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Developing Language Learning Materials for Undergraduate Students

¹Sukirman, ¹Abdul Pirol and ²Ismail Suardi Wekke ¹State Islamic Institute of Palopo, South Sulawesi, Indonesia ²Sekolah Tinggi Agama Islam Negeri (STAIN) Sorong, West Papua, Indonesia

Abstract: The objective of this study was to develop a workbook of English morphology materials. The data was obtained by interviewing the lecturer, analyzing the syllabus used at the university, validating the product to the two experts in English morphology, trying out the product to the users. The data was analyzed qualitatively and descriptively. Furthermore, ten aspects of the product were validated to the experts and tried out the users. The aspects were organization of the materials, instructional objectives, examples, exercises, activities and instructions, coverage of the materials, contents of the materials, language and summaries. The findings of the try-out indicated that all the aspects were clear, understandable and not confusing for the students. Also, the product was well-designed and attractive. They were also not too easy and difficult. In addition, they dealt with the objective of the course.

Key words: Developing materials, word formation, English morphology, objective, interviewing, Indonesia

INTRODUCTION

In the preliminary study, it was found that the teaching of English morphology at State Islamic University "Alauddin" Makassar was not successful. It could be seen from the student's scores of the course. Most of the students reached Score C. They also pointed out that this course was one of the most difficult courses they had. In fact, they were not motivated and interested to join the course. It was also found that there was no lecturer who had the expertise in teaching the materials. In addition, it was found that both the students did not have appropriate materials of English morphology dealing with their proficiency and needs. In this case, the existing materials were hard for the students to understand the contents because of the language used. The language was not suitable with the student's English proficiency. They did not also provide adequate examples as well as exercises. In addition, they dealt with general discussion of word formation for all languages such as French, Latin and German words. The students who did not understand those languages were confused. Therefore, researchers was encouraged to develop appropriate of English morphology (Mendibil and MacBryde, 2005; Cannon, 1986; Alonso, 2011) in the form of a workbook (Leggett et al., 2012; Jasper, 1995; Dancza et al., 2016; Tomlinson, 2011) dealing with student's proficiency, needs and the objectives of course. The teaching of English morphology had important roles in developing the student's vocabulary, reading and writing development. Some studies showed that morphological instructions provide good contributions to

the student's vocabulary development. Morphological instruction improves the student's words reading and spelling (Nunes et al., 2003; Angelelli et al., 2014; Goodwin et al., 2013; Amanda, 2016) but this kind of instruction is still uncommon in schools. Then, morphological instruction can improve student's ability to define words from untaught morphological families by identifying the affixes of the words (Bowers and Kirby, 2010; Peter, 2010; Ganz, 2008). Also, morphological instruction and analysis are beneficial to promote student's ability in analyzing word structures into the smallest unit of the words and to evolve their ability to infer the meaning of unfamiliar words (Veeravagu et al., 2010; Mcbride-chang et al., 2005; Baumann et al., 2003; Harris et al., 2011). Finally, morphological instruction is especially advantageous for students who struggle with writing (Reinbold, 2013; McCutchen et al., 2014) it minimizes student's misspelling writing (Alonso, 2011).

MATERIALS AND METHODS

The research design used in this study was Research and Development (R&D). The development model used was ADDIE model. It stands for analysis, design, develop, implement and evaluate (Donald, 2005; Hsu *et al.*, 2014; Apel and Werfel, 2014). The procedures were started from analyzing, designing, developing, implementing and evaluating the materials (Wiphasith *et al.*, 2016; Reinbold, 2013) (Fig. 1).

Analysis: The researchers analyzed the syllabus used to gain information about the objective of the course

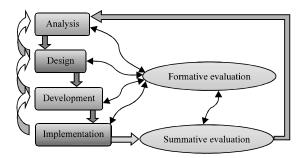


Fig. 1: ADDIE Model (Donald, 2005)

and the materials needed by students (Suwarni et al., 2014). After analyzing the objective and the materials he consulted them to the two experts and the lecturers to decide whether the objective should be revised or not as well as whether the materials were appropriate with English formation materials or not.

Design: The researchers wrote the objective of the course and selected the delivery materials. After that he sequenced the materials from easiest to most difficult. Also, he designed the selected materials in the form of a blueprint. In addition, he decided the materials design such as the organization, lay-out, format, style and font of the product.

Development: The researchers developed the materials in the form of a textbook of English morphology. In this case, he discussed the materials based on their order. After that he provided some examples of each material. Finally, he developed some exercises dealing with the materials-they were developed in varied format.

Implementation: The researchers taught the materials to real class. In other words, the materials developed were tried out to the students. The design of the try-out was field try-out. The product was tried out to the 5th semester students at the English Education Department in Alauddin State Islamic University of Makassar. The purposes of this phase were to look at whether the product had fulfilled the learner's needs as well as the objectives of the course or not and whether the materials were appropriate for the target learners or not. In addition, ten aspects of the product were tried out: organization of the materials, instructional objectives, examples, exercises, activities and instructions, coverage of the materials, contents of the materials, language and summaries (Ghorbani, 2011).

Evaluation: The researchers evaluated the results of the try out. Two kinds of evaluation were involved: formative

and summative. Formative evaluation was ongoing during and between phases; meanwhile, summative evaluation dealt with summative evaluation dealt with the final evaluation of developed materials. To obtain valid data, the researchers used two instruments: rubric and worksheet. The rubric was addressed to experts and students. The worksheet was only addressed to the experts, they were in the forms of worksheet for expert's comment and suggestion as well as the worksheet for expert's revision. Furthermore, types of data obtained in this study were qualitative and quantitative. The qualitative data gained from the experts were analyzed qualitatively; meanwhile the quantitative data gained from the try-out were analyzed descriptively.

RESULTS AND DISCUSSION

The product of this study was a student's book (Dalton and Grisham, 2013) in form of a workbook (Birjandi and Alizadeh, 2013; Barrette, 2015) consisting of theoretical and practical point of view of English morphology. The researchers presented short discussion dealing with morphological process in forming words then followed by some exercises dealing with the materials presented previously. The exercises were also designed by applying Bloom taxonomy (Tyran, 2010; Adams, 2015; Richard, 1985) in order to help students foster their critical thinking (Fahim and Bagheri, 2012; Birjandi and Alizadeh, 2013; Black and Ellis, 2010).

The results of the needs analysis included the objective and the materials of English morphology. First, the objective of the teaching of English morphology stated in the syllabus was to provide the students with some knowledge of English morphology and how to apply the knowledge for the teaching and learning English. Second, the materials included in the syllabus were introduction, morphemes, root, base, stem, affixes, inflection, derivation, English words, word formation and other word formation processes.

The results of the product design included writing the objectives of the teaching of English morphology and the blueprint of English morphology materials. First, the existing objective was consulted to the two experts in order to gain information whether it should be revised or not. They stated that it was a good objective and no needs to be revised, the researchers only rewrote the existing objective. Second, the materials identified in the needs analysis were designed in the form of a blueprint. The contents of the blueprint were designed from easiest to the most difficult (Table 1).

Two experts were involved in order to validate the product. They validated ten aspects of the product: organization of the materials, instructional objectives,

Table 1: The organization of materials

		Percentage		
Aspects	Criteria	Yes	Partly	No.
Organization	Organized attractively	96.67	3.33	0
	Organized appropriate	100	0	0
	Organized in logically ordered tasks	93.33	6.67	0
Instructional objectives	Clear	93.33	6.67	0
	Understandable	96.67	3.33	0
	Ordered appropriately	90	10	0
	Reflect to the topics	96.67	3.33	0
Examples	Clear	90	10	0
	Understandable	96.67	3.33	0
	Too easy	96.67	3.33	0
	Too difficult	0	3.33	96.67
	Confusing	0	3.33	96.67
	Help learners to	100	0	0
	Master materials			
	Deal with the theory	96.67	3.33	0
Exercises	Understandable	93.33	6.67	0
	Clear	93.33	6.67	0
	Too easy	13.33	20	66.67
	Too difficult	16.67	66.67	16.67
	Appropriate	93.33	6.67	0
	Reinforce what learners have already learned	96.67	3.33	0
	Simple to more complex	93.33	6.67	0
	Varied in format	93.33	6.67	0
	Match with the topic being discussed	93.33	6.67	0
	Challenge learners	86.67	6.67	6.67
	Can be done by the learners	93.33	6.67	0
	Comprehend English morphology materials	90	10	0
	Enhance student's ability to understand the theory of word-structure	9.33	6.67	0
	Emprove student's ability in analyzing word-structure	90	10	0
	Enhance student's ability in creating English word	100	0	0
Activities	Attractive	90	10	0
	Appropriate with the student's ability	93.33	6.67	0
	Motivate learners	100	0	0
	Designed for work group	83.33	10	6.67
	Designed for individual	13.33	66.67	20
	Can be done by the learners	100	0	0
	Varied in format	100	0	0
Instructions	Clear	93.33	6.67	0
	Appropriate	100	0	0
	Understandable	100	0	0
	Confusing	0	00	100
	Ambiguous	0	3.33	96.67
	Can be done by the learners	96.67	3.33	0
Coverage	In line with the syllabus of the course	90	10	0
	Relevant to the goals of the course	100	0	0
	Matches the objectives of the course	100	0	0
	Covers both theoretical and practical points of view	80	20	0
	Understandable	90	10	0
	Appropriate with the student's interest	83.33	10	6.67
	Appropriate with the student's needs	90	10	0
	In line with the syllabus	90	10	0
Contents	Clear	90	10	0
	Appropriate	93.33	6.67	0
	Understandable	96.67	3.33	0
	Matches with the goals of the course	100	0	0
	Matches with the objectives of the course	100	0	0
	Matches with the learner's interests	83.33	10	6.67
	Matches with the learner's needs	90	10	0
	Well-designed	100	0	0
	High quality	90	10	0
	Covered the standard materials of English morphology	80	20	ō
	Up-to-date	80	20	0
Language	Appropriate with student's English proficiency	96.67	3.33	0
Language	Clear	96.67	3.33	0
	Confusing	0	0	100

Table 1: Continue

Aspects	Criteria	Percentage		
		Yes	Partly	No.
Summaries	Clear and simple	96.67	3.33	0
	Confusing	0	0	100
	Understandable	96.67	3.33	0
	Well-organized	96.67	3.33	0
	Appropriate with the materials presented	100	0	0

examples, exercises, activities, instructions, coverage of the materials, contents of materials, language and summary. The product was validated twice. For the first validation, the experts pointed out that seven aspects of the product were developed well whereas three aspects of them should be revised: language, exercises and summaries. The language used was confusing; there were some grammatical errors, the exercises were not challenging and the summaries were too long and not to the point. For the second validation, the experts pointed out that all the aspects of the product was excellent and appropriate with the objective of the teaching of English morphology.

After validation, the ten aspects of the product were retried out to the users. Then, the results of the try-out showed in Table 1 that all the aspects were satisfactory. The results of the try-out presented in Table 1 showed that all the aspects of the product (organization of the materials, instructional objectives, examples, exercises, activities, instructions, coverage of the materials, contents of materials, language and summary) was acceptable and appropriate with the student's needs and proficiency. In addition, table of qualification indicated that the quality of the product was excellent. Therefore, no revision was needed in respect to all the aspects.

Even, all the aspects were acceptable and appropriate for the users and no revision needed, the findings drove the researchers to analyze them more deeply in order to draw a conclusion dealing with the most important aspects that should be covered in designing a course material. Then, based on the student's response it was found five primary aspects should be covered in designing teaching material. They are the content (based on students" need); instructional objectives (measurable and achievable objectives); organization (the way how the designer(s) organize the materials starting from the simple to the most complex material, it should be understandable); activities (fostering critical thinking, motivated, interesting and attractive) and language (understandable and based on student's language proficiency). In other sides, the other aspects are also very important, however they are only as secondary aspects in helping students to comprehend the materials. Furthermore, the findings stated previously also

showed that the researchers developed well the materials in order to; promote the student's curiosity, interest and attention in doing them (Sun, 2010); help learners to feel at ease and comfortable in doing them; help learners to develop confidence by asking question(s) actively both to the researchers and their classmate are relevant and useful for improving the student's English proficiency especially their vocabulary mastery; show student's readiness to learn them in the try-out they totally enjoyed their time in doing that and provide positive feedback for students by discussing the materials and exercises with their pairs (Tomlinson, 2011).

This product was also developed in accordance to Bloom taxonomy (Soleimani and Kheiri, 2016; Assaly and Smadi, 2015; Pourdana and Rajeski, 2013; Dong, 2014). In this case, the users of this product were not only expected to achieve lowest level of critical thinking but also the highest level of critical thinking. In this case, the product was designed the materials as well as the exercises to foster their critical thinking (Kamaili and Fahim, 2011; Talebinezhad and Matou, 2012) starting from the lowest until to the highest level. After reading the product they will of course; remember all the materials; understand the concepts of English morphology; apply the concept if they find unfamiliar words in their reading; analyze the element of words in their writing and reading; evaluate current issues dealing with English morphology and create new words.

CONCLUSION

The product was a student's book in form of a workbook consisting of eight chapters, the number of pages for each chapter was varied: 8, 15, 16, 17, 15, 19, 20 and 16 pages, respectively. The total pages of the product were 126 pages. In addition, the materials accounted for introduction, morpheme, root, base, stem, affix, inflection, derivation, English words, word formation and other word formation processes. Furthermore, it was designed using Times New Roman theme font; meanwhile the letters were 13 point. For the title of each chapter was written using Cambria (Headings) font with 41 point; meanwhile for the sub-chapter was also written using Cambria (Headings) font but with different point (17) and style

(title). In addition, the title of each chapter and sub-chapter were designed colorfully. Then, in the title page of each chapter, the instructional objectives were provided colorfully.

The findings of the try-out indicated that all the aspects were clear, understandable and not confusing for the students. Also, the product was well-designed and attractive. They were also not too easy and difficult. They also dealt with the objective of the course. Furthermore, the product was designed in accordance to some principles of developing materials proposed by Tomlinson. Then, it was also developed based on Bloom taxonomy in order to promote student's critical thinking.

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REFERENCES

- Adams, N.E., 2015. Bloom's taxonomy of cognitive learning objectives. J. Med. Librar. Assoc., 103: 152-153.
- Alonso, R.T., 2011. Affix combination in old English noun formation: Distribution and constraints. Spanish J. Appl. Linguist., 24: 257-278.
- Amanda, P.G., 2016. Effectiveness of word solving: Integrating morphological problem-solving within comprehension instruction for middle school students. J. Read. Writing, 29: 91-116.
- Angelelli, P., C.V. Marinelli and C. Burani, 2014. The effect of morphology on spelling and reading accuracy: A study on Italian children. Frontiers Psychol., 5: 1373-1373.
- Apel, K. and K. Werfel, 2014. Using morphological awareness instruction to improve written language skills. Lang. Speech Hearing Serv. Sch., 45: 251-260.
- Assaly, I.R. and O.M. Smadi, 2015. Using bloom's taxonomy to evaluate the cognitive levels of master class textbook's questions. English Lang. Teach., 8: 100-110
- Barrette, C.M., 2015. Usefulness of technology adoption research in introducing an online workbook. Syst., 49: 133-144.
- Baumann, J.F., E.C. Edwards, E.M. Boland, S. Olejnik and E.J. Kame'enui, 2003. Vocabulary tricks: Effects of instruction in morphology and context on fifth-grade students' ability to derive and infer word meanings. Am. Educ. Res. J., 40: 447-494.

- Birjandi, P. and I. Alizadeh, 2013. Manifestation of critical thinking skills in the English textbooks employed by language institutes in Iran. Intl. J. Res. Stud. Lang. Learn., 2: 27-38.
- Black, S.M. and R.B. Ellis, 2010. Evaluating the level of critical thinking in introductory investments courses. Acad. Educ. Leadersh. J., 14: 99-106.
- Bowers, P.N. and J.R. Kirby, 2010. Effects of morphological instruction on vocabulary acquisition. Reading Writing, 23: 515-537.
- Cannon, G., 1986. Blends in English word formation. Linguist., 24: 725-754.
- Dalton, B. and D.L. Grisham, 2013. Love that book. Reading Teach., 67: 220-225.
- Dancza, K., J. Copley, S. Rodger and M. Moran, 2016. The development of a theory informed workbook as an additional support for students on role emerging placements. Br. J. Occupat. Therapy, 79: 235-243.
- Donald, C., 2005. Instructional system design (ISD). System Approach to Training.
- Dong, F.M., 2014. Teaching learning strategies: Connections to bloom's taxonomy. J. Food Sci. Educ., 13: 59-61.
- Fahim, M. and M.B. Bagheri, 2012. Fostering critical thinking through Socrates questioning in Iranian language institutes. J. Lang. Teaching Res., 3: 1122-1127.
- Ganz, J., 2008. Word morphology as a strategy for vocabulary instruction. Ohio Reading Teach., 39: 3-9.
- Ghorbani, M.R., 2011. Quantification and graphic representation of EFL textbook evaluation results. Theor. Pract. Lang. Stud., 1: 511-520.
- Goodwin, A.P., A.C. Huggins, M.S. Carlo, D. August and M. Calderon, 2013. Minding morphology: How morphological awareness relates to reading for English language learners. Reading Writing, 26: 1387-1415.
- Harris, M.L., J.B. Schumaker and D.D. Deshler, 2011. The effects of strategic morphological analysis instruction on the vocabulary performance of secondary students with and without disabilities. Learn. Disab. Q., 34: 17-33.
- Hsu, T.C., J. Lee-Hsieh, M.A. Turton and S.F. Cheng, 2014. Using the ADDIE model to develop online continuing education courses on caring for nurses in Taiwan. J. Continuing Educ. Nurs., 45: 124-131.
- Jasper, M., 1995. The portfolioworkbook as a strategy for student-centred learning. Nurse Educ. Today, 15: 445-451.
- Kamali, Z. and M. Fahim, 2011. The relationship between critical thinking ability of Iranian EFL learners and their resilience level facing unfamiliar vocabulary items in reading. J. Lang. Teach. Res., 2: 104-111.

- Leggett, H., J. Sandars and P. Burns, 2012. Helping students to improve their academic performance: A pilot study of a workbook with self-monitoring exercises. Med. Teach., 34: 751-753.
- McCutchen, D., S. Stull, B.L. Herrera, S. Lotas and S. Evans, 2014. Putting words to work: Effects of morphological instruction on children's writing. J. Learn. Disab., 47: 86-97.
- Mcbride-chang, C.A.T.H.E.R.I.N.E., R.K. Wagner, A. Muse, B.W.Y. Chow and H.U.A. Shu, 2005. The role of morphological awareness in children's vocabulary acquisition in English. Appl. Psycholinguistics, 26: 415-435.
- Mendibil, K. and J. MacBryde, 2005. Designing effective team-based performance measurement systems: An integrated approach. Produc. Plann. Control, 16: 208-225.
- Nunes, T., P. Bryant and J. Olsson, 2003. Learning morphological and phonological spelling rules: An intervention study. Sci. Stud. Reading, 7: 289-307.
- Pourdana, N. and J.S. Rajeski, 2013. Estimating the difficulty level of EFL texts: Applying bloom's taxonomy of educational objectives. Intl. J. Appl. Linguist. English Literature, 2: 202-211.
- Reinbold, S., 2013. Using the ADDIE model in designing library instruction. Med. Ref. Serv. Q., 32: 244-256.
- Richard, P., 1985. Bloom's taxonomy and critical thinking instruction. Educ. Leadersh., 42: 36-39.

- Soleimani, H. and S. Kheiri, 2016. An evaluation of TEFL postgraduates testing classroom activities and assignments based on bloom's revised taxonomy. Theory Pract. Lang. Stud., 6: 861-869.
- Sun, Z., 2010. Language teaching materials and learner motivation. J. Lang. Teach. Res., 1: 889-892.
- Suwarni, S., S.S. Tarjana, S.Y. Slamet and Ngadiso, 2014. English teaching material development as an alternative source in teaching English at junior high schools. Intl. J. Res. Stud. Lang. Learn., 3: 95-105.
- Talebinezhad, M.R. and Z. Matou, 2012. EFL reading comprehension textbooks at university level: A critical thinking perspective. Theory Pract. Lang. Stud., 2: 1746-1754.
- Tomlinson, B., 2011. Introduction: Princples and Procedures of Materials Development. In: Materials Development in Language Teaching, Tomlinson, B. (Ed.). Cambridge University Press, Cambridge, UK., pp: 1-10.
- Tyran, C.K., 2010. Designing the spreadsheet based decision support systems course: An application of Bloom's taxonomy. J. Bus. Res., 63: 207-216.
- Veeravagu, J., C. Muthusamy, R. Marimuthu and A.S. Michael, 2010. Using bloom's taxonomy to gauge students reading comprehension performance. Canadian Social Sci., 6: 205-212.
- Wiphasith, H., R. Narumol and C. Sumalee, 2016. The design of the contents of an e-Learning for teaching
 M. 5 English language using ADDIE model. Intl. J. Inf. Educ. Technol., 6: 127-131.