The development of information and communication technology currently involves many fields of multimedia because it is effective in conveying information. Multimedia technology can help to create a high-quality learning environment through a variety of media such as text, graphics, sound, animation, including Augmented Reality (AR). Utilization of technology in the multimedia field that is currently developing is augmented reality. AR is currently experiencing very rapid development and has affected various lives, one of which is in the world of health

Behavior is the result of all kinds of experiences and human interactions with the surrounding environment which are manifested in the form of knowledge, attitudes and actions. Behavior is the response of individuals to stimuli that come from outside or from within themselves. Actions that are carried out continuously will create habits that actions that are carried out continuously will form habits

that will eventually become permanent behavior.

Along with the development of technology, educational institutions develop learning strategies by utilizing information technology to increase students' interest in learning, because it is more interesting, and makes students active. The Department of Dental Health is a vocational education that produces skilled graduates, so that in the learning process strategies and methods are needed that lead to practice to hone students' skills by utilizing information technology.<sup>3</sup>

One of the effectiveness in learning can be implemented using the development of learning media through Augmented Reality technology. It is this technology that simulates abstract things in 3D or 2D so that they look real.<sup>4</sup> By using this learning media, the delivery of material on various kinds of dental tools, especially conservation and exodontia tools can be helped.

Augmented Reality is used with the aim of increasing students' learning desires and understanding so that they can increase the value of student learning outcomes when participating in Dental Instrument learning in theory and practice. Where is the experience at DIV when studying Dental Instruments using printed book media and the exam through determination activities there are still students who are declared not to pass / remedial in the learning therefore, in this study will utilize augmented reality technology in learning the introduction of dental tools.

One of the competencies of a dental and oral therapist is to perform limited simple curative measures and chair side assistance.

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This competency requires skills to identify and use dental instruments so that in the learning process students are taught to recognize, maintain and use dental instruments through clinical practice.<sup>5</sup>

The introduction and use of dental equipment in the Department of Dental Health can utilize information technology, one of the technologies that can assist the learning process in the introduction of dental equipment is the use of augmented reality technology.<sup>6</sup>

The concept of Augmented Reality itself was first introduced by Thomas P. Caudell in 1990 in The Term 'Augmented Reality'. There are three characteristics that state that a technology applies the concept of augmented reality, namely being able to combine the real world and the virtual world; able to provide information interactively and in real time, and able to display in three-dimensional form.<sup>7</sup>

Augmented Reality is a technology method that takes the real world as a basis by combining several virtual technologies and adding contextual data so that human understanding as a user becomes clearer. This contextual data can be in the form of audio comments, location data, historical context, or in other forms. <sup>8</sup> The way Augmented Reality works is divided into 4 stages according to Matthias & Kuckelhaus (2014), namely: (1) Capture, At this stage, an image is taken (VideoCapturing). ) using camera media that is directed at the object that is used as a marker. (2) Identification, At this stage, identification of the suitability of the image captured in the capture process will be carried out with the marker image that has been configured with the system. (3) Processing, At this stage, the

testing process is carried out from the results of the previous marker detection process to determine the position of the existing virtual content storage. The position of the virtual content can be identified via markers or by tracking on a GPS depending on how the system is integrated. (4) Visualization, In this last stage virtual content will be displayed. This content can be text, images, videos, and 3D objects.

The use of augmented reality in the world of health in learning and introducing dental equipment was chosen as a medium that is able to help and facilitate students in the learning process. The above statement is reinforced by previous researchers, namely Mayer and Mareno that animation can be used effectively to promote student understanding if its use and application appropriately meets the principles of multimedia learning, research conducted by Lin<sup>9</sup> which says that students who receive learning treatment with visual animation have higher scores on each criterion when compared to students who study using still images. Animation and narration can make people learn better than animation alone,

Augmented Reality has several types and methods depending on the application. In this study the authors use Marker Based Augmented Reality, or what is commonly called image recognition. Because this type of AR requires a special visual object and a camera to scan it. Visual objects can take any form, from printed QR codes to special symbols. This augmented reality device also calculates the position and orientation of the marker to position the content. That way, the marker will

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display a digital animation that can be seen by the user. In this application there is material in the form of a photo object simulation with Augmented Reality technology which will produce a simulation of the introduction of the types of dental tools.<sup>11</sup>

The use of augmented reality applications in the introduction of dental equipment is considered to be able to facilitate the teaching and learning process on campus between lecturers and students besides that it can also be an alternative efficient learning method for users because it is in the form of an application that can only be used via Android smartphones. Meanwhile, the use of other commonly used learning methods, such as books, is considered less effective in the learning process in the midst of technological developments as it is today. The use of AR in the introduction of dental equipment can also provide and develop the latest science and knowledge in medical science, including digital information/digital technology. In other words, this research will apply augmented reality in the application of learning to introduce dental tools.

Based on the background of the problem, it is necessary to research "Utilization of SYIF' AR DENTAL TOOLS in Learning the Introduction of Dental Instruments towards Equipment Identifying Skills."

## **MATERIALS AND METHODS**

This type of research is a mix method, which is a combination of qualitative and quantitative approaches in producing products. This research uses the Research

and Development (R&D) development method. The R&D method is a step in developing a new product or improving existing products to be accounted for. This research and development method is used to produce a product and test the effectiveness of the product.

The analytic method is used to test the effectiveness of the resulting product, while the descriptive method is used to collect data to produce the product.

The Research and Development procedure includes five main steps, namely: (1) Information gathering, (2) Model design, (3) Expert validation and revision, (4) Model trial, and (5) Model results. Information collection includes needs analysis by identifying and analyzing dental tools, namely observation and interview methods, literature studies, data observation results, tools. To test the effectiveness of the model is to use the research design "Quasy experiment Pretest-Posttest Control Group Design" (Sugiyono, 2016). This research will be conducted in Makassar City in April 2022 to May 2022.

## **RESULTS AND DISCUSSION**

The results of the research conducted consisted of five stages including information collection, model design, expert validation and revision, model testing and model results, the results of which will be described as follows.

### **A. Information Gathering**

#### **1. Interview**

The interview method is used to collect information related to the problems that

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occur in the target group. This is done to further explore and seek material for consideration in developing SYIF' AR DENTAL TOOLS on targets, in this case Diploma IV students of JKG Poltekkes Makassar. Interviews were conducted with

dentists in this case including lecturers at the JKG campus, dental and oral therapists and dental nurses (in charge of the clinic). The results of the interviews obtained are as follows:

**Table 1.** Description of the answer from the resource person to the question "How is the introduction of dental equipment learning to students today?"

Source person	Answer	Information Summary
<b>Dentist (JKG Poltekkes Makassar lecturer)</b>	In my opinion, learning about the introduction of tools, which includes dental instrument courses, went well, but because during this pandemic there were several obstacles, because several meetings were held through zoom meetings so that students did not understand what was being taught about introducing dental tools.	Learning the introduction of dental tools to students today requires direct learners so that learning can run effectively and interestingly.
<b>Dental and Oral Therapist</b>	Based on my observations, there are some students who complain about the learning process of introducing dental instruments at this time because it is known that the current learning is not 100% offline where for this learning it is recommended to see the implementation directly so that students can understand better.	
<b>Dental (Clinical Responsible) Nurse</b>	According to my observations, at this time, learning for the introduction of dental equipment is still not running smoothly due to current conditions so that lecturers still teach through zoom meetings.	

**Table 1.** Description of the answer from the resource person to the question "How is the learning method for introducing dental instruments to current students?"

Source person	Answer	Information Summary
<b>Dentist (JKG Lecturer at Poltekkes Makassar)</b>	In my opinion, the current method is quite good by providing printed book facilities to students about dental instruments and making determinations during exams in dental instrument courses.	The right method used for this learning is by utilizing increasingly advanced and sophisticated media so as to create new technology or educational models and make media that is attractive and easily understood by the target.
<b>Dental and Oral Therapist</b>	So far, the learning method for introducing dental instruments to students has been good. Where in addition to being provided with printed book facilities, students can also recognize dental equipment when entering the pre-clinic.	
<b>Dental Nurse (Clinical Responsible)</b>	Based on my observations, currently students are still using the usual learning method, namely with the lecturer teaching in front of the class and students being given printed books which contain dental tools and for this learning students can see directly at the pre-clinical time.	

**Table 2.** Description of the answer from the resource person to the question "What learning media is suitable for use in learning the introduction of dental equipment to students?"

Source person	Answer	Information Summary
<b>Dentist (Lecturer JKG Poltekkes Makassar)</b>	In my opinion, the use of media that is really needed is a media that is more innovative, informative and certainly more interesting for students which can certainly increase student	From all the interviews, the current learning process cannot be separated from the development of increasingly sophisticated technology so that in this

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	learning motivation.	case the media developed is in accordance with the times so that it fits the current era. And by utilizing technology can increase the attractiveness of students to the developed media.
<b>Dental and Oral Therapist</b>	The media commonly used today, as previously said, is to use printed books. But in my opinion, media is needed that is more effective and that can use technology to make it easier and more interesting for students.	
<b>Dental Nurse (Clinical Personnel)</b>	In my opinion, the media is important in carrying out the learning process, it is better if the media used can be more attractive to students which of course can be in line with the times.	

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## B. Model Design

Data collected from information collection conducted on 3 respondents as well as data collected from research journals to design educational models in improving students' knowledge and skills in identifying tools. The results obtained from the collection of information showed that the level of student knowledge of the introduction of dental tools was still low and lacked understanding.

Technological developments affect all aspects of human life. The existence of technology can help and simplify human life. The ease of this technology can also be felt in the world of education. Students and educators are expected to be able to adapt to the speed of technological development so that in the end it will help the learning

process that occurs in the classroom. As the development of technology causes changes in the existing learning system, currently many learning applications, especially multimedia applications are used.

Of the many existing multimedia applications, learning applications for the introduction of dental tools for students are still relatively few. One of the functions of multimedia is to convey information with an attractive combination of media elements to users. The use of 3D animation will certainly make it easier to describe a real object, so that the modeling will feel real. In this case, it will help the learning process for students because the types of tools that will be studied will feel more real and through this media can increase the

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attractiveness of students in the learning process.

Utilization SYIF' AR DENTAL TOOLS was created in an effort to improve skills in identifying dental tools and to facilitate students in the learning process and to obtain information about dental tools.

1. Preparation of "Utilization" SYIF' AR DENTAL TOOLS in Learning the Introduction of Dental Instruments for Tool Identifying Skills was built using the ADDIE system development which consists of several stages, namely:

- a) *Analysis*
- b) *Design*
- c) *Develop*
- d) *Implement*
- e) *evaluate*

2. Output from SYIF' AR DENTAL TOOLS Is was developed with the following menu display:

a. Landing page view

This page is the first page that appears when the user presses the icon of the application. On this page it says "welcome to the dental device introduction application" and the user will be instructed to press the "start" menu

b. Main menu display

This page will display the main menu of this application, namely the menu for augmented reality, consisting of a menu of conservation tools and exodontia making it easier for users to choose each tool.

SYIF' AR DENTAL TOOLS in learning the introduction of dental tools for students was developed by researcher Agung Rezki et al in 2015

with the title "Introduction and Dental Care in Children Using Markless Augmented Reality" which explains that the learning media that has so far been developed is one of them is interactive using digital media such as Augmented Reality. This learning media can be used as a medium in teaching activities and can be used as a means for students to learn more interactively and independently.

Printed media for dental equipment from a book made by a lecturer at JKG Poltekkes Makassar, namely drg. Ernie Thioritz M.Mkes and drg. Surya Irayani M.Kes which is currently being developed using Augmented Reality technology in an effort to create learning media for the introduction of dental equipment with the aim of providing solutions to make it easier for students to obtain information and knowledge about dental equipment.

### C. Expert Validation

There are 3 expert validators who conduct testing on the developed media, namely: Dr. Imam Sarwo Edi, S.SiT., M.Pd as an expert who tested the feasibility of the developed media, drg. Ernie Thioritz, M.Mkes as a dental instrument expert and Dr. eng. Armin Lawi, S.Si., M.Eng as an IT (Information and Technology) expert. This expert validation activity is carried out by filling out an assessment questionnaire containing 20 question points that must be filled in by each expert validator

Based on the results of the assessment

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of 3 expert validators, it is known that the distribution of data on the frequency of IT experts is 91%, media feasibility experts are 91%, and dental instrument experts are 91% with a very feasible category to apply. The results of expert validation show that the p-value is 0.000 which means SYIF' AR DENTAL TOOLS in learning the introduction of dental instruments to skills in identifying relevant and appropriate tools as learning media for students.

#### D. Test Model

Trial use SYIF' AR DENTAL TOOLS in Learning Dental Instrument Recognition for Tool Identifying Skills was carried out using a quasi-experimental method with a pretest-posttest control group research design. This research was conducted at the Makassar Health Polytechnic Department of Dental Nursing, which is located on Jalan Karunrung, Kec. Rappocini, Makassar City, South Sulawesi, precisely in class B Tk II which was selected as the intervention group and in class A Tk II which was selected as the control group in this study.

This study has a pilot objective, namely to determine the effectiveness of

**Table 3.** Frequency Distribution of Respondents' Characteristics of Intervention and Control

Variable	Intervention Group		Control Group		Homogeneity
	n	(%)	n	(%)	
Learning achievement					
>80	26	65	20	50	0.750
<80	14	35	20	50	0.747

The results of the respondent

augmented reality technology as a learning medium to increase knowledge and skills in identifying dental equipment for Diploma IV students of JKG Poltekkes Makassar. Testing of this model was carried out on two different groups, this was done to determine the effectiveness of the resulting technology. The first group as the intervention group was given treatment using Augmented Reality technology regarding the material of dental tools, especially conservation and exodontia devices which were distributed to each study sample and the second group as a control group who received treatment using printed books.

#### 1. Univariate Analysis

The model test in this study was conducted on 80 Diploma IV JKG Poltekkes Makassar students consisting of 40 students from class B Tk II as an intervention group given augmented reality technology and 40 students from class A Tk II as a control group given printed book media. The general description of respondents is presented in the following table:

characteristic test in table 5 know the frequency of respondents based on

learning achievement in the intervention group, namely test scores > 80 as many as 26 students (65%) and test scores <80 as many as 14 (35%) and in the control group, namely test scores > 80 as many as 20 students (50%) and test scores >80 as many as 20 students (50%).

Based on the data from the homogeneity test, it shows that the learning achievement variable in the intervention and control groups has a p value > 0.05 so it can be concluded that the learning achievement variable in the intervention and control groups is homogeneous.

1. Bivariate Analysis

Bivariate analysis was used to test the differences between the two variables, in the early stages of model testing, it was carried out by conducting a normality test first and then testing the effectiveness of paired and unpaired variables.

a. Normality test

Normality test is a test carried out with the aim of determining whether

the data collected on each variable is normally distributed or not. This test uses the Kolmogrov-Smirnov method because the number of samples in this study is more than 50 samples

**Table 4. Normality Test of Data in the Intervention and Control Group**

Variable	p-value*	
	Intervention	Control
Skill Pre Test	0.001	0.002
Skills Post Test	0.000	0.035

Based on the results of the normality test, the data in table 6 shows that the pre-post skill variables in the intervention and control groups are not normally distributed because the p value <0.05, then the data analysis will be continued using non-parametric statistical analysis, namely the Wilcoxon test in paired test and test. Mann-Whitney in the unpaired test to see the difference in the effectiveness of the two groups.

**Table 5. The Average Score of Skills in Identifying Tools in the Intervention and Control Group**

Variable	Mean	SD Stats		
		SD	Min.	Max.
<b>Intervention</b>				
Pre test Skills	52.58	11.249	33	77
Post test skills	79.31	12,375	51	95
<b>Control</b>				
Pre test Skills	47.52	10,590	26	68
Post test skills	61.77	10,561	44	88

The descriptive results from table 7 show that the mean score of student skills in the intervention group increased by

52.58 to 79.31 and for the control group increased from 47.52 to 61.77

**Table 6.** Test the Effectiveness of Skills in Identifying Tools in the Intervention and Control Group

Group	Mean±SD		p-value
	Pre-Test	Post Test	
Intervention	52.58±11,	79.31±12	0.00
	249	.375	0*
Control	47,52±10,	61.77±10	0.00
	590	.561	0*
Unpaired test			
	Mean±SD		p-value
Group	Intervention	Control	0.00
	on		0**
Post	79.31±12	61.77±10.	0.00
	.375	561	0**
□	26.73	14.24	

\*Wilcoxon \*\*Mann-Whitney

Based on table 8 the results of the paired data effectiveness test of student skills variables show the p-value of the intervention group is 0.000 ( $p < 0.05$ ) meaning SYIF' AR DENTAL TOOLS in learning the introduction of dental tools is effective in improving students' skills in identifying tools. The p-value of the control group's skills was 0.000 ( $p < 0.05$ ), meaning that the media used in the control group was effective on student skills.

The results of the unpaired data effectiveness test of the unpaired data skill variable in the intervention and control groups were 0.000 ( $p < 0.05$ ) meaning SYIF' AR DENTAL TOOLS in learning the introduction of dental tools is effective in improving students' skills.

The results of the unpaired test of the change value ( $\Delta$ ) of the effective pre-post

test with a p-value of 0.000 ( $p < 0.05$ ) means that it shows a significant increase in skills. This is evidenced by the increase in the average value of the difference in the intervention group is greater than the control group, which is 26.73 while in the control group it is 14.24

### E. Product Results

The resulting product is one of the innovations in the learning process of introducing technology-based dental tools and is expected to be able to increase students' knowledge and skills in identifying dental instruments.

## DISCUSSION

### A. SYIF' AR DENTAL TOOLS .

#### Augmented Reality Models

The collection of information resulted in the conclusion that the role of learning media in the learning and teaching process is an integral part that cannot be separated from the world of education. Learning media is one of the teaching aids for educators to deliver teaching materials, increase creativity and increase students' attention in the learning process. (Tafonao, nd)

In a learning process, of course, it is not only done with theory but also with practice. Practical learning is a process to improve the skills of students with various methods in accordance with the skills provided and the equipment used. Knowledge of tools is one of the important factors to support practical activities. Students will be skilled in practice if they have knowledge of practical tools which include the name of the tool, the function of the tool, and how to use it (Ayuni et al., 2018).

The technology offered in developing learning media is Augmented Reality (AR). AR is a promising technology that encourages students to explore learning materials from new perspectives. AR can also be implemented on Android-based smartphones, making it easier to learn both inside and outside the teaching and learning process. In addition, students can learn independently wherever and whenever. (Fitri Ayu, Des Suryani, Muhammad, 2014)

The validation results from several experts show that the average value of the three experts is 91% with a very feasible category and the p-value is 0.000 ( $p < 0.05$ ) yes in the intervention group means augmented reality technology in the introduction of dental tools This is worthy of being used as a learning medium for students. This is considered important in developing a learning model to assess the feasibility of the theory, concepts developed and the feasibility of the model itself so that the resulting model can be useful for its users. (Yuberti, 2014)

The application of augmented reality to the introduction of dental tools in the intervention group can be used as a learning medium that can be used during teaching and learning activities that have an attractive appearance and easy-to-understand material so that students can know and recognize dental tools. properly and correctly.

#### **B. Test the Effectiveness of SYIF' AR DENTAL TOOLS on Tool Identifying Skills**

The results of testing the effectiveness of data on paired variables

using the Wilcoxon test, it is known that the p-value in the intervention group has increased with a value ( $p < 0.05$ ), which means SYIF' AR DENTAL TOOLS in learning the introduction of dental tools that were applied to the intervention group was effective in improving students' skills in identifying tools. And in the control group that was given the printed book treatment did not experience an increase in skills which was known from the value ( $p > 0.05$ ). The success of augmented reality technology in learning the introduction of dental instruments can also be seen from the results of the unpaired effectiveness test using the Mann-Whitney test of pre-post test skills in the intervention group with a value of ( $p < 0.05$ ) and in the control group with a value of ( $p < 0.05$ )  $p > 0$ ,

The increase in skills that occurred in the intervention group was caused by: SYIF' AR DENTAL TOOLS introduction of dental tools was developed based on target needs and educational materials were packaged into attractive and easy-to-understand applications. The material contained in augmented reality technology for the introduction of dental tools is in the form of the characteristics and uses of each tool.

Development is a scientific and technological activity that aims to utilize scientific principles and theories that have been proven to be true to improve the functions, benefits, and applications of existing science and technology or to produce new technologies. (Ma'ruf, 2021)

Knowledge is one of the foundations

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for students to help overcome and also solve a problem and one of the factors that influence knowledge is the acceptance of information and knowledge is an important part that can shape one's behavior.(Rahmawati, 2021)

Skill is a response from the target self to his behavior. One of the things that educators must develop in the learning process is learning media. Media is any person, material, tool, or event that can create conditions that enable learning to receive knowledge, attitudes and skills. This is in line with research conducted by Wahyu Nur Hidayat et al in 2019 which explained that a person's skills affect the learning process. Augmented reality technology is one of the digital technologies that has the potential to be developed and applied in education.(Hidayat et al., 2019)

According to research from Ilmawan Mustaqim entitled "Utilization of Augmented Reality as a Learning Media" explains that augmented reality can be defined as a technology that is able to combine virtual or two-dimensional or three-dimensional objects into a real environment and then bring it up in real time. AR can be used to help visualize abstract concepts for understanding and structure an object model. In this case it is the same as research that has been done by researchers who use augmented reality technology in learning the introduction of dental tools, especially conservation and exodontia tools so that users can visualize the tools they want to learn because in general the way augmented reality works is by scanning the marker/barcode. then it

will produce three-dimensional images and especially in applications developed by researchers also include a menu of features and uses of the tool so that users or targets can better understand the material from the application. Then when compared with the learning method using printed books,

Based on the research of Dwi Rezky Agung et al with the title "Introduction and Dental Care in Children Using Markerless Augmented Reality" explained that applications made through augmented reality technology were successfully used as a tool to introduce types of teeth and procedures for caring for children's teeth. This is evidenced by more than 90% of students being able to recognize several types of teeth and procedures for taking good care of teeth and this application is more attractive to students in recognizing types of teeth and procedures for caring for teeth rather than using books. This is evidenced by more than 88% of students choosing to be interested in learning about the types of teeth and procedures for caring for teeth using applications. So it can be concluded that the use of augmented reality in learning is effective compared to using books.

Skills are also related to one's learning achievement because the indicator of a successful learning process so far is an increase in learning achievement, so that the learning achievement of students can be used as feedback that can be used by teachers to evaluate activities during the learning process that has been carried out. It is

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known that learning achievement is the mastery or skill developed by the subject, usually indicated by the value/number given by the teacher. Factors that influence learning achievement are internal and external factors.

## CONCLUSIONS

Based on the results of the study, it can be concluded that SYIF' AR DENTAL TOOLS in learning the introduction of dental tools is feasible and effective to improve skills in identifying dental tools for students, as evidenced by: 1) The SYIF' AR DENTAL TOOLS model in dental instrument recognition learning is feasible to be used as a tool recognition learning medium, as evidenced by the p-value 0.000 ( $p < 0.05$ ). 2) The SYIF' AR DENTAL TOOLS model is effective in improving skills in identifying tools compared to the control group, as evidenced by the p-value of 0.000 ( $p < 0.05$ ).

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