

## Research Article

# Development of 5.0 based learning devices using wordpress websites

Sri Wahyuni\*, Jimi Ronald, Vivina Eprillison, Mona Amelia

Faculty of Economics and Business, PGRI University of West Sumatra, Padang, Indonesia

\*Corresponding Author: [sriwahyuniajeng4@gmail.com](mailto:sriwahyuniajeng4@gmail.com)

## ABSTRACT

This study aims to describe and explain the validity of the device, the practicality of the learning device, and the effectiveness of the learning device through word press media for high school in West Sumatra. This research method is a development model. The test subjects in this development research were high school students from the city of Padang. Instruments used to collect data in this study include: validity instruments, practicality instruments and effectiveness instruments. Data obtained through various instruments qualitatively and quantitatively. The findings in this study are First, the validity of the wordpress-based economic textbook learning tool with a very valid level of validity for linguists. Second, Validity of lesson plans and syllabus learning tools on wordpress-based economic subjects with a level of validity for linguists is very valid. Third, the validity of LKS learning tools on wordpress-based economic subjects with a very valid level of validity for language experts.

**Keywords:** development; LKS; e-learning; e-LKS; textbook learning;

## 1. INTRODUCTION

Era 5.0 is a virtual era in the form of human, machine and data connectivity that has touched the whole world, this term is known as the Internet of Things (IOT). Industry 5.0 produces flexible mass technology, machines operate independently and in coordination with humans, control the production process by synchronizing time by integrating and adjusting production. The uniqueness of industry 5.0 is to produce artificial intelligence. The development of the 5.0 era certainly has an impact on the world of education. This development not only changes the way teachers think, how to teach but changes perspectives in the world of education. This development is a new problem for teachers where teachers must be able to adapt themselves in the development of this 5.0-based world of education.

According to (Novan, 2015) that the learning process requires maximum preparation such as learning tools, even though the teacher already has a lot of busyness. This happened to high school economics teachers in West Sumatra, where seen from the UN scores obtained by SMA in Padang City, there were still many students who scored below the KKM. The UN scores obtained by students are still far below the predetermined KKM, judging from the accreditation obtained by the school, the average A is not comparable to the UN scores obtained by students. The low value of the National Examination in West Sumatra is allegedly influenced by the number of teachers who are less creative in making learning tools and less active in the use of 5.0-based learning media so that students are less interested in the learning process. This is because students are currently more interested in learning using online-based learning, so teachers must provide learning tools that can activate their learning motivation. One of the learning media that can accommodate the learning process is to use the WordPress website media. According to (Anjarkusuma, 2014) WordPress is a blog-based website for delivering information about online system-based learning tools.

Make it easy for students to get learning tools that are already available on the WordPress website, wherever they are, they can get free access to learning tools such as lesson plans, worksheets, ebooks, syllabus journals, assignments, and so on. This research is in line with research conducted by (Sri Wahyuni, 2019; Sakina Tees, Yoseph Paramata, 2018) entitled Development of Subject Learning Devices Using a Constructivism Approach. Then the difference in this study lies in one of the variables in this study using the WordPress variable. Based on the problems above, the purpose of this research is to measure the validity of the 5.0-based Economics Subject learning device by using the Word Press website media in high schools throughout West Sumatra.

## Economics Subject

According to (Sigit Winarno, 2012) In the Big Dictionary of Economics, economics is defined as an economic science that studies the principles of production, distribution, and use of goods and wealth, such as finance, industry, and trade; science that studies human efforts to meet their needs. According to (Budimansyah, 2012) "Economics is the science or art of human efforts to meet the needs of their lives which are many, varied and developed with existing resources through choices of production, consumption, and distribution activities". Economics subjects can be interpreted as subjects taught in schools

that study human efforts to meet needs. Economics subjects also have several characteristics. According to (Huda, 2013) the characteristics of economic subjects are as follows:

- a. Economics departs from facts or real economic phenomena. The fact shows that human needs are not limited while economic resources as a tool to meet the needs are limited.
- b. Economics develops theories to explain facts rationally. In order for humans to be able to read and explain economic phenomena systematically, economic concepts and theories are compiled into the building of economics. In addition to having systematic requirements, economics also fulfills other scientific requirements, namely being objective and having clear goals.
- c. Generally, the analysis used in economics is a problem-solving method. The problem-solving method is suitable for use in the economic analysis of causes.
- d. object in economics is the basic problem of economics. The basic problem is what goods should be produced, how to produce and for whom the goods are produced. The three basic problems basically depart from the scarcity of economic resources.
- e. The essence of economics is choosing the best alternative. To achieve prosperity, humans have many choices of activities. However, from the many choices of these activities, it can be analyzed economically so that it can be determined which alternative choices are the most optimal both qualitatively and quantitatively. Economics can be used to determine the best alternative choices of economic activity.
- f. The birth of economics because of the scarcity of sources to satisfy human needs. If economic resources are abundant (not rare), then economics is no longer needed for human life.

### Learning Media

To help teachers in the learning process, teachers need media to convey material to their students. According to (Apsari, 2018) learning media is a medium of communication needed by teachers to convey information to students. Whereas (Rika Lisiswanti, Oktadoni Saputra, Novita Carolia, 2015) media or multi-media have an effect on active learning, which is more influential on active cognitive learning (cognitive) than behavioral activities (behavior). According to (Andrijati, 2014) Media including teaching aids will function properly if the media can provide a meaningful, activating, and fun learning experience for children. Correspondingly, according to (Falahudin, 2014) learning aids in teaching and means of carrying messages from learning sources to recipients of learning messages (students).

### WordPress Website

The learning process in era 5.0 requires applicative media that can foster student activity in learning. One of the media that can activate the learning process is WordPress. According to (Muhammad Nur Susilo, 2014) WordPress is a website that can be updated and its settings can be changed. According to (Wirandito, 2014) WordPress is an open application that is similar to the Blog application. In this Word Press website, teachers can provide online-based learning tools that can be freely accessed by students wherever they are. The learning tools provided by the teacher are lesson plans, syllabus, assignments, worksheets, economic books, and so on.

### Learning Media

Learning devices are all tools and materials used by teachers to support the smoothness and implementation of learning. The learning tools can be in the form of SAP, syllabus, lesson plans, teaching materials, and assessments.

1. Learning Implementation Plan (RPP) is a face-to-face learning activity plan for one or more meetings. RPP was developed from the syllabus to direct student learning activities to achieve Basic Competencies.
2. A syllabus is an outline and summary of the topics covered in an education or course. The syllabus is descriptive and defining, or curriculum specific. The syllabus is usually made by a testing institution, or prepared by a professor who supervises or controls the quality of a course/education, and is prepared in paper form (printed) or online. The syllabus contains specific information about the course/education/learning such as information on where, when, and how to contact teachers (teachers/lecturers) and teaching assistants, an outline of what material will be covered/taught, schedule and dates for the implementation of the test up to the following dates. assignment date, grading system (ranking)/assessment, class rules, etc. Regarding exams,
3. Textbooks are one of the means of successful teaching and learning process. Textbook is a unit of learning unit that contains information, discussion and evaluation. Textbooks that are systematically arranged will facilitate students in the material so that it supports the achievement of learning objectives. Therefore, textbooks must be arranged in a systematic, attractive, high readability aspect, easy to digest, and comply with the applicable writing rules.
4. Student Activity Sheet (LKS) is a printed teaching material in the form of sheets containing assignments which contain instructions, steps to complete the task. Worksheets can be in the form of a guide for developing cognitive aspects or a guide for developing all aspects of learning in the form of an experimental guide and demonstrations (Trianto, 2012)
5. Rating by (Sukardi, 2011) is evaluation as a systematic process to collect, analyze, and interpret information that determines the success of students in achieving their learning goals. (Susan, 2018) also suggested that assessment is a process of activities to obtain, analyze, and interpret data about the process and student learning outcomes. So, it can be concluded that assessment is a systematic process of activities to obtain, analyze, and interpret information about student learning outcomes. Assessment can be done by holding a test. A good test must meet the requirements of (a) valid, (b) reliable, (c) thorough, and (d) practical. The validity of the test includes (1) content validity, (2) measurement-

validity, (3) consistent validity, (4) concept validity, (5) predictive validity. Comprehensive test means that the test must be carried out by considering all aspects of the material to be tested. A test is said to be practical if it is economical, easy to assess, and easy to interpret.

## Validity

Validity is a measure that shows the level of validity of a test. A test is said to be valid if it measures what it is intended to measure. The test is said to have high validity if the results match the criteria, in the sense that there is a gap between the test and the criteria (Arikunto, 2016). Validity test was conducted to determine the level of validity of the instrument used. The types of test validity can generally be grouped into three groups, namely construction validity, content validity, and criterion validity.

## Practicality

According to (Arikunto, 2016), practicality in educational evaluation is the ease that exists in evaluation instruments both in preparing, using, interpreting/obtaining results, as well as ease in preparing them. The instrument is a learning device that is declared valid by the validator. Practicality is also a measure of whether an evaluation instrument is said to be good or not. Practical trials are carried out on students who take the Economics Learning Outcomes Assessment course.

## 2. METHOD

This research method uses the Development Model. The development model is a set of sequential procedures to carry out the design and development which is realized in the form of a teaching and learning strategy learning activity process. The development model used is based on the 1974 Thiagarajan model and modified by (Trianto, 2012).

### A. Development procedure

This study aims to develop learning tools for assessment of learning outcomes. The complete research design can be described in the following procedure.

#### 1. Analysis Stage

At this stage, it is analyzed the need to develop learning tools for high school Economics subjects in West Sumatra by using word press media, then analyze the problem. The process carried out is as follows.

### B. Data collection instruments

The instruments used to collect the research data include:

#### 1. Instrument validity

- a. RPP validity sheet
- b. Syllabus validation sheet
- c. LKS validation sheet
- d. Textbook validation sheet
- e. Instrument validation sheet

#### 2. Practical instrument

- a. Observation sheet on the implementation of syllabus, lesson plans, worksheets and textbooks.
- b. Questionnaire of student responses to learning tools

#### 3. Instrumental effectiveness

- a. The remaining activity observation sheet is used to record student activities during the learning process.
- b. Study Results Test. The test carried out is in the form of a test with indicators of concept understanding.

### C. Data analysis technique

The data obtained through various instruments were analyzed qualitatively and quantitatively. The data analysis technique of each instrument is described as follows.

#### 1. Validation sheet

The validation results from the validator for all aspects assessed are presented in tabular form. Then find the average score by using the formula:

$$r = \frac{\sum_{t=1}^n VI}{n}$$

Then calculated the average of all aspects. To determine the level of validity of the learning device, the following criteria are used:

- a. If the mean > 3.20 then the module is categorized as very valid.
- b. If 2.40 < mean 3.20 then the module is categorized as valid.
- c. If 1.60 < mean 2.40 then the module is categorized as quite valid.

- d. If  $0.80 < \text{mean} \leq 1.60$  then the module is categorized as less valid.
- e. If the mean is  $0.80$  then the module is categorized as invalid.

**Table 1.** Responses of rate

No.	Percentages	Level of validity and practicality	Information
1	85% RS	Very Positive	LKS can be used directly in class XI Economics of SMA Negeri 1 Siberut Selatan
2	75% RS < 85%	Positive	LKS can be used in class XI Economics at SMA Negeri 1 Siberut Selatan, but requires a little revision
3	50% RS < 75%	Less positive	LKS can be used in class XI Economics at SMA Negeri 1 Siberut Selatan, but requires a lot of revisions
4	RS 50%	Not positive	LKS cannot be used in class XI Economics of SMA Negeri 1 Siberut Selatan

Source: (Processed Primary Data 2021)

## 2. Practical Analysis of Learning Devices

The practicality questionnaire of learning devices is described using the data frequency analysis technique with the formula:

$$P = x \cdot 100\% \frac{R}{SM} \quad (\text{Purwanto, 2016})$$

Note: P = Practicality Value

R = Score obtained

SM = Maximum Score

**Table 2.** Categories of Learning Device Practicality

No.	Achievement Rate (%)	Category
1.	85-100	Very Practical
2.	75-84	Practical
3.	60-74	Practical enough
4.	55-59	Less Practical
5.	0-54	Not Practical

Sources: (Purwanto, 2016).

Based on table 2, it can be concluded that the device is said to be practical if the target of achieving the practicality value is 75%.

## 3. Observation Sheet Analysis

Based on the data obtained through the observation sheet, the percentage of student learning activities was calculated in each meeting. The percentage of activity is calculated by the formula proposed by (Sudjana, 2016):

$$P = \frac{F}{N} \times 100\%$$

After obtaining the percentage of student activity, then the activity criteria are seen based on those proposed by (Indriantoro, 2014);

**Table 3.** Student Activity Criteria

Percentage	Criteria
0% P < 25%	So little
25% P < 50%	A little
50% P < 75%	Lots
75% P < 100%	Many

Sources: (Supomo, 2014).

## 4. Study Results Test

Data from student learning outcomes were analyzed in the form of class meeting average scores. The data obtained from the learning outcomes test were analyzed using a scoring rubric or weighting scores.

## 3. RESULTS AND DISCUSSION

This study was carried out in 5 stages, namely analyze, design, develop, implement and evaluate, with a period of two years. Year one the researcher looked at the validity of the device that the researcher made. Where the validity of the device was assessed by three experts, namely material experts, media experts and linguists. Devices that are seen as valid for RPP, syllabus, textbooks and worksheets.

## Results of Textbook Product Validity Test

The validity of the textbooks was assessed by three teams of experts, namely material experts, linguists and media experts. There are two textbooks assessed for class XI, semester 1 and semester 2. For more details, please see the Table 4.

**Table 4.** Results of Validation of Wordpress-based Textbooks by Language Experts

No	Aspects	Validators		Amount	Validation values	Criteria
		1	2			
1.	Straightforward	12	11	23	96%	Very Valid
2.	Communicative and Interactive	8	8	16	100%	Very Valid
3.	Suitability with student development	8	8	16	100%	Very Valid
4.	Conformity with language rules	11	12	23	96%	Very Valid
Total					392%	
Average					98%	Very Valid

Sources: (Processed Primary Data 2021)

For the validity of wordpress-based textbooks for linguists, there are 4 indicators, namely straightforward, communicative and interactive, compatibility with student development and conformity with language rules. On a straightforward indicator with a validation level of 96% with a very high category valid. In communicative and interactive indicators with a 100% validity level with a very valid category. On the indicator of conformity with student development with a level of validity of 100% with a very valid category. On the indicator of conformity with language rules with a validation value of 96% the category is very valid. So, it can be concluded that the results of the validation of learning tools for textbooks with a validity level of 98% with a very valid category.

**Table 5.** Results of Validation of Textbook Learning Tools for Wordpress-Based Media Experts by Media Experts

No	Aspects	Validators		Amount	Validation values	Criteria
		1	2			
1.	Media efficiency aspect	16	13	29	90%	Very Valid
2.	Attractive aspect	11	11	22	90%	Very Valid
3.	Aspects of physical quality	8	6	14	87%	Very Valid
4.	Relevance aspect	8	6	14	87%	Very Valid
Total					354%	
Average					88%	Very Valid

Sources: (Processed Primary Data 2021)

In table 5 above, there are four indicators for the validity of textbook learning tools for wordpress-based media experts, namely aspects of media efficiency, aspects of attractiveness, aspects of physical quality and aspects of relevance. In the aspect of media efficiency, the value of textbook validation is 90% with a very valid category. In the aspect of attractiveness with a validation value of 90% with a very valid category. In the aspect of physical quality with a validation value of 87% with a very valid category. In the aspect of relevance, the validation value is 87% with a very valid category. From the validation results for textbooks from learning media experts with a value of 88% with a very valid category.

**Table 6.** Results of Material Expert Validation for Wordpress Based Textbooks by Economics Teachers

No	Aspects	Validators		Amount	Validation values	Criteria
		1	2			
1.	Content Feasibility Aspect	26	26	52	85%	Very Valid
2.	Aspects of Feasibility of Presentation	15	15	30	87%	Very Valid
Total					172%	
Average					86%	Very Valid

Sources: (Processed Primary Data 2021)

In table 6 above, it can be seen that for textbooks there are two indicators, namely the aspect of the feasibility of the content and the aspect of the feasibility of presentation with a validation value of 86% with a very valid category. In the aspect of the feasibility of the content with a validation value of 85% with a very valid category. In the aspect of presentation feasibility with a validation value of 87% with a very valid category. So it can be concluded that the validity of textbooks for material experts is categorized as very valid.

## Results of Testing the Validity of RPP and Syllabus

**Table 7.** The results of the validity of Wordpress-based linguists

Aspects	Validators Rating		Amount	Validation Values	Notes
	1	2			
Straightforward	12	12	24	100%	Very valid
Communicative and Interactive	4	4	8	100%	Very valid
Suitability with student development	8	8	8	100%	Very valid
Conformity with language rules	7	6	13	81.25	Valid
Total				381.5%	
Average				95.37%	Very Valid

Sources: (Processed Primary Data 2021)

In Table 7, for the validity of the wordpress-based lesson plans and syllabus for linguists, there are 4 indicators, namely straightforward, communicative and interactive, compatibility with student development and conformity with language rules. In a straightforward indicator with a validation level of 100% with a very valid category. In communicative and interactive indicators with a 100% validity level with a very valid category. On the indicator of conformity with student development with a level of validity of 100% with a very valid category. In the indicator of conformity with language rules with a validation value of 81.25%, the category is very valid. So, it can be concluded that the results of the validation of learning tools for syllabus and lesson plans by linguists with a validity level of 95.37% with a very valid category.

**Table 8.** Results of the Validity of Wordpress-Based Media Experts

Aspects	Validator Rating		Amount	Validation Value	Notes
	1	2			
Relevance	15	13	87.5	100%	Very valid
Accuracy	16	15	31	96.9%	Very Valid
Serving Equipment	4	3	7	87.5%	Very Valuable
Basic concepts	4	4	8	100%	Very Valid
Serving suitability with learning demands on students	16	14	30	93.8%	Very Valid
Total				478.2%	
Average				95.64%	Very valid

Sources: (Processed Primary Data 2021)

In Table 8, there are five indicators for the validity of lesson plans and syllabus learning tools for wordpress-based media experts, namely relevance, strength, completeness of presentation, basic concepts and suitability of presentation with student-centered learning demands. In the aspect of media relevance, the validation value is 100% with a very valid category. In the aspect of accuracy with a validation value of 96.9% with a very valid category. In the aspect of completeness of the presentation with a validation value of 87.5% with a very valid category. In the basic concept aspect, the validation value is 100% with a very valid category. In the aspect of suitability of the presentation with the demands of student-centered learning with a validity value of 93.8% with a very valid category. From the validation results for the syllabus and lesson plans from learning media experts with a value of 95,

**Table 9.** Results of the Validity of Wordpress-Based Material Experts

Aspects	Validators Rating		Amount	Validation Values	Notes
	1	2			
Content eligibility	31	32	63	98.44%	Very valid
Serving Eligibility	15	14	29	90.63%	Very Valid
Total				189.07%	
Average				94.53%	Very Vali

Sources: (Processed Primary Data 2021)

In Table 9, it can be seen that for the syllabus and lesson plans there are two indicators, namely aspects of content feasibility and aspects of presentation feasibility with a validation value of 94.53% with a very valid category. In the aspect of the feasibility of the content with a validation value of 98.44% with a very valid category. In the feasibility aspect of presentation with a validation value of 90.63% with a very valid category. So, it can be concluded that the validity of the lesson plans and syllabus for material experts is categorized as very valid.

### LKS Validity Testing Results

**Table 10.** Wordpress-Based Linguistics Validation Results by Language Lecturers

No.	Aspects	Validators		Amount	Validation values	Criteria
		1	2			
1	Straightforward	12	9	21	87%	Very Valid
2	Communicative and Interactive	3	4	7	87%	Very Valid
3	Suitability with student development	7	7	14	87%	Very Valid
4	Conformity with language rules	8	6	14	87%	Very Valid
Total					348	
Average					87%	Very Valid

Sources: (Processed Primary Data 2021)

In Table 10, for the validity of wordpress-based worksheets for linguists, there are 4 indicators, namely straightforward, communicative and interactive, conformity with student development and conformity with language rules. In the straightforward indicator with a validation level of 87% with a very valid category. In communicative and interactive indicators with a validity level of 87% with a very valid category. On indicators of conformity with student development with a level of validity of 87% with a very valid category. On the indicator of conformity with language rules with a validation value of 87% the category is very valid. So it can be concluded that the results of the validation of learning tools for LKS with a validity level of 87% with a very valid category.

**Table 11.** Results of Validation of Wordpress-Based Media Experts by Economics Lecturer

No.	Aspects	Validators		Amount	Validation values	Category
		1	2			
1	Relevance	14	16	30	94%	Very valid
2	Accuracy	13	16	29	91%	Very valid
3	Serving equipment	3	4	7	88%	Very Valid
4	Basic concepts	3	4	7	88%	Very Valid
5	The suitability of the presentation with the demands of student-centered learning	13	16	29	91%	Very valid
Total					452%	
Average					90%	Very valid

Sources: (Processed Primary Data 2021)

In Table 11, for the validity of LKS learning tools for wordpress-based media experts, there are five indicators, namely relevance, strength, completeness of presentation, basic concepts and suitability of presentation with student-centered learning demands. In the aspect of media relevance, the validation value is 94% with a very valid category. In the aspect of accuracy with a validation value of 91% with a very valid category. In the aspect of completeness of the presentation with a validation value of 88% with a very valid category. In the basic concept aspect, the validation value is 88% with a very valid category. In the aspect of suitability of the presentation with the demands of student-centered learning with a validity value of 91% with a very valid category. From the validation results for LKS from learning media experts with a value of 90% with a very valid category.

**Table 12.** Results of Expert Validation of Wordpress-Based Materials by Lecturers of Economics

No.	Aspect	Validator		Amount	Validation Value	Category
		1	2			
1	Content Eligibility	32	31	63	98%	Very Valid
2	Serving Eligibility	15	16	31	97%	Very Valid
Total					195%	
Average					97%	Very Valid

Sources: (Processed Primary Data 2021)

In Table 12, it can be seen that for LKS learning tools there are two indicators, namely aspects of content feasibility and aspects of presentation feasibility with a validation value of 97% with a very valid category. In the aspect of the feasibility of the content with a validation value of 98% with a very valid category. In the aspect of presentation feasibility with a validation value of 97% with a very valid category. So it can be concluded that the validity of textbooks for material experts is categorized as very valid.

### 4. CONCLUSION

The findings in this study are the validity of the wordpress-based economic textbook learning tool with a 98% validity level for linguists in the very valid category, for media experts with a validity level of 88% with a very valid category. The validity level for material experts is 86% with a very valid category, the validity of lesson plans and syllabus learning tools on wordpress-based economics subjects with a validity level for linguists of 93.57% with a very valid category, for media experts

with a validity level of 95.64 % with very valid category. The level of validity for material experts is 94, 53% with a very valid category and validity. LKS learning tools on wordpress-based economic subjects with a validity level for linguists of 87% with a very valid category, for media experts with a validity level of 90% with a very valid category. The validity level for material experts is 97% with a very valid category.

## ACKNOWLEDGEMENTS

The author would like to thank the supervisors who have guided in the completion of writing of this research manuscript.

## AUTHOR'S CONTRIBUTIONS

The author discussed the results and contributed to from the start to final manuscript.

## CONFLICT OF INTEREST

The author declare that he has no competing interests.

## REFERENCES

- Andrijati, N. (2014). Application of Innovative Learning Media in Elementary School Mathematics Learning at PGSD Tegal. *Journal of Educational Research*, 31(2), 123–132. <https://doi.org/10.15294/jpp.v31i2.5696>
- Anjarkusuma, D. (2014). Use of CMS Wordpress Application to Design Websites as Promotional Media at Maroon Wedding Malang. *Journal of Accounting, Economics and Business Management*, 2(1), 63–69. <https://doi.org/https://doi.org/10.30871/jaemb.v2i1.135>
- Apsari, PN (2018). Android-Based Mathematics Learning Media on Linear Program Materials. *Axiom Journal of Mathematics Education FKIP Univ. Muhammadiyah Metro*, 7(1), 161–170. <https://doi.org/http://dx.doi.org/10.24127/ajpm.v7i1.1357>
- Arikunto. (2016). *Research Procedure A Practical Approach*. Rineka Cipta.
- Budimansyah, D. (2012). *Economic Learning Model*. Genesindo.
- Falahudin, I. (2014). Utilization of Media in Learning. *Journal of the Widwaswara Circle*, 1(4), 104–117. [https://juliwi.com/published/E0104/Paper0104\\_104-117.pdf](https://juliwi.com/published/E0104/Paper0104_104-117.pdf)
- Huda, A. (2013). The Influence of the Role of Peers, Learning Discipline and Learning Motivation on Economic Learning Outcomes of Class X Students at SMA Negeri 1 Lembah Melintang, West Pasaman Regency. Article Faculty of Economics, Padang State University. <http://ejournal.unp.ac.id/students/index.php>
- Indriantoro, N. and BS (2014). *Business Research Methodology For Accounting & Management*. BPFE.
- Muhammad Nur Susilo, FN (2014). WordPress Cms Theme Generator Using Html 5 Technology to Facilitate Theme Creation as Promotional Media (Case Study: Synchronous, Yogyakarta). *Journal of Bachelor of Informatics Engineering*, 2(2), 247–255. <https://doi.org/http://dx.doi.org/10.12928/jstie.v2i2.2846>
- Novan, AW (2015). *Childhood Development Psychology. Early*. Gava Media.
- Purwanto. (2016). *Evaluation of learning outcomes*. Student Library.
- Rika Lisiswanti, Oktadoni Saputra, Novita Carolia, MMM (2015). Relationship between Learning Approach and Student Learning Outcomes of the Faculty of Medicine, University of Lampung. *Journal of Medicine and Health*, 2(1), 79–81. <https://ejournal.unsri.ac.id/index.php/jkk/article/view/2535/1345>
- Sakina Tees, Yoseph Paramata, M. (2018). Development of Constructivism-based Learning Devices on the Topic of Motion in Objects. *Journal of Scientific Research and Development*, 3(1), 30–37. <http://ejournal.pps.ung.ac.id/index.php/JPS/article/view/160>
- Sigit Winarno, SI (2012). *Great Dictionary of Economics*. Graphics Library.
- Sri Wahyuni, MA (2019). Development of Learning Devices for Class X Economics Subjects Using a Constructivism Approach at PGRI High Schools in Padang City. *Annual National Conference for Economics and Economics Education*. <http://econference.stkip-pgri-sumbar.ac.id/index.php/NCSE/SPSK/paper/view/443>
- Sudjana, N. (2016). *Assessment of Teaching and Learning Outcomes*. Rosdakarya Youth.
- hard. (2011). *Education Evaluation*. Earth Literature.
- Susani, RG (2018). The Implementation Of Authentic Assessment In Extensive Reading. *International Education Studies*, 11(1). <https://doi.org/https://doi.org/10.17509/ije.v11i1.9113>
- Trianto. (2012). *Integrated Learning Models, Concepts, Strategies, and Implementation of the KTSP Curriculum*. Earth Literature.
- Wiryandito, BAA, Syamsul, LA, & Akbar, I. (2014). Using Wordpress and Open-Sid Integration Based on Design of Village Information System Using Wordpress And OPEN-SID. Department of Electrical Engineering, University of Mataram, NTB.