Development of Web-Based Learning Media in Western Bridal Makeup Course at Make-Up and Beauty Education Department

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A B S T R A K

Sarana pendidikan berbasis internet dapat digunakan sebagai sarana penyampaian pembelajaran yang mengandalkan segi kepraktisan serta mudah diakses di manapun dan kapanpun. Selain itu, media pembelajaran ini memungkinkan pembelajaran jarak jauh atau penyampaian informasi antara dosen dan mahasiswa. Tata Rias Pengantin Barat adalah mata kuliah wajib di prodi pendidikan. Penelitian ini bertujuan untuk a) mengembangkan produk media pembelajaran berbasis *web* pada materi basis data untuk jurusan Pendidikan Tata Rias dan Kecantikan Universitas Negeri Padang melalui proses pengembanganmedia, b) mendapatkan informasi tentang kelayakan produk media pembelajaran berbasis *web* pada materi basis data yang digunakan sebagai penunjang dalam pembelajaran basis data di jurusan Pendidikan Tata Rias dan Kecantikan Universitas Negeri Padang. Penelitian ini menggunakan metode pengujian *alpha* (*alpha testing*). Subjek penelitian dalam *alpha testing* adalah 2 orang ahli media dan 2 orang ahli materi, sedangkan subjek penelitian pada *beta testing* adalah 32 orang mahasiswa jurusan Pendidikan Tata Rias dan Kecantikan Universitas Negeri Padang. Data diperoleh dengan menggunaakan instrumen *test* untuk menguji efektivitas dan instrumen *non-test* untuk menguji validitas dan praktikalitas dalam proses penelitian. Berdasarkan hasil media pembelajaran yang dikembangkan menghasilkan media yang valid dari sisi media (desain) dengan nilai 0,936 dan valid dari sisi materi dengan nilai 0,875 oleh ahli media dan ahli materi dan dari sisi praktikalitas media yang dikembangkan memiliki tingkat praktikalitas yang praktis dengan persentasi 95%, dari uji beta diperoleh 100% sangat layak. Implikasi dari penerapan media ini dapat meningkatkan pemanfaatan media pembelajaran sebagai bahan ajar yang independen, *mobile*, dan interaktif oleh dosen, sehingga membantu dosen dalam menyampaikan materi pembelajaran.

A B S T R A C T

Internet-based educational facilities can be used as a means of delivering learning that relies on practical aspects and is easily accessible anywhere and anytime. In addition, this learning media enables distance learning or the delivery of information between lecturers and students. Western Bridal Make Up is a compulsory subject in an education program. This study aims to a) develop web-based learning media products on database materials for the Department of Makeup and Beauty Education at Universitas Negeri Padang through the process of developing media, b) obtain information about the feasibility of web-based learning media products on database materials used as support in database learning in the Department of Makeup and Beauty Education, Universitas Negeri Padang.This research uses alpha testing method (alpha testing). The research subjects in alpha testing were 2 media experts and 2 material experts, while the research subjects in beta testing were 32 students majoring in Makeup and Beauty Education, Padang State University. Data obtained by using test instruments to test the effectiveness and non-test instruments to test the validity and practicality in the research process. Based on the results of the developed learning media produces valid media in terms of media (design) with a value of 0.918 and valid from the material side with a value of 0.875 by media experts and material experts and from the practical side of the media developed has a practical level of practicality with a percentage of 95%, from the beta test obtained 100% very feasible. The implications of the application of this media can increase the use of instructional media as teaching material that is independent, mobile, and interactive by lecturers, thus helping lecturers in delivering learning material.

Introduction

Information technology brings huge changes in all aspects of life (Gede et al., 2018). Along with the development of information and communication technologies to improve the quality of other educational efforts can be made through the integration of ICT in activity based learning known as information and communication technology. Through the facilities provided by the system, learners can explore and elaborate an effective and efficient learning. Technology and Vocational Education is education that prepared students to have expertise and

skills in their fields and ready to face the challenges in life in the current era of globalization. Technological and Vocational Education is education that equips graduates with certain competencies to be ready to use in a particular field of work. To produce quality graduates, it is necessary to improve the quality of education by improving the quality of education (Dani et al., 2019; Yayuk & Sugiyono, 2019). Improving the quality of education can be done by improving the learning process in educational institutions both school and college (Yayuk & Sugiyono, 2019). Universitas Negeri Padang as an educational institution with a mission to improve the quality of education.

To achieve this mission, one of them is pursued by a quality learning process in accordance with the development of science and technology, one of which is the learning process through web-based learning media. The web is a system that provides all information, including text, images, animation, sound, and / or a combination of these, both static and dynamic (Rahayu et al., 2019; Qondias et al., 2016; Divayana et al. ., 2016; Nugroho, 2012). The rapid development of technology has made many universities support the use of technology in learning, especially the internet. Based on observations in 2020 in Universitas negeri Padang showed that the university has been equipped with computer laboratories with internet facilities and hotspots that allow students to access the internet through a computer, notebook or smartphone. Unfortunately, these facilities have not been able utilized well by all citizens of the campus. Internet is used more to access social media (facebook, twitter, yahoo messenger, skype, etc.). The situation becomes ironic when students' interest in accessing the internet is high but there are not learning media supported and directed the students to effective independent learning.

The students did not use the internet optimally. Because of the ease in accessing information and data, it is misused to search information that contains negative elements and things that are not related to learning such as online gaming, online shop, YouTube, and social networking. The use of the internet as an entertainment is normal, but if it spends a lot of time it will interfere the effectiveness of students in learning. Based on the results of observations by researchers at the Faculty of Education, Universitas Negeri Padang in February 2017, researchers found students use wifi or internet networks by smartphones or laptops for various things: opening social media, YouTube, downloading music and videos or movies, online games, online shopping, online ticket ordering, doing tasks by opening search engines, e-mailing, and reading articles. There are students on campus who spend a lot of time use the internet just to play games and watch movies. It is not uncommon for students to use the internet outside of educational media during study hours. The results of data collection and processing use a Likert scale through internet utilization instruments. The research data can be seen in Table 1 as follows.

Table 1. Distribution of frequency and percentage of internet use for learning by category (n = 244)

Interval Score	Category	F	%
115 – 135	Very Precise	2	0.8
93 – 114	Precise	153	62.7
71 – 92	Enough Precise	89	36.5
49 – 70	Not Precise	0	0
27 – 48	Very imprecise	0	0
Total score		**244**	**100**

Based on Table 1, most of them use the proportional stratified random sampling technique. The instrument used was a Likert scale. To find out the contribution of independent variables to the dependent variable, the data analyzed by regression of students in using the internet properly for learning, which was 62.7%, some students use the internet in the fairly precise category, 36.5%, and only a few students were very precise in using the internet which is 0.8%. Students use the internet to find information with appropriate use. Judging by each indicator, there are still quite precise and precise categories. For indicators that are categorized quite right, it is necessary to make improvements. All students have the right use of the internet. Meanwhile, the right indicators need to be maintained. The internet that sometimes used by students: (1) Looking for references in the form of e-books, e-journals, and so on; (2) discussion through social networks and so on, as well as; (3) Internet update. Based on this data, it can be seen that students do not use the internet to find scientific references such as e-journals and e-books, social networks not used to discuss lessons, and students not use information on the internet to make learning easier and find information or data. Based on observations and interviews with Beauty Education lecturers, students in International Bridal Makeup course still confused about the characteristics of international bridal make-up with other make-up such as Javanese bridal make-up, make-up stage, and so on. Mandalika, 2018 in his research entitled The Effect of Correction of Slanted Eyes on Western Bridal Makeup states that western bridal make-up has its own characteristics. Students generally think that international bridal make-up and other make-up was not different, even though international bridal make-up should have its own characteristics, from the color selection of the cosmetics, the way of applying the cosmetics, the clothes, and so on. In addition, the results of observations

and interviews with lecturers who teach the International Bridal Makeup course, showed that the average score obtained by students not A. It occurs because there are various problems in learning international bridal make-up. It often seen that students are less active and less attention to the material presented through Power Point media which contains examples of pictures of international bridal makeup.

Based on these problems, internet-based education facilities can be used to deliver learning that relies on practicality and easily accessible anywhere and anytime. This is in line with the research conducted (Priyambodo et al., 2012) that there is a significant effect of web-based interactive learning media on student learning motivation. This learning media allows distance learning or the delivery of information between lecturers and students. Therefore, to overcome these problems, innovative and interactive learning is needed to improve in understanding material and skills as well as increase student motivation. The lack of clear material and the material presented in the learning process can be aided by presenting the media as intermediary. The complexity of the material presented to students can be simplified with media. Web-based media which contains examples of international bridal makeup images that have been used as to deliver material has been developed into a media for international bridal make-up videos, western bridal makeup teaching materials, western bridal makeup power points, western wedding teaching materials photos and interactive questions on learning western bride courses which are expected to increase motivation, interest and new enthusiasm to learning for students.

Western Bridal Makeup is a compulsory subject in Makeup and Beauty education program, Universitas Negeri Padang. Western bridal make-up is a lesson that requires imagination and logic. Learning Outcomes related to KKNI, students are able to analyze (aspects of knowledge) to understand of western bridal make-up concepts which include: the notion of western wedding and bridal make-up (long dress), the differences between western bridal make-up and traditional brides. The history of the wedding dress and its development, wedding ceremonies, selection of clothing and accessories, knowledge of cosmetics and makeup tools. The ability (skill aspect) in make-up corrective techniques, make-up designs, bridal hairstyles, hand bouquet arranging and being able to make up western brides as well as carrying out western bridal make-up shows by showing a responsible, honest and responsible attitude (attitude aspect).

Based on the description above, the student learning outcomes are still not optimal. The application of learning with Web media is one of the alternative methods that can use to develop student skills and at the same time. It possible to maximize student learning outcomes, so it necessary to conduct research on "Development of Web-Based Learning Media in Western Bridal Makeup Course in Makeup and the Beauty Department at Universitas Negeri Padang". This research was carried out to develop web-based learning media products on database material for Make-up and Beauty Education Department at Universitas Negeri Padang through the media development process and get information about the feasibility of web-based learning media products on database material used as supporting learning database in Department of Makeup and Beauty Education, Universitas Negeri Padang.

Method

This research was research and development or R&D. The development of learning media was based on Multimedia-based Instructional Design through the ADDIE model which includes Assessment / Analysis, Design, Development, Implementation and Evaluation (Branch, 2009). The ADDIE model used in this study because the ADDIE model has systematic stages based on a theoretical learning design. The ADDIE model was an effort to overcome learning problems, especially in learning resources that developed characteristics and needs of students and learning materials. This research was conducted in the Makeup and Beauty Education Department, Universitas Negeri Padang. Research subjects in alpha testing were 2 media experts and 2 material experts to test aspects of software engineering, learning design and visual communication. Meanwhile, the research subjects for beta testing were 32 students at Make-up and Beauty Education, Universitas Negeri Padang. Data collected through a non-test instrument in the form of a closed questionnaire with 5 answers. The following is a table of 5 answers to the questionnaire.

Tabel 2. Answer score data

Answer	
Very Good	5
Good	4
Doubt	3
Not Good	2

Result and Discussion

This research was development of media web. This research's subjects in alpha testing were 2 media experts and 2 material experts to test aspects of software engineering, learning design and visual communication. Meanwhile, the research subjects for beta testing were 32 students at Make-up and Beauty Education, Universitas Negeri Padang.

Table 3. Frequency distribution of non-practical trials

Classification	Category	F	%
81-100%	Very Feasible	19	95.0
61-80%	Feasible	1	5.0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 4 above, it can be explained that in the non-practicality test instrument trial in the western bridal makeup course in Makeup and Beauty Department which carried out 20 students of Makeup and Beauty Department, Universitas Negeri Padang assessed that non-practical media tests scored Very feasible, namely 19 people (95%) and 1 person (5%) considered it feasible. The category of eligibility frequency distribution of web-based media practical tests can be described as follows:

Table 4. Distribusi frekuensi tes pratikalis media berbasis *web*

Classification	Category	F	%
81-100%	Very Feasible	19	95.0
61-80%	Feasible	1	5.0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 5 above, it can be explained that the web-based media practicality test in western bridal make-up course at Makeup and Beauty Department which carried out on 20 students of the Makeup and Beauty Department, Universitas Negeri Padang assessed that the web media practicalist test was scored Very feasible, 19 people (95%) and 1 person (5%) considered it feasible. The results of descriptive data in this study are the results of the practicality test of the beta test of web media in the western bridal makeup course in the Department of Makeup and Beauty, Universitas Negeri Padang. The data described in the form of frequency distribution on 19 statement items with 20 students. For more details, see the following description:

Table 5. The frequency distribution in practicality of the web media beta test

Classification	Category	F	%
81-100%	Very Feasible	20	100
61-80%	Feasible	1	0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 6 above it can be explained that in the practicality of the beta test in the development of web-based media learning in the western bridal makeup course at Makeup and Beauty Department which has been carried out on 20 students at Makeup and Beauty Department, Universitas Negeri Padang, all of them considered that practical web media beta test is very feasible (100%). The elaboration of these results, the understanding of the students at Makeup and Beauty Department Universitas Negeri Padang about western bride make-up before the development of web-based media learning explained by presenting the results:

Table **6.** The frequency distribution of the western bridal make-up pretest before the practicality of web media

Classification	Category	F	%
81-100%	Very Feasible	1	5.0
61-80%	Feasible	19	95.0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 7 above, it can be explained that in practical pretest testing of Makeup and Beauty web media that carried out on 20 students at Make-up and Beauty Department, Universitas Negeri Padang, the most respondents considered it feasible, 19 people (95%) and 1-person (5%) rate very feasible. These results elaboration, the understanding of the students at Makeup and Beauty Department, Universitas Negeri Padang, describes the test instrument for the effectiveness of the western bridal make-up in developing web-based media learning with the presentation of the following results:

Table 7. Frequency distribution of test instrument effectiveness testing on western bridal make-up

Classification	Category	F	%
81-100%	Very Feasible	20	100
61-80%	Feasible	0	0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 8 above, it can be explained that trial test instrument of the effectiveness of Makeup and Beauty web media which carried out on 20 students Make-up and Beauty Department, Universitas Negeri Padang, all students considered it very feasible. (100%). The elaboration of these results describes the effectiveness of web trials at Makeup and Beauty Department, Universitas Negeri Padang on the make-up of the western bride in developing web-based media learning with the following results:

Table 8. Frequency distribution of effectiveness of web trials on understanding of western bridal make-up

Classification	Category	F	%
81-100%	Very Feasible	20	100
61-80%	Feasible	0	0
41-60%	Enough	0	0
21-40%	Not Feasible	0	0
0-20%	Very unworthy	0	0
Total Score		**20**	**100**

Based on table 9 above, it can be explained that the web media effectiveness test on the understanding of Make-up and Beauty that carried out on 20 students at Make-up and Beauty Department, Universitas Negeri Padang, all students considered it very feasible. (100%).

Discussion

The implementation of learning in the classroom during the research process runs smoothly in accordance with the RPP of the TSTS learning model assisted by the mind mapping method. Meetings in research have been held 6 times in the experimental class and also 6 times in the control class. At the end of the study, the two-class groups carried out a post-test with the same questions regarding the material that had been taught. After giving different treatments, data from the research results can be obtained and analyzed descriptively and inferentially. The descriptive test result data is presented in the following table.

Table 3. Descriptive Test Result Data

Analysis	Result of *Post-test* Data	
	Experiment Group	Control Group
Amount of Data (n)	36	36
Minimum Score	56,7	40
Maximum Score	100	93,3
Mean	79,06	68,75
Median	79,4	68,3
Modus	87,4	62,9

Based on the results of the analysis presented in table 2, it was found that the post-test average score of the experimental group was higher than the post-test score of the control group. Therefore, it can be concluded that there is an increase in student science learning outcomes when using the TSTS learning model assisted by the mind mapping method. Furthermore, the prerequisite test is carried out, namely the normality test, homogeneity test, and hypothesis testing. The results of the normality test can be presented in the following table.

Table 4. Normality Test and Homogeneity Test

Normality Test				
Group	**Significant Level**	**X^2 -count**	**X^2 -table**	**Decision**
Experiment	0,05	6,6993	7,815	Normal
Control	0,05	4,1748	7,815	Normal
Homogeneity Test				
Homogeneous Terms	**F**	**$_{\text{-count}}$ $_{\text{F-table}}$**	**Simpulan**	
$F_{\text{-count}} < F_{\text{-table}}$	1,20	1,69	Homogenous	

Based on table 4, it is concluded that the post-test result data of the experimental group and the control group are normally distributed. The homogeneity test shows that the value of F-count = 1.20. This value was compared with the F-table price of 1.69 at the 5% significance level. This shows that F-count <F-table, it can be concluded that the post-test data of class V students' science learning outcomes between the experimental and control classes has a homogeneous variant.After the prerequisite test has been carried out and it has met the criteria, then the hypothesis is tested using the t-test formula (polled variance), the results of which are presented in the following table.

Table 6. Hypothesis Test

No	Sample	N	dk	Mean	$t_{\text{-count}}$	$t_{\text{-table}}$	Information
1	Class VA SDN 1 Dajan Peken	36	70	79,06	3,20	1,99346	H_0 rejected
2	Class VB SDN 1 Dajan Peken	36		68,75			H_a accepted

From the t-test analysis, the results obtained t-count = 3.20. With a significance level of 5% and dk = 70, then the price of t-table = 1.99346 (t-count = 3.20> t table = 1.99346). This shows that H0 is rejected. This shows that the TSTS learning model assisted by the mind mapping method is effectively used to improve science learning outcomes compared to groups of students who are taught with conventional learning models in fifth-grade students of SD Negeri 1 Dajan Peken, Tabanan District, Academic Year 2019/2020.Based on the results of the analysis using the t-test formula (polled variance) and obtained t-count = 3,920. Then, the price of t count is compared with the price of t-table with dk = 70 at a significance level of 5% (0.05), obtained t table = 1.99444. Because t-count (3,920) t-table = 1.99444 then H0 is rejected and Ha is accepted. This shows that it means that the learning outcomes of grade V students at Public Elementary School 1 Dajan Peken, Tabanan District, 2019/2020 Academic Year in science learning using the two stay two stray learning model assisted by the mind mapping method are greater than using conventional learning models on the theme of Events in Life. The calculation of the analysis obtained data results showing that the average score of students who were taught using the two stay two stray learning model assisted by the mind mapping method (79.06) and those taught using the conventional learning model (68.75) had a difference of 10, 31. Thus there is a significant difference between the science learning outcomes of class V SD Negeri 1 Dajan Peken students who take part in learning using the two stay two

stray learning model assisted by the mind mapping method with groups of students who are taught with conventional learning models on the theme of Events in Life. Several things were found in research, namely, students getting special experiences, developing cooperation skills, and interaction between students because through these interactions students are directly involved in learning so that students can explore their knowledge and can improve learning outcomes. This concurs with the statement from (Suyanti, 2017) which states that interaction between students can improve learning outcomes. With good interaction between learning components, it will make it easier for Sissa to receive learning material.

In the preparatory stage, the formation of heterogeneous groups of student learning with each group consisting of 4 people. Through group learning, students' ability to interact can develop. It is known together that the formation of small groups is a heterogeneous syntax of cooperative learning models. One of the cooperative learning models is the TSTS learning model. Huda (Arthaningsih, 2018) explained that the purpose of the heterogeneous group arrangement is to allow students to mutually teach and discuss with their friends. Through these discussions, the interaction will arise between students to exchange information with each other (Isjoni, 2016). This can support student learning success and is more effective than just teaching given by the teacher. Based on this, student learning outcomes can increase due to these interactions.

At the teacher's presentation stage, before entering the material, the teacher gives an apperception to provoke students with several questions and link them to the material to be studied. The giving of this apperception greatly affects the readiness of students in receiving the next material. Apperception that is right can deliver students in a sustainable pattern of thinking. In line with the opinion expressed by Mansur (2015) that apperception is very important because it is a stimulus to attract students' attention and makes learning more effective so that students understand the material being taught easier. Trianto (Safitri, 2020) argued that the material presented in science content is related to everyday life, it will be easier to learn and understand if the teacher first gives apperception.

The collaboration of these models and methods has a positive impact on learning outcomes due to the advantages of these models and methods. The advantages of the two stay two stray assisted mind mapping learning model that have been carried out in this study, namely by applying the two stay two stray model assisted by mind mapping students are more able to develop the ability to work with other students and provide special experiences because students are directly involved in learning so that they can explore their knowledge. In general, elementary students enjoy feeling or doing something directly and enjoy playing (Khaulani et al., 2020).

By using the TSTS model students become more active, able to work with teams, and learn responsibly with the tasks they get in their study groups. Good cooperation produces good results too. Likewise, in this case, cooperation between students can foster students' enthusiasm for learning so that learning becomes fun. Students are very enthusiastic about learning and students also find it easier to understand the material being taught.

In addition, another advantage of the application of the two stay two stray learning model assisted by mind mapping that has been carried out is the mind mapping method that can present images with attractive shapes and use bright colors. Elementary school-age students are not yet able to face abstract things but can understand mathematical symbols (Alvin, 2015). (Hidayat et al., 2020) also explained that the application of this model is more emphasized on combining colors and shapes so that it looks attractive. The use of images with interesting shapes in mind mapping can increase student motivation so that students can more easily understand the images presented. The images used in mind mapping can help students' brains to organize, remember, compare, and make connections between materials. This statement is in accordance with the opinion (Muhamad Husni, 2018; Pratama & Yuniar, 2017; Suruni, 2018) that is, the combination of shapes and colors helps the brain to absorb information. Mind mapping can be designed according to the material needs that must be taught to students. With a variety of designs, the brain will find it easier to absorb information, and students' willingness to accept the material will be better.

With the application of the two stay two stray learning model assisted by mind mapping, students are more able to develop their collaboration skills with the team. This collaboration is one of the characteristics of the implementation of the two stay two stray learning model assisted by the mind mapping method. Through good cooperation, work can be completed faster, in this case, namely making a mind mapping of the material obtained. This collaboration makes each individual have their respective responsibilities. The learning process can run effectively because students can work together with their groups both in discussion and in the distribution of tasks so that the application of this model becomes very enjoyable. This concurs with Fatmawati (N. Handayani, 2018) which states that applying the two stay two stray learning models can provide students to create creativity in communicating related to the material so that learning becomes meaningful. Based on these findings, it can be stated that through group formation, students can study together with their friends and can develop interaction between students through small discussions within the group. The development of students 'ability to interact, the knowledge possessed by each individual is also developing, even the students' insights have increased towards the learning material. This has a positive impact on student learning outcomes. In addition, apperception is also said

to be a benchmark in improving student learning outcomes. Giving precise and easy to understand perceptions, able to deliver and guide students to the material discussed next. Through this perception, students can more easily understand the subject matter so that the material can be well absorbed by students.

The superiority of the mind mapping-assisted two-stay two-stray learning model which is associated with the theory of the characteristics of elementary school students can support the research of the two stay two-stray-assisted mind mapping learning model that has been carried out because the two stay two-stray-assisted mind mapping learning model that has been designed has been adjusted to The needs and characteristics of elementary school students so that the application of the two stay two stray learning model assisted by mind mapping can be optimally applied in learning activities. Through this treatment, students become more active, able to work with teams and learn responsibly with the tasks they get in their study groups. Good cooperation produces good results too. Likewise, in this case, cooperation between students is able to foster students' enthusiasm for learning so that learning becomes fun. Students are very enthusiastic about learning and students also find it easier to understand the material being taught. according to the opinion of (Suyanti, 2017), Interaction between students can improve student learning outcomes because students are able to explore their knowledge. If there is no interaction between students, then students become bored quickly and are not enthusiastic in learning, thus making students have difficulty understanding the subject matter given. This will have an impact on student learning outcomes. This research is in line with research conducted by (Juniantari, 2019).

Based on the results of data analysis, the study explained that the two stay two stray cooperative learning model assisted by mind mapping on the social studies learning outcomes of fourth-grade elementary school students in the VIII cluster, Sukasada District, 2017/2018 academic year can improve student learning outcomes. These results are proven based on the results of hypothesis testing with the acquisition of a t-count (3.53)> t -table (2.04). Therefore, the two stay two stray learning model assisted by mind mapping can improve student learning outcomes (Juniantari, 2019). Research conducted by (Batubara, 2019) is also in line with this research. This research states that learning using the TSTS model can improve student learning outcomes in grade IV with the sub-theme of "Diversity of Ethnic and Religious Diversity in My Country" at SD Negeri 7 Langsa. In this study, the results obtained through hypothesis testing obtained t-count (6.955)> t-table (2.0588). Based on the hypothesis test, it can be concluded that the TSTS model can improve student learning outcomes (Batubara et al., 2019). In addition, research that is in line with the results of this study is research conducted by (Karlina, 2017). The results of the data analysis showed that cooperative learning type TSTS assisted with mind maps can improve science learning outcomes through lesson study for fifth-grade students at SDN 2 Paket Agung, Buleleng District, Buleleng Regency. The results obtained from the hypothesis test state t-count (3.65)> t table (1.99). This shows that the mind map assisted TSTS learning model can improve student learning outcomes.

Based on the three relevant research results, research using the two stay two stray model assisted by mind mapping has never been applied to the content of science theme 7 "Events in Life", therefore researchers researched the two stay two stray learning model assisted by mind mapping on learning outcomes. IPA theme 7 "Events in Life". The relevant research results indicate that the two stay two stray learning model assisted by mind mapping can improve student learning outcomes. This research implies that the application of the two stay two stray learning model assisted by mind mapping can help the teacher's task in implementing learning because the two stay two stray models has structured steps involving interaction between students so that learning becomes more meaningful. In addition, the use of the mind mapping method makes learning more interesting. Mind mapping can help students' brains to organize, remember, compare, make relationships between materials, and can be designed according to the material needs that must be taught to students, therefore the use of the two stay two stray models assisted by the mind mapping method can improve student learning outcomes

Conclusion

Based on results discussion of the research carried out on the development of web-based learning media in western bridal makeup course at Makeup and Beauty Department, Universitas Negeri Padang, it can be concluded that the learning media developed was valid from the design and terms of material from the practical side of the media developed has a practical level of practicality and the beta test was very feasible.

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