Student Needs on Indonesian Language's Teaching Materials as General Compulsory Subject in Social Sciences and Natural Sciences Clusters

Welsi Damayanti, Syihabuddin Syihabuddin and Vismaia S. Damaianti Universitas Pendidikan Indonesia, Jl. Dr. Setiabudhi No. 229, Bandung, Indonesia welsi damayanti, syihabuddin, vismaia@upi.edu

Keywords: Student Needs Analysis, Teaching Materials, General Courses, Science Clusters.

Abstract: The purpose of this study is to analyse the students' needs on Indonesian language as a general compulsory subject in social science and natural science clusters. This research used qualitative approach with descriptive analysis method. The data in this study collected through questionnaire which distributed to students of social science and natural sciences clusters. The data validity tested by using correlation technique through correlation coefficient product moment, and data reliability tested using the Cronbach alpha formula. The results of this study showed that the continuum line indicated by the number of respondents score was 47502, which belongs to "necessary" category in social science cluster. Similarly, the results from natural science cluster showed the score of 37433, which also belongs to the "necessary" category. These results means that both according to social science clusters' students and natural science clusters' students, Indonesian language considered as necessary as a compulsory subject.

1 INTRODUCTION

The General Compulsory Course at University is a strategic in transmitting knowledge of attitude and behavior of Indonesian students through the learning process. Based on the main goal of General Compulsory Course as a development course for student that is a young adolescent level who are still looking for their identity. General Compulsory Course aims to educate graduates who characterize the Indonesian Nation. The basis of the General Compulsory Course study is real work and fosters learning motivation in line with the General Education concept. In the Law No. 12 of 2012 on Higher Education level states that, learning in universities must include the subjects of Religion, Pancasila, Civic Education and Indonesian Language. Indonesian language should be an advocate in the education of Indonesia to support the establishment of the character of the Nation.

Students must be equipped with teaching materials to face global challenges. The ability of "general education" to be a parameter in forming an adaptive, flexible, creative, innovative attitude integrated with professional competence, and aware of changes in science and technology on a global

scale (Kemenristekdikti, 2016). General education focuses on the development of individuals as a whole that includes understanding the purpose of human life. emotional ingenuity. and maturing understanding of something in harmony with science. The purpose of general education, namely; (a) To develop a person's behavior in personal and community life, (b) to actively participate as an educated citizen in society, state, and nation, (c) to recognize the need for interdependence as a citizen of the world and to be responsible, (d) to understand phenomena nature and familiarize the scientific thinking of oneself or society, and (e) keep the emotions in harmony (Harris, 2011).

General education is education that prepares the younger generation to enter life satisfactorily, in order to live worthily in time. In addition, as well as knowledge in the boundaries of the generality and convey to the students about the values that apply in the society. It states that the purpose of general education according to Dressel and Lorimer (translated by Hakam, 2013) prepares men and women to have a satisfying life, family and happy social relationships, by introducing cultural heritage, by integrating subjects into disciplines, and developing skills, ability, and attitude. General

726

Damayanti, W., Syihabuddin, S. and Damaianti, V.

In Proceedings of the Tenth Conference on Applied Linguistics and the Second English Language Teaching and Technology Conference in collaboration with the First International Conference on Language, Literature, Culture, and Education (CONAPLIN and ICOLLITE 2017) - Literacy, Culture, and Technology in Language Pedagogy and Use, pages 726-730 ISBN: 978-989-758-332-2

Copyright © 2018 by SCITEPRESS – Science and Technology Publications, Lda. All rights reserved

Student Needs on Indonesian Language's Teaching Materials as General Compulsory Subject in Social Sciences and Natural Sciences Clusters.

DOI: 10.5220/0007174007260730

Compulsory Course Indonesian Language must be contracted by all Indonesia University of Education students.

The concept of General Education is a learning process by educating through critical thinking that triggers high order thinking and fosters lifelong learning motivation. General Education must be developed in each person (Abdullah, 2004). General Education is the process of fostering the essential meanings because the essence of human beings is a creature that has the ability to learn and appreciate the essential meaning. General education fostered a person as a whole, skilled at speaking, using symbols and cues that are factually well informed. In education, teachers are involved as facilitators and partners that provide learning-based services according to the needs of the learning partners.

Knowledge and language skills are necessary to face the real world and engage in critical reflection within the community (Edgar, 2016). The results indicate that in the years of 1990s, proportion of students placed in general education classes largely increased from 27.3% to 44.7%. This evidence suggests that the U.S. achieved improved learning and educated students through general education classes (Williamson et al., 2006). The use of writing techniques as a form of writing for learning helps students learn the content of social science and gives them the practice of communicating like a true scientist. (Kuhn and McDermott, 2017).

Teaching materials become important guidelines and components in learning. Teaching materials as well as a substance of competence that is taught to students. Subyantoro (2014) Language learning is organized to achieve learning objectives that have been identified based on existing needs. The use of appropriate teaching materials to support the learning program to be better. With teaching materials, learning programs can be implemented more regularly because lecturers as an education implementers will obtain clear material guidelines (Thamrin, 2014).

There are several advantages when a lecturer develops teaching materials. First, the learning materials obtained in accordance with student learning needs. Secondly, it is easy to use teaching materials because they no longer depend on textbooks that are sometimes difficult to obtain. Third, the material obtained a more varied because it was developed by using various references. Fourth, obtained additional repertoire of knowledge and experience in writing teaching materials. Fifth, the development of effective learning communication with learners because they feel more confident to the lecturer. Sixth, the fulfilment of some demands of professionalism of lecturers (Depdiknas, 2006).

In addition to the benefits for lecturers, there are a number of benefits obtained for students with the teaching materials developed by the lecturer. Learners will get ease in learning each competence that must be mastered. Learners get the opportunity to learn independently (Thamrin, 2014).

2 METHODOLOGY

Qualitative research methods as described by as a research procedure that produces descriptive data in the form of written or oral words of the people and behavior that can be observed. In addition, descriptive methods are a way of describing and analyzing the phenomena, events, social activities, beliefs, perceptions, thoughts of individuals and groups. By using descriptive qualitative research, it can consider the importance of steps to understand the extent to which people's lives to change. This research is proposed to analyze the needs of students on teaching materials General Compulsory Course.

Indonesian language based on the science clusters. Clusters of social and natural sciences became the focus of this research. In collecting, revealing various problems and goals to be achieved then, this research is done by analytical descriptive study approach. Descriptive qualitative research is a symptom of objects that are holistic (comprehensive, inseparable). Object in question is the whole of the observation to the students through a questionnaire that includes aspects of places, actors, activities that interact synergistically. Qualitative research collects data with the aid of instruments with the help of behavior checklists involved in complex skills (Creswell, 2010). The data in this research is documentation of Semesteral (6-months) Lesson Plan which is used as a lattice to compile questionnaires and questionnaires distributed to students.

This data is tested validity by using correlation technique through correlation coefficient product moment. Then performed reliability testing using Cronbach alpha formula. The analysis in this research is used to describe the score of X variable and Y variable and its position, by the procedure of determining the number of criterium score and comparing the total score of the questionnaire with the number of criterium score, to find the total score of the questionnaire result. Next make a continuum line and determine the location of the scores of research results. The continuum line aims to determine the percentage of the scores of the research score (rating scale) in the continuum line (S/maximum score x 100%). Participants in the study were students of class of 2016 a total of 394 students of social clumps and 308 students of natural sciences.

3 RESULTS AND DISCUSSION

The role of general education lecturers is more responsible for developing and implementing valid and useful learning than in the past. Language education is one of the general education learning in college. Brice, Miller and Brice (2006) say that how teachers/lecturers use language in the classroom has an effect on how students interact, and the effect of student learning. Language learning uses language discourse known as pragmatics (Hymes, 1972; Prutting and Kirchner, 1987; Tyler, 2005) defined as the rules of language use in a social context. This is related to the importance of language for students of social science classes. Lecturers in general education face the challenge of providing the best service for students with different regional languages (Brice, et. al., 2008). Learning in general education must be a facilitator to accommodate students' needs on language.

Lecturers in undergraduate candidates are required to provide many opportunities for students to read, write, and use language to represent their understanding of the social science performance expectations. (Kuhn and McDermott, 2017). In general education classes, language can be used to engage students in working with the concept of social science. Approach for the STEM Infused Science Teaching (ASSIST) allows to negotiate their understanding of the social science concepts for learning using an argument-based inquiry (ABI) approach supported by scientific research in scholarly heuristics for students (Akkus et al., 2007; Cavagnetto et al., 2010; Hand 2008).

In addition, mathematics can simplify long descriptions in the form of symbols so that more quickly understood (Suaedi, 2016) .Natural phenomena can be expressed by the senses and have characteristics with a regularity pattern of an event, such as a cloudy sky and usually followed by rain, the heated metal will be elongated. Based on this theory, reason serves only as a manager of the concept of sensory ideas by composing the concept or dividing it up. This explanation is a category of natural science.

Knowledge includes also humanities and mathematics. The humanities are composed of art, religion, language, and history. History is sometimes incorporated into the science of social science and is a prolonged controversy whether history is science or humanities. Historical data and the results of people's explanation is Social Sciences is a science that studies the behavior and human activities in life together. Social science is one that has the role of three faces of social science, as a critical discourse, an academic enterprise, and applied science. Each branch of social science that became the main ingredient of social science has essential values and essential concepts in human life (Supardi, 2009).

In studying and understanding social phenomena and human life as a whole, using three main dimensions namely the dimensions of space, time and value/norm. The main concepts can be enriched with other concepts of equal or lower level (Ismaun, 2001). History Science contains the concept of change, events. causation, nationalism, colonialism. independence, revolution, civilization, time, and so on. Psychology contains the concepts of motivation, self-concept, attitude, perception, frustration, suggestion, 50 crowding, awareness, fantasies, thoughts, instincts, dreams, and personality. In political science the concept of power, sovereignty, social control, state, government, legitimacy, opposition, political system, democracy, human rights, etc. (Ismaun 2001).

General Compulsory Course Indonesian teaching materials in Indonesia University of Education refers to the lesson plan compiled by the General Compulsory Course lecturers' team at the General Course Compulsory communications forum throughout Indonesia in 2016 in Pekanbaru Riau. This lesson plan has been compiled based on the applicable curriculum in Indonesia. This lesson plan is used as a grid to arrange instruments. Instruments are arranged using Likert scale. Likert scale is a scale that can be used to measure attitudes, opinions, and perceptions of a person or a group of people about a phenomenon. The score of positive statements starts from 1 for strongly disagree (SD), 2 for disagree (D), 3 for not sure (NS), 4 for agree (A), and 5 for strongly agree (SA). The negative statements score starts from 1 for strongly agree (SA), 2 for agree (A), 3 for Not sure (NS), 4 for disagree (D), and 5 for strongly disagree (SD). Some remove the "Not sure" option in the instrument to make it easier to see the questionnaire that the respondent input. Likert scale is used to measure the approval and disagreement of a person against a program plan, program implementation or success rate of a program. This study uses a positive statement that is Very Unnecessary (VU), Unnecessary (U), Less Necessary (LN), Necessary (N), and Very Necessary (VN).

The prepped Instruments have been tested for the validity and reliability in advance. The validity and reliability test of the instrument was done on 126 Faculty of Social Sciences Education and 126 Faculty of Mathematics and Natural Sciences Education, Indonesia University of Education students who have

contracted Indonesian general lecture as a sample. Based on the calculation of validity test that has been done on 30 items statement, obtained that all statement items declared valid. Based on the Item-Total Statistics table obtained on each item. All values of in the table> 0.1472 =, this means that all items are valid. The value =0.1472 is obtained from table r where and $\dot{a} = 0.05$. Obtained shows bigger than with the value of 0,1472. Thus the statement items on the instrument are declared valid. The value of Cronbach's Alpha obtained from the Reliability *Statistics* table is 0.936 > 0.1472 =, where = 0.1472is obtained from table r with dk = n-2 = 126-2 = 124and $\dot{a} = 0.05$. For reliability value obtained r value of 0.936 which means this Instrument has a very good reliability value and can be used in this study. This can be seen in the table 1.

Questionnaires were given to students of social science classes in batch of 2016. Number of respondents are 394 students. The questionnaires were distributed to students of natural sciences, batch of 2016. The number of respondents was 308 students. Recapitulation score of respondents' results of social science student cluster 394 respondents and natural science students as much as 308 respondents about the material and learning General Compulsory Course Indonesian language can be seen in the table 2. The results of the recapitulation of respondents' scores on General Compulsory Course material and learning in Indonesian language can be viewed as a whole based on the continuum area showing the ideal region. The steps as calculated to know continuum area. Based of continuum line area showing the ideal region of social science be seen in the figure 1. Based of continuum line area showing the ideal region of natural science be seen in the figure 2.

Table 1: Reliability statistic.

Cronbach's Alpha			Cronbach's Alpha Based on Standardized Items						N of Items	
0.936			0.935					30		
	VU		U	LN		N			VN	
11820	212	276	307	32	40	188 4750	496 2	544	5	59100

Figure 1: Continuum Line Social Science.



Figure 2: Continuum Line Natural Science.

No	Indicators	Statements	Total Score (SS)	Average Score (SS)	Total Score (NS)	Average Score (NS)
1	The Essence of Language	6	10295	1715.833	7909	1318
2	Variety of languages, and their characteristics	2	3265	1632.5	2447	1224
3	Diction or word choice	1	1667	1667	1331	1331
4	Improved Indonesian Spelling (<i>Ejaan yang disempurnakan</i>)	6	10433	1738.833	8216	1369
5	Effective Sentences	2	3222	1611	2678	1339
6	Paragraph (alinea)	3	3406	1135.333	2500	833.3
7	Scientific articles	2	3574	1787	2779	1390
8	Journal	3	3400	1133.333	2794	931.3
9	Research report	1	1628	1628	1429	1429
10	Scientific Journal	1	1423	1423	1403	1403
11	Reasoning	2	3430	1715	2566	1283
12	Scientific Presentation	1	1759	1759	1381	1381
Total		30	47502		37433	

Table 2: Recapitulation of Respondents Result Score (Social Science/SS and Natural Science/NS).

CONAPLIN and ICOLLITE 2017 - Tenth Conference on Applied Linguistics and the Second English Language Teaching and Technology Conference in collaboration with the First International Conference on Language, Literature, Culture, and Education

4 CONCLUSIONS

The results of questionnaire analysis that has been given to students of social science and natural sciences are declared valid according to validity and reliability test. Questionnaires are distributed to get the expected outcomes that students want that are drawn on the continuum line. Based on the continuum line, student expectations of social science classes on the development of teaching materials and learning MKWU Indonesian language is necessary. This is indicated by the number of total respondents' score of 47502 which is included in the category of necessary. Continuum lines, the expectations of natural science students on the development of teaching materials and learning MKWU Indonesian language is necessary. This is indicated by the number of respondents score of 37433 included in the category of necessary.

ACKNOWLEDGEMENTS

The researcher would like to thank Prof. Dr. H. Syihabuddin, M.Pd. and Dr. Vismaia S. Damaianti, M.Pd. which has provided motivation and support until this article is completed.

REFERENCES

- Abdullah, T., 2004. Landasan Prinsip Pendidikan Umum, Pascasarjana UPI. Bandung.
- Akkus, R., Gunel, M., Hand, B., 2007. Comparing an Inquiry-based Approach known as the Science Writing Heuristic to Traditional Science Teaching Practices: Are there differences?. *International Journal of Science Education.* 29(14), pp.1745-1765.
- Brice, A. E., Miller, K. J., Brice, R. G., 2006. Language in the English as a second language and general education classrooms: A tutorial. *Communication Disorders Quarterly.* 27(4), pp.240-247.
- Brice, A. E., Shaunessy, E., Hughes, C., McHatton, P. A., Ratliff, M. A., 2008. What language discourse tells us about bilingual adolescents: A study of students in gifted programs and students in general education programs. *Journal for the Education of the Gifted*. 32(1), pp.7-33.
- Cavagnetto, A., Hand, B. M., Norton-Meier, L., 2010. The nature of elementary student science discourse in the context of the science writing heuristic approach. *International Journal of Science Education.* 32(4), pp.427-449.

- Creswell, J. W., 2010. Research Design Qualitative, Quantitative, and Mixed Methods Approaches, SAGE Publications. California, ^{3rd} edition.
- Depdiknas., 2006. *Panduan Pengembangan Bahan Ajar*, Direktorat Pembinaan Sekolah Menengah Atas. Jakarta.
- Edgar, S. N., 2016. Music teacher education at a liberal arts college: Perspectives across campus. *Journal of Music Teacher Education*. 25(2), pp.95-108.
- Hand, B., 2008. Science inquiry, argument and language: A case for the science writing heuristic, Sense Publishers. Rotterdam, The Netherlands.
- Hakam, K. A., 2013. *Tensions and models in general education planning*, Universitas Pendidikan Indonesia. Bandung.
- Harris, C. W., 2011. Encyclopedia for Educational Research, Macmillan. New York.
- Hymes, D., 1972. Functions of language in the classroom, Teachers College Press. New York, (pp. xi-ivii).
- Kuhn, M., McDermott, M., 2017. Using Argument-Based Inquiry Strategies for STEM Infused Science Teaching. *Science and Children*. National Science Teachers Association.
- Ismaun, 2001. Paradigma Pendidikan Sejarah yang Terarah dan Bermakna. *Historia: Jurnal Pendidikan Sejarah. I* (4), pp.88-115.
- Kemenristekdikti., 2016. Bahasa Indonesia untuk Perguruan Tinggi, Direktorat Jenderal Pembelajaran dan Kemahasiswaan. Jakarta.
- Prutting, C. A., Kittchner, D. M., 1987. A clinical appraisal of the pragmatic aspects of language. *Journal of Speech and hearing Disorders*. 52(2), pp.105-119.
- Suaedi, 2016. Pengantar Filsafat Ilmu, IPB Press. Bogor.
- Subyantoro, 2014. Basis Pembelajaran Bahasa yang Komunikatif pada Kurikulum 2013. Seminar Pembelajaran Bahasa dan Sastra Indonesia "Apa Kabar Kurikulum".
- Supardi, 2009. Filsafat, Ilmu, dan Ilmu Sosial. Diktat Mata Kuliah Dasar-dasar Ilmu Sosial, Universitas Negeri Yogyakarta. Yogyakarta.
- Thamrin, M., 2014. Pengembangan bahan ajar penulisan karya ilmiah berbasis vokasi. *LITERA*. 13(1).
- Tyler, A., 2005. Language in use: Cognitive and discourse perspectives on language and language learning, Georgetown University Press. Washington, DC.
- Undang-undang Perguruan Tinggi, 2014. Undang-undang Republik Indonesia Nomor 12 Tahun 2012, Fokusindo Mandiri. Bandung.
- Williamson, P., McLeskey, J., Hoppey, D., Rentz, T., 2006. Educating students with mental retardation in general education classrooms. *Exceptional children*. 72(3), pp.347-361.