

The Development of a Lexical-Semantic Teaching Material Using Local Wisdom Values and Information Technology

M. Surip
Universitas Negeri Medan

Syairal Fahmi Dalimunte
Universitas Negeri Medan

Sumarsono
Universitas Negeri Medan

The present study was enacted to develop a lexical-semantic teaching material using local wisdom values from North Sumatra, Indonesia, technology based. The research procedure was undertaken following Borg and Gall's (1989) model consisting of nine stages. The study showcases three points: 1) the teaching material has been successfully developed; 2) the developed material has been creative and innovative; and 3) the validation of technological aspect was 91.75%, and the linguist validation was 93.61%. The data both explained that the teaching materials designed by lecturers were declared worthy of supporting student success in achieving lecture goals. The results of the validation of large group trials were 89.66 %, and the small group was 87.26%. Test results also showed that the resulting teaching materials were declared worthy of supporting the success of student learning outcomes in lexical semantic courses. Furthermore, the pre-test and post-test trials after teaching materials with the insight into the local wisdom of North Sumatra are effective in improving students' ability to understand teaching materials and achieve lecture goals.

Keyword: teaching material, lexical semantics, local wisdom, North Sumatra

INTRODUCTION

In recent years, the vast growth of technology and information has influenced the paradigm change of higher education. In the Indonesian context, participating in Merdeka Belajar Kampus Merdeka (independent learning campus program) enacted by the Ministry of Education and Culture of the Republic of Indonesia has been a salient issue. This condition requires that educators in universities or lecturers must be able to adjust their teaching. In such a condition, the development of technology and information requires educators to adapt and revise appropriate and effective teaching materials and learning media. With its interactive capabilities, internet-based information technology will bring various conveniences in conveying information and science and as a means to obtain feedback (Rusman, 2012). The adjustment of teaching materials continues to be designed and elaborated with the lecturer team. In implementing the

Merdeka Belajar Kampus Merdeka program, the Indonesian Literature Study Program curriculum underwent several changes, including semantic courses oriented towards preparing regional language dictionaries that combined data on eight regional languages typical of North Sumatra culture.

IT-based learning opens up new access for the advancement of the world of education. Learning by elaborating on IT will support increased flexibility and convenience that is not available in classical learning (Agarwal, 2012). Therefore, IT-based learning media must be optimized to the maximum, especially in universities. According to Bostald (2014), a senior researcher from the New Zealand Council for Educational Research, there are at least three concrete and operational reasons why IT is needed as a teaching medium: 1) IT has influenced the social environment and the natural environment, 2) it offers “new opportunities” to strengthen many aspects of learning practice, and 3) support in several education sectors for the development and integration of IT into education policies, curricula, and learning practices.

Several previous studies by Yule (2020), Choi and Chung (2016), Kusmana (2014), Dilek and Yarak (2013), and Pinker (2013) showcase that the lexical semantic teaching materials in various variants of language analysis have been studied. The present study differs from the previous research regarding the methodological lens. In other words, this study employed a development process rarely undertaken in previous studies. The developed material in this study is inspired by the local wisdom of North Sumatra ethnic groups as an effort to preserve and share eight regional languages typical of North Sumatra. Lexical semantic teaching material in IT-based applications and prints are in dictionaries of eight ethnic, regional languages: Malay, Batak Toba, Batak Mandailing, Batak Pesisir, Batak Karo, Simalungun, Pakpak, and Nias.

Regional languages manifest a rich culture that must be maintained and developed. North Sumatra culture has eight ethnicities as the original culture of North Sumatra. The diversity of North Sumatra’s ethnic culture is the potential to be developed and maintained to exist and preserved. In addition, the typical culture of North Sumatra is also a gift from Allah SWT, God Almighty, to the people of North Sumatra province. The cultural wealth of North Sumatra is a miniature of Indonesia’s rich and civilized diversity. The typical ethnic culture of North Sumatra consists of 8 indigenous ethnic groups that inhabit North Sumatra: Malay, Batak Toba, Batak Mandailing, Batak Pesisir, Batak Karo, Simalungun, Pakpak, and Nias. These eight ethnicities hold diverse oral traditions, and each has a figure. This research is expected to produce lexical semantic teaching materials for 8 North Sumatra ethnic groups based on information technology.

This research is also directed to support learning with interactive and fun teaching materials based on student character since educators are obliged to develop a learning material that is interactive, inspiring, and fun, motivating students to participate actively (Devi et al., 2009). Given the aforementioned problems above, we developed a lexical semantic material with the local wisdom-minded on eight ethnics of North Sumatra based on information technology. The material development aims to preserve and share the regional language to continue its existence in the community.

LITERATURE REVIEW

Teaching materials are knowledge, skills, and attitudes students must learn to achieve predetermined competency standards. In detail, these learning materials consist of knowledge (facts, concepts, principles, procedures), skills, and attitudes or values. Learning materials are a tool that serves to convey messages in formal learning process activities in schools and non-formal in the community. According to Personal (2018), learning materials can bring information and messages from the sender or source of information to the recipient.

Various people believe that the benefits of IT as a medium in the learning process are very large. IT is considered capable of making learning more effective and efficient in improving the quality of learning outcomes. According to Riyanto (2016), IT is the solution to various educational problems. In particular, the use of IT in learning is believed to be: (a) improve the quality of learning; (b) develop the skills (IT skills) required by students while working and in their later lives; (c) expand access to education and

learning; (d) answer “the technological imperative” (must participate in IT); (e) reduce the cost of education, and (f) increase the ratio of cost of benefits in education.

Regional languages must be preserved to remain a part of human life. A regional language is a tangible form of cultural wealth that must be maintained. The government has an essential role in this, and the community becomes an important element so that the regional language still exists and is used in people’s lives. One of the things is preserving and maintaining the regional language by preparing regional language dictionaries. The richness of the language becomes vital for a nation because it can reinforce the identity of society’s character.

However, today the existence of regional languages in Indonesia is increasingly worrying. Regional languages are increasingly eroded by the development of information technology and changes in people’s hedonic lifestyles. The release of the United Nations Educational, Scientific and Cultural Organization (UNESCO) on February 21, 2019, revealed that about 2500 languages globally, including more than 100 regional languages in Indonesia, are endangered. UNESCO says at least 200 local languages will be extinct in the past 30 years, and 607 languages are now in unsafe status.

All eight ethnicities in North Sumatra already have regional language dictionaries developed by various communities. But no dictionary or application brings together the eight languages of the area in one application or media that makes it easier for people to learn it. In fact, through various academic activities such as lectures in universities and language learning in schools, there should be an application and a medium that unites the regional languages of the eight ethnicities of north Sumatrans to facilitate community access in preserving them.

The above phenomenon must be responded to quickly by academics in universities to take a role. Lecturers and students should start actively researching and developing regional languages in North Sumatra, mainly by providing easy access to regional language development. This effort can strengthen its identity as part of its regional culture. As explained by Riyanto (2016: 70), there is no doubt that the natural introduction to regional language and literature will cause a solid cultural precipitate for its introduction, in addition to causing a dense sense of unity between regions.

The use of reflective teaching materials is based on the emergence of various limitations in teaching and learning activities. The presence of communication media in the world of education then accommodates all these limitations as an intermediary/bridge to convey the subject matter. Learning will not be optimal without the media as an intermediary for information directly referring to the problem’s core. Mayer (2019) revealed that the media is a tool to convey instructional messages designed in line with how the human brain works.

There are at least five main reasons, according to Mayer (2019), why materials and media are needed in learning activities. The five are as follows.

1. Change the abstract concept to operational (concrete). Instead, it can also visualize a three-dimensional object into a two-dimensional image.
2. Overcome the limitations of space and time.
3. Replace learning props if in a school there are no props available.
4. Overcome the limitations of spoken language by teachers (both foreign languages and diction).

To structure good teaching material, we must pay attention to the following principles: (1) relevance, (2) consistency, and (3) adequacy. The focus on relevance means that the learning materials compiled should be related to achieving competency standards and essential competencies. The principle of consistency means that there is an overlap between prepared teaching materials and basic competencies that students must master. For example, in Baharun’s (2017) research, the preparation of learning media should be based on the principles of active learning, namely fundamental behaviour that always appears and describes the involvement of students in the teaching and learning process, both mental, intellectual, and emotional involvement which in many ways can be hinted at direct participation in various forms of physical activity, and the use of information technology.

Lexical semantics is a meaning that belongs to or is contained in the leksem even though there is no context whatsoever. For example, leksem *buya* (crocodile) has the lexical meaning of ‘a kind of melata animal’. Therefore, the lexical meaning is the true meaning. It is, as stated by Saeed (2016) and Yule (2020),

that lexical meaning is the meaning of the word itself, while the field that examines lexical semantics according to its principles is interpreted as “lexicology”. While Pateda (2015: 74) said in semantic studies, lexical semantics tend to focus more on discussing the system of meaning contained in words. The same opinion was expressed by Saeed (2014:72), that the study of the meaning of words is also called lexical semantic studies. The purposes of traditional descriptions of lexical semantics are to a) present the meaning of each word and b) indicate the word’s meaning in the language.

Discussing lexical semantic relationships, Saeed (2014) divided them into some forms of meaning relations homonyms, polycyclic, synonyms, antonyms, hyponyms, meronymy, member collection (member-collection), and a portion of mass (portion-mass). Pateda (2015) states that lexical meaning relationships include only five types; synonyms, antonyms, hyponyms, homonyms, and polymeric. Allan (2016:174) limit its division based on synonyms, hyponyms, and antonyms. The above data shows several types of meaning relations in lexical semantic relationships, including synonyms, hyponyms, homonyms, policies, meronymy, membership collection, and mass portion. Lexical semantics is the study of the meaning of words.

Regional language dictionaries become an effort to document languages in dictionaries to help the government preserve by spreading regional languages for preservation by the community, for example, through various community social activities and educational institutions used as local content. That way, the pride in using regional languages can still grow, which is very influential in preserving regional languages. In addition, efforts to maintain language can take place well if supported by politics (in the community and schools with records must be packaged so as not to cause ethnic diversity conflicts in one minority area).

Multilingual dictionaries use various regional languages as a source and target languages. The source language is the language that becomes the object of inventory that is loaded as a dictionary input. Input from the source language is given an explanation of the meaning in the source language and the target language in accordance with the order set out in the guidelines for preparing the multi-language dictionary used as a reference. Thus, the target language is used to explain the meaning of the source language entry at once if there is an example of a sentence. Through a multi-language dictionary, it is expected that the use of the target language can understand and master the meaning of the source language word and can understand and master the meaning of the source language word and can use it properly and correctly. In addition, multilingual dictionaries can also change people’s cultural insights to play a role in preserving and defending from the extinction of regional languages.

Anticipation in the new era of IT-based life demands the anticipation of presentation techniques in the preparation of multilingual dictionaries of 8 ethnic North Sumatra regions. New hope in the presentation of multilingual dictionaries can make it easier for people to preserve and maintain regional languages to continue to grow. However, the way of presentation in the preparation of multilingual dictionaries must be adjusted to the demands of the desires and needs of the people who use language and multi-dictionaries in line with the development and guidance of the times and the development of lexicography techniques. This step is based on experience in using bilingual and multilingual dictionaries that have become a tradition in lexicography.

METHODOLOGY

This study employed a development research approach with research methods used to produce a particular product and test the effectiveness of the product. To create certain products used, research needs analysis and to test the effectiveness on the broader community. In addition, research is needed to test the product’s effectiveness (Sugiyono, 2009). Therefore, the development approach aims to produce specific products and test their effectiveness of products (Sugiyono, 2009). Winarto (2016) mentions three development models: procedural, conceptual, and theoretical. The procedural model follows the existing steps to produce Dick and Carey products (2016).

Development research in this research follows the development steps of Borg and Gell (1989), namely: 1) Research and data collection consisting of (a) measurement of needs, (b) literature studies, (c) research

on a small scale, 2) planning (planning) to be developed including (a) the purpose of product use, (b) who is the user of the product, (c) description of the product components and their use, 3) the development of product drafts, consisting of (a) initial field trials, (b) revising trial results, (c) field trials, (d) refining field test products, (e) field implementation tests, (f) final product refinements, and (g) dissemination and implementation.

Then, after the lexical semantic teaching material with local wisdom of 8 IT-based North Sumatra ethnic groups was completed, a trial was conducted on students in a public university in Indonesia. Furthermore, the validation was tested by IT experts and language experts. After validation, product revisions through advice and input from experts. From the results of the product revision, then retested the product on student respondents. The trial was conducted in two stages a small group of 25 students and a large group of 35 students. In the process of validating experts and respondents, the formula used in Akbar's study (2013) is as follows:

V_{ah} : Validation /validation of respondents' expert

T_{se} : Total empirical score achieved

T_{sh} : Total expected score

RESULTS AND DISCUSSION

Anchored by Borg and Gell's (1989) development procedure, the results of this study are: Measurement of The Needs of Materials Teaching Lexical Semantic Courses Based on Local Wisdom of North Sumatra Culture. Developing lexical semantic teaching materials based on the local wisdom of North Sumatran culture is necessary based on several considerations. The consideration in question is in terms of student characteristics and the relevance of teaching materials.

Student characteristic data was taken using interview techniques and exercise tests. The question raised refers to several things related to students' understanding and knowledge related to the lexical-semantic material of the dictionary of eight ethnic north Sumatran regional languages as an effort to preserve and share regional languages. The results showed differences in understanding and knowledge of lexical semantic material based on local wisdom in North Sumatra. However, knowledge of lexical semantic material in the dictionary of eight ethnic languages typical of North Sumatra is associated with efforts to preserve the culture of North Sumatra is still relatively low. 70% of students lack understanding and have not tried to preserve regional languages in everyday life.

The need to develop lexical semantic teaching materials based on the local wisdom of North Sumatra culture is obtained from the need for questionnaires and analysis of teaching material devices used by lecturers in lectures. Table 1 below showcases teaching material used by lecturers in a public university in Indonesia.

TABLE 1
TEACHING MATERIAL USE COMPARISON

Component	Learning devices used by lecturers	Learning devices based on local wisdom of North Sumatran culture
RPS	Learning activities include literature searches, lectures, presentations of observation results	Diverse learning activities (discussion, percentage of regional language research results from 8 ethnic North Sumatra)
Learning resources	Learning resources use a variety of literature, including books, journals, magazines, research results, and other references.	Learning resources from the results of research on the study of regional languages of 8 ethnic North Sumatra

Learning media	Presentation slides and other interactive media	Presentation slides, animated videos, regional language dictionaries, digital dictionaries, and short films
Assessment	Assessment of cognitive, affective and psychomotor aspects through 6 mandatory tasks of each lecture	The assessment covers aspects of knowledge, attitudes, and skills. The assessment was taken from six assignments given to students related to lexical semantics and regional language dictionaries of 8 north Sumatra ethnic groups.

From the table above, it can be known that lecturers have not developed a tool for lexical semantic courses based on local wisdom and eight typical cultures of North Sumatra. On the other hand, the results of the analysis of teaching material show that teaching material based on local wisdom of North Sumatran culture needs to be developed to support the success of the lecture process in achieving the learning goals.

Planning for the Material

The design of the development of lexical semantics course teaching material devices is made based on the data collected. Rules for developing learning materials are based on the Indonesian National Qualification Framework, with additional information from various sources regarding the design of teaching and learning materials. The learning teaching material device then gets a feasibility assessment by experts in the validation process. Validation details from experts can be seen in the following table.

TABLE 2
FEASIBILITY MATERIAL VALIDATION

No	Indicators	Criterion	Score
1	Completeness of parts	1. Learning achievements support the achievement of graduate profiles.	1
		2. The subject matter is relevant and in accordance with the local wisdom of North Sumatran culture.	1
		3. Learning activities provide experience and support research in the field of local wisdom development of 8 ethnic cultures of North Sumatra.	1
2	Conformity	1. <i>Indicators of learning achievement in accordance with learning outcome</i>	1
		2. <i>Indicators are declared operationally and measurably.</i>	1
3	Insightful local wisdom eight it-based North Sumatra cultural ethnicities	1. Achievement indicators support the assessment and participation of local wisdom of 8 ethnic cultures of North Sumatra.	1
		2. Using various references from research results, journals and other literature.	1
		3. Teaching materials are already IT-based, so they are easy to access.	1
		4. Assessment takes into account aspects of six types of assignments.	1

4	Interaction	1. Students are active in learning activities	1
		2. There is an interaction between lecturers and students.	1
5	Thorough assessment	1. Assessment consists of aspects of attitude, knowledge and skills.	1
		2. There are tests (UTS and UAS) at the middle and end of learning.	1
		3. There are six types of assignments, namely: routine tasks, mini research, journal review, critical book review, idea engineering, and projects.	1

The validation results showed that the teaching material developed met the eligibility to be used as a lexical semantic course learning tool. The woven learning device gets advice and criticism from validators during the validation process. The achievement value of the validation result reached 92.20 with decent criteria. Some of the criticisms and suggestions given are (1) adding ideas for engineering tasks related to the language of 8 ethnic north Sumatra regions, (2) adding references or reading materials given to students, and (3) adding routine tasks made in worksheet format that students will do at each meeting, ranging from meetings 2 to 14.

The Developed Material

In today's modern era, regional languages are increasingly squeezed by the development of the times and people's lifestyles. Many factors cause the regional language to be left by the community due to the weak concern for regional languages' existence to continue. It can slowly threaten the extinction of the regional language and the regeneration of native speakers of the region's language. Therefore, there must be an effort to cultivate learning activities in schools and on campus so that regional languages are preserved and used as teaching materials for teachers and lecturers. It is also necessary to slowly document all information about regional languages, ranging from information collection, processing, and distribution through socialization, exhibitions, and others.

As mentioned above, Mcmenemy and Poulter (2015) explained that IT-based teaching materials or digitalization create digital coffee from an analogy object. He added that many advantages could be obtained by digitizing a document, such as easily accessed, searched, or indexed. The writing obtained from computer info describes that the process of digitizing documents is the process of changing from printed documents (hardcopy) to electronic documents.

Regional language data of eight ethnic North Sumatra is based in the form of a digital dictionary. It has been designed based on regional language data-oriented to the community's social communication process, then classified based on eight regional languages typical of North Sumatra. Once classified, the next step is to complete the regional language program of 8 ethnic North Sumatra based on IT / website. As for the appearance of regional language dictionary products, eight ethnic North Sumatra ethnic it-based, as shown below.

The first display image informs the location of the application on the screen of the <https://kbdsunimed.com> website. The display will change by clicking on the website page, as in figure 1. In Figure 2, we will be presented with eight choices of typical regional languages in North Sumatra. After that, we can choose what regional language we want. It will appear according to the image. Then Figure 3 shows the regional language search results from eight regional language data stored on the website page. The IT-based application is a form of data literacy that can be developed into cultural literacy in the lives of the people of North Sumatra to have concern in preserving regional languages while maintaining them from extinction.



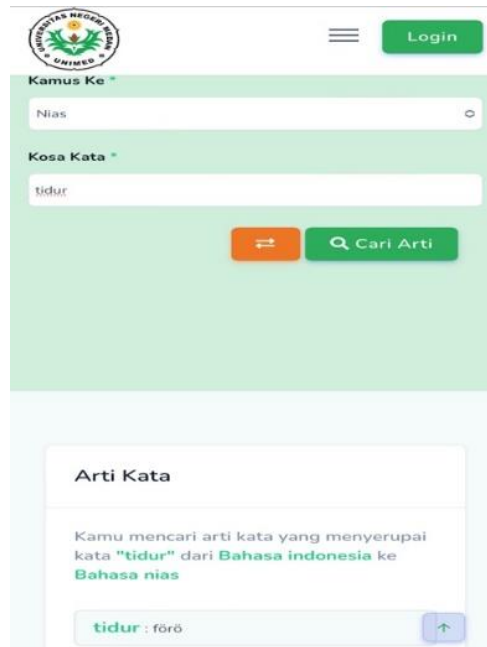


TABLE 3
TEACHING MATERIAL VALIDATION

No	Aspects	T _{se}	T _{sh}	Percentage
1	Software	58	61	95,08 %
2	Digital media design android version	44	45	97,77 %
3	Visual	49	53	92,45 %
	Total	151	159	94,96 %

Table 3. The above explains that T_{se} obtained from teaching materials experts is 151, with a total score of T_{sh} 159. Based on the results of this validation, it has been set, with a result of 151: 159 x 100% = 94.96%. This data explains that the teaching materials with the local wisdom of 8 IT-based North Sumatra ethnic groups are declared suitable for students' learning of lexical semantic courses. The IT material validation was carried out in the following results.

TABLE 4
IT VALIDATION

No	Aspects	T _{se}	T _{sh}	Percentage
1	Content eligibility	25	27	92,59 %
2	Design IT	23	25	92,00 %
3	IT-based material presentation	20	22	90,90 %
4	Graphicity	21	23	91,30 %
	Total	89	97	91,75 %

Table 4. The above obtained material 1 IT field, T_{se}: 89, while T_{sh}: 97. This validation data is calculated based on the formula; then the validation result is 89: 97 x 100% = 91.75%. Based on these data and criteria, teaching materials with the local wisdom of 8 IT-based North Sumatra ethnic groups were declared suitable

for use in lectures. The second validator assessed its quality in the following result in terms of language use.

**TABLE 5
LANGUAGE VALIDATION**

No	Aspects	T _{se}	T _{sh}	Percentage
1	Content eligibility	24	26	92,30 %
2	Linguistics	23	24	95,83 %
3	Literary material	17	18	94,44 %
4	Graphics	24	26	92,30 %
	Total	88	94	93,61 %

Table 5. T_{se} obtained from material experts in two fields of language and literature is 88, while the T_{sh} score reached 94. Then included in the formula with a result of 88: $94 \times 100 \% = 93.61\%$. Based on data and criteria, teaching materials with local wisdom-minded insights from 8 IT-based North Sumatra ethnicities are declared suitable for lexical semantic course lectures.

Furthermore, the validation of small group trials was carried out by 20 students of the Indonesian literature study program class A class 2020. The validation results can be seen in the following table.

**TABLE 6
SMALL GROUP VALIDATION**

No	Aspects	T _{se}	T _{sh}	Percentage
1	Software design	83	91	91.20 %
2	IT-based lexical semantic teaching material design	122	141	86.52 %
3	Literary material	124	138	89.85 %
4	Visual communication	171	203	84.24 %
	Total	500	573	87.26 %

Based on table 6. The above obtained T_{se} score: 500 and T_{sh} score: 573, then the data is entered in the formula, with a result of 500: $573 \times 100 \% = 87.26\%$. This data stated that the teaching materials with local wisdom insights of 8 IT-based North Sumatra ethnic groups were declared very suitable for use in semantic course lectures.

Furthermore, large group validation was carried out on 35 students of the Indonesian literature study program class A class 2020. The validation results can be seen in the following table.

TABLE 7
LARGE GROUP VALIDATION

No	Aspects	T _{se}	T _{sh}	Percentage
1	Software design	275	284	96.83 %
2	IT-based lexical semantic teaching material design	819	928	88.25 %
3	Literary material	298	320	93.13 %
4	Visual communication	905	1030	87.86 %
	Total	2297	2562	89.66 %

Table 7 above explains that the number of T_{se} scores is obtained at 2297, while the number of T_{sh} scores is 2562. After being calculated based on the formula, obtained 2297: $2562 \times 100\% = 89.66\%$. Based on the data and criteria specified, the teaching materials with the local wisdom of 8 IT-based North Sumatra ethnic groups are declared very suitable for use in lexical semantic lectures or their fields in various universities.

After analyzing the validity of the results of planning the development of lexical semantics courses with insight into the local wisdom of North Sumatra culture, the teaching material device was revised by lecturers and lecturer groups in the field of expertise. Then the next stage is to test the effectiveness of teaching material devices. At this stage, two trials were conducted, namely: limited trials and extensive trials.

The limited trial (small-scale) was conducted on 30 students in the 3rd semester of the Indonesian Literature Study Program. The trial results stated that it was necessary to revise the development of teaching material content to support the preservation and participation of the regional languages of 8 ethnic North Sumatra. Furthermore, it is also adjusted to the assignment of six mandatory tasks given to students in lectures.

Teaching material devices are revised based on small-scale trials. Revisions are carried out in the form of lexical semantic material content that is more specific and easier to understand by students on questionnaires and assignment sheets. In addition, teaching materials are directed to support the preservation of the regional languages of 8 ethnic groups in North Sumatra as a development and preservation effort so that regional languages can be used in everyday life. The teaching material device was then tested on a larger scale to determine its effect on student learning outcomes through lexical-semantic courses. The test was conducted using a quasi-experimental method on two classes: experimental and control groups.

Quasi-experiments were chosen because they wanted to get research results that have high reliability, such as true experiments. However, they could not fully control the outside variables that affect the implementation of experiments, so there may still be outside variables that affect research. The results showed that the learning tools developed affected student learning outcomes.

Student learning outcomes are seen from three assessment aspects: 1) knowledge, 2) attitude, and 3) skills. The knowledge score was obtained from a post-test after the lexical semantic course learning material using teaching materials with local wisdom-minded teaching materials from 8 IT-based North Sumatra cultural ethnicities were completed. The maximum score in the post-test is 100. Post scores between the control and experimental classes show significant differences and can be seen in the presentation of the data in the following table.

TABLE 8
EXPERIMENTAL AND CONTROL CLASSES

Component	Initial score		final score		Delta initial score	
	Control	Experiment	Control	Experiment	Control	Experiment
Average	67.20	67.59	74.59	76.35	5.67	10.12
Highest value	75	76	83	92	-	-
Lowest value	52	53	59	58	-	-

Based on Table 8 above, in general, students of the experimental group have higher learning outcomes than the control group. It is supported by a more significant difference between the pre-test and post-test in the experimental class compared to the control class.

Attitude values are taken using self-recollection sheets by students. The attitudes assessed are tolerance, friendship, and curiosity. The assessment is taken at the end of the meeting. The data was taken from 46 students in an experimental class. From the data obtained, it is known that, in general, students of the experiment class have good seriousness, seriousness, and curiosity in utilizing teaching materials with the local wisdom of 8 IT-based North Sumatra ethnicities.

Lecturers give the mastery value of the assignment in lexical semantic courses on six compulsory assignments. The six mandatory tasks are routine, min research, critical book review, critical journal review, engineering ideas, and projects. The results obtained from the assignment to students obtained good grades. It is seen from the average class score obtained from the six types of tasks in the excellent category.

REFERENCES

- Agarwal, T., & Singh, R. (2012). Evaluation of Antimicrobial Activity of Piper betle cultivars. *Novus International Journal of Pharmaceutical Technology*, 1(1), 50–58. India.
- Akbar, S. (2013). *Instrumen Perangkat Pembelajaran*. Bandung: Remaja Rosdakarya.
- Allan. (2016). *Pengertian Internet dan asal usul dari kata internet*. Surabaya: Penerbit Indah
- Aminoto, & Hairul. (2014). Penerapan Media E- Learning Berbasis Schoology Untuk Meningkatkan Aktivitas dan Hasil Belajar Materi Usaha dan Energi Di Kelas XI SMA N 10 Kota Jambi. *Jurnal Sainmatika*, 8(1), 14–29.
- Baharun, H. (2017). *Pengembangan Media Pembelajaran PAI BerbasisLingkungan melalui Model ASSURE*. Jakarta. Cendekia
- Basori. (2013). Pemanfaatan Social Learning Network Schoology dalam Membantu Perkuliahan Teori Bodi Otomotif di Prodi PTM JPTK FKIP UNS. *JIPTEK*, 21. Surakarta: UNS.
- Bibi, S. & Handaru, J. (2015). Efektivitas Model Blended Learning Terhadap Motivasi dan Tingkat Pemahaman Mahasiswa Mata Kuliah Algoritma dan Pemrograman. *Jurnal Pendidikan Vokasi*, 5(1), 74–87.
- Borg, W.R., & Gall, M.A. (1989). *Educational Research: An Introduction* (Fifth Edition). New York and London: Longman.
- Choi, J-H., & Chung, H.-S. (2016). Semantic Clustering in EFL Secondary School Student Vocabulary Learning. *English Teaching Journal*, 71(3).
- Czerkawski, B.O. (2014). The Semantic Web in Teacher Education. *The Turkish Online Journal of Education Technology*, 13(4).
- Devi, P.K. (2009). *Pengembangan Perangkat Pembelajaran*. Bandung: P4TK IPA
- Dick, W., Carey, L., & Carey, J.O. (2016). *The Systematic Design of Instruction*. Addison-Wesley Educational Publisher Inc.

- Dilek, Y., & Yuruk, N. (2013). Using Semantic Mapping Technique in Vocabulary Teaching at Pre-intermediate Level. *Procedia – Social and Behavioral Sciences*, 70. Published by Elsevier Ltd.
- Kusmana, A. (2014). Pengembangan Model Materi Ajar Semantik: Penelitian dan Pengembangan Model Materi Ajar Semantik di Prodi Bahasa, Sastra Indonesia, dan Daerah FKIP Universitas Jambi. *Literasi Pendidikan*, 17(1).
- Levin, B. (1993). *English verb classes and alternations: A preliminary investigation*. Chicago, IL: University of Chicago Press.
- Mayer, R.E. (2019). *Aplikasi Teknologi Multimedia dalam Proses Belajar Mengajar*, Malang. Mimbar Pendidikan
- Mcmenemy, D., & Poulter, A. (2015). *Delivering Digital Sevices: A Handbook for Public Services and Learning Centres*. London: Facet Publishing.
- Pateda, M. (2015). *Semantik Leksikal*. Jakarta: Rineka Cipta
- Pinker, S. (2013). *Learnability and cognition: The acquisition of argument structure* (2nd ed.). Cambridge, MA: MIT Press.
- Pribadi, B.A. (2011). *Model Desain Sistem Pembelajaran*. Jakarta: PT.Dian Rakyat.
- Riyanto, B. (2016). *Dasar-dasar Pembelajaran* (Edisi 5). Yogyakarta. BPFE.
- Rusman, D.(2012). *Model-Model Pembelajaran Mengembangkan Profesionalisme Guru Edisi Kedua*. Bandung: PT. Rajagrafindo Persada.
- Rusman. (2012). *Belajar dan Pembelajaran Berbasis Komputer Mengembangkan Profesionalisme Guru Abad 21*. Bandung: Alfabeta.
- Saeed, J.I. (2016). *Semantics* (4th ed.). Oxford, UK: Wiley Blackwell.
- Sugiyono. (2015). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Penerbit CV. Alfabeta: Bandung.
- Winarto, Y.T. (2016). *Karya Tulis Ilmiah Sosial: Menyiapkan, Menulis, Mencermatinnya*. Jakarta: Yayasan Pustaka Obor Indonesia
- Yule, G. (2020). *The Study of Language* (Seventh Edition).