THE DEVELOPMENT OF LOCAL WISDOM-BASED CRAFT AND ENTREPRENEURSHIP MODULE TO IMPROVE THE ENTREPRENEURIAL INTENTION IN SENIOR HIGH SCHOOL

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ABSTRACT

The objective of research was to develop a local wisdom-based craft and entrepreneurship module to improve students' entrepreneurial intention. This study was a research and development based on Sukmadinata's model, encompassing three research steps: preliminary study, development, and trial. The subjects of research were the 11th graders of SMAN 1 Bodeh. The result of validation conducted by experts obtained mean value of 89.39% belonging to very good category. The result of non independent t-test obtained sig. 0.000 meaning that significance level is < 0.05, so that H0 is not supported, meaning that there is an increase in posttest and pretest value. Considering the result of research, it can be concluded that students' entrepreneurial intention improves after using craft and entrepreneurship module.

KEYWORDS: module, craft and entrepreneurship, local wisdom, entrepreneurial intention

INTRODUCTION

Craft and entrepreneurship is compulsory subject taught to students at high education level. Craft and entrepreneurship learning is important to be a means of growing entrepreneurship spirit earlier and constitutes a good measure to prepare many more entrepreneurs in Indonesia. Widiastuti, Rahmawati, & Rahmawaty (2015: 2) say that the essence of craft and entrepreneurship course is to growth creativity with economic value in improving the entrepreneurial spirit. Entrepreneurial knowledge and skill are expected to grow entrepreneurial intention for the sake of achieving the students' independency after graduation. Preliminary study conducted in Public Junior High Schools in Pemalang Regency found that students' entrepreneurial intention is low. It can be seen in the figure 1 below.
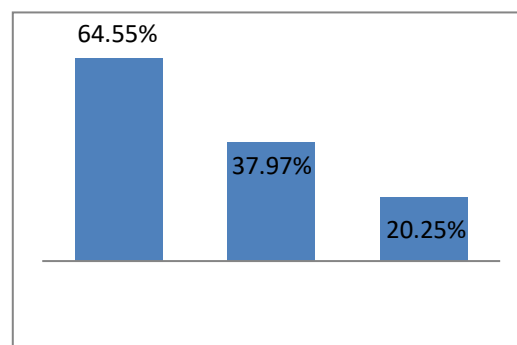
Figure 1. Alternative choice after graduation

Figure 1 shows that only few students intend to establish business. Similarly, Hartini says that only few Senior High School graduates are oriented to and intend to work independently or to be entrepreneur with knowledge they acquire in school until today (Wijaya, 2007: 118). Most students prefer working after having graduated from Senior High School. Bangser (2008: 4), suggested that Senior High School graduates cannot meet the company's standard in many academic area, work skill, presence, team work, collaboration, and working habit. As a result, there is an increase in educated unemployment rate, because Senior High School graduates are not equipped with special skill need in work realm.

Considering some problems above, one solution to improve students' entrepreneurial intention in craft and entrepreneurial learning is to design a good teaching material. One of teaching materials to be developed is module. Module belongs to independent teaching material that is practical and adjusted with the students' need (Sudarwati, Susilowati, & Qomariyah, 2014: 165). The objectives of module organization are, among others, to deal with limited time and space of students and teachers. Larawan (2013:

11) Reveals that *"...with the use of modularized   instruction,   more time could be used for the teacher's explanation instead of note-taking"*.

Learning system using module gives the students an opportunity of learning independently, reading elaboration and instruction in activity sheet, answering question and implementing the measures to be completed in each task (Prasetya & Sukardi, 2016: 156). Module has a distinctive advantage compared with other teaching materials, module can condition the well-planned, independent, completed learning activity with obvious outcome (Darmiatun, 2013: 6); in addition module can also lead students to participate actively in the interaction with learning material (Rufii, 2015: 19).

Mirkouei, Bhinge, McCoy, Haapala, & Dornfeld (2016: 1139) revealed that learning using module effectively improves the students' interest in the material presented. Learning module can solve the learning problems like poor concentration, and critical and creative thinking ability Matanluk, Mohammad, Kiflee, & Imbug, 2013: 613). It indicates that the use of module in communicating information and knowledge can be understandable to students. These advantages of module can be an opportunity the teacher can utilize to develop a more attractive and joyful learning module, thereby will improve learning enthusiasm and facilitate the students to understand learning material. The module to be developed should be organized based on condition and potency of individual areas. The utilization of local wisdom as learning material will build contextual and more meaningful learning (Anwari, Nahdi, & Sulistyowati, 2016:1). In addition, local wisdom as a learning material very effectively helps students improve their affective skill, cognitive ability, and other skill (Kurniawati, Wahyuni, & Putra, 2017: 49). Therefore, learning model to be developed should be

integrated into local wisdom in order to motivate the students to learn it because it is familiar to their daily life. The use of local wisdom- based learning model shows positive effect on the improved learning outcome. As suggested by Azizahwati, Maaruf, Yassin, dan Yuliani (2015: 73), *students' learning outcome improves after the learning process using local wisdom-based physics learning. The improvement of learning outcome is the accumulation of students'* improved knowledge and attitude during learning process. Wang & Wong (2004: 163) state that "Their attitude and knowledge of entrepreneurship are likely to shape their inclination to start their own businesses in the future. It is in line with Nugroho's (2013: 136) study finding that learning achievement affects entrepreneurial intention positively and significantly. The use of module integrated into local wisdom in craft and entrepreneurship learning is expected to improve the students' entrepreneurial intention.

Therefore, a local wisdom- based craft and entrepreneurship module will be developed in this research in order to be used in craft and entrepreneurship learning process in SMA Negeri 1 Bodeh. The problem statement in this research is how to develop local wisdom-craft and entrepreneurship module to improve the students' entrepreneurial intention. Meanwhile, the objective of research is to develop local wisdom- based craft and entrepreneurship module that can improve the students' entrepreneurial intention.

Therefore, a local wisdom- based craft and entrepreneurship module will be developed in this study to be used in craft and entrepreneurship learning process in SMA Negeri 1 Bodeh. The problem statement of research is how to develop a local wisdom-based craft and entrepreneurship module to improve the students' entrepreneurial intention. The objective of research is to develop a local wisdom-based craft and entrepreneurship module to improve the students' entrepreneurial intention

METHOD

This study was a research and development, the research process oriented to developing and validating the product used in the learning (Borg & Gall, 1983: 772). The product developed was a local wisdom-based craft and entrepreneurship module. This research procedure was based on Sukmadinata's (2012: 189) involving preliminary study, development, and trial. This research was limited to product development stage. This research started with preliminary study conducted by means of library study and field survey. This stage was intended to collect data related to learning process, teaching material used, and students and teachers' need. The data was obtained through observation, interview, and document analysis. Data collected was then analyzed using descriptive analysis.

The next stage was development one intended to develop the finding obtained during preliminary study into module prototype design. The first step taken in this stage was to design prototype based on the finding of preliminary study. The draft product design was then validated by expert judgment including material, media experts, linguist, and education practitioner. Many recommendations and inputs will be used as the basis of product improvement. The next step was to test the product

feasibility by means of trial. Product trial was conducted in two stages: small-scale and large- scale trials.

Small-scale trial was conducted on 10 11th graders of Social Science 3 in SMA N 1 Bodeh. Data of small-scale trial was obtained from interviewing teachers and students in the end of learning. Recommendation and input were obtained from teachers and students and used to be the material for revising the module to be trialed again in large-scale trial. The large- scale trial was conducted in the 11th Social Science 1 and 11th Social Science 2 graders in SMAN 1 Bodeh. The subjects of research were 32 students selected using random sampling technique. The large-scale trial was conducted to get response concerning the quality of module and to find out the improvement of students' entrepreneurial intention after using the module developed.

The large scale trial in this research could be conducted using experimental method with one group pretest posttest control design, the one using an experimental class by administering pretest and posttest.

Instruments of collecting data used were questionnaires of students' response and entrepreneurial intention. Students' response questionnaire was analyzed descriptively quantitatively, while the result of pretest and posttest on students' entrepreneurial intention questionnaire will be analyzed using non-independent test preceded with prerequisite test. Analytical prerequisite test consisted of normality and homogeneity tests. Normality test was analyzed using kolmogrov smirnov, and homogeneity test was analyzed using Levene's test. Non independent t-test was conducted using nonparametric paired sample t test. T value obtained was then compared with □ of 5% or 0.05. If t-statistic <□, the hypothesis was supported (H0 was not supported), so that there is a difference between pretest and posttest, and vice versa or if t-statistic >□, hypothesis was not supported or H0 was supported so that there was no difference between pretest and posttest.

RESULT AND DISCUSSION

Preliminary Study

Preliminary study stage was conducted to get information on text book used and the need for craft and entrepreneurship module. The result of observation and interview showed that learning methods used more were recording and lecturing, so that the students read book less enthusiastically, students do not have textbook that can be used for learning, students use the book they borrow from library that is limited in number during learning process, students find difficulty in studying the book because the material contained in the book is general in nature, incomplete, and not relevant to local wisdom. The result of document analysis on teaching material used shows that the material contained in the book has not been specific and has not been explained in detail, and neither attractive visualization nor evaluation question is available.

Considering the result of preliminary study conducted in craft and entrepreneurship learning process in SMAN 1 Bodeh, it can be found that students have no textbook for learning. The book used so far was the one borrowed from library and can be used during learning process only. The book has some weaknesses: its material is incomplete and still general. The book as has not been consistent with students' experience in daily life and students' knowledge on environment is still inadequate. The result of data showed that there should be a local wisdom-based craft and entrepreneurship module that can improve the students' motivation to learn, is attractive, and gives real experience to students.

Development Stage

1. Designing Product Prototype

Draft local wisdom-based craft and entrepreneurship module is developed based on the result of library study and field survey that has been conducted. Draft module is developed based on the module development framework according to National Education Department (2008: 21), consisting of three components: beginning, main, and closing. Beginning component consists of cover, page of title, page of francis, acknowledgment or preface, table of content, introduction, module position map, glossary, module manual instruction, main competency and basic competency. Main component consists of learning objective, learning material, and student worksheet. Closing component consists of summary, final evaluation, assignment, answer key and discussion, and references.

The procedure of developing local wisdom-based craft and entrepreneurship module in this study is as follows: 1) determining main competency and basic competency to be developed in the module, local typical food processing system, 2) identifying the material of local typical food processing, 3) looking for references on local typical food processing system, particularly in Pemalang, 4) organizing the material of local typical food processing system consisting of some learning activities: understanding the local typical food business plan, organizing the local typical food business plan, and the local typical food business plan, 5) integrating the material of local typical food business plan into Pemalang local wisdom, 6) looking for example and image supporting the material and corresponding to Pemalang local wisdom, 7) organizing entrepreneurial inspiration coming from a figure successfully building his business in Pemalang Regency, 8) looking for quotes that can motivate the students to learn and to be entrepreneur, 9) developing questions and exercises that can test students' understanding on concept studied, and 10) developing module layout.

2. Design Validation

Design validation is conducted to assess the feasibility of draft original product, the local wisdom-based craft and entrepreneurship module. This validation involves such experts: material expert, media expert, linguist, and education practitioners. Summarized result of assessment on the local wisdom-based craft and entrepreneurship module conducted by experts can be seen in table 2.

Table 2. Summary of Expert Judgment

No	Expert Validation	Scoring Scale				
		∑ ni	∑ N	100%	Score	Criteria
1.	Material Expert	137	152	100%	90.13%	Very Good
2.	Media Expert	148	180	100%	82.22%	Very Good
3.	Linguist	51	52	100%	98.08%	Very Good
4.	Education Practitioner	133	152	100%	87.50%	Very Good
	Mean Score				**89.48%**	Very Good

Considering table 2, the result of assessment made by material expert, media expert, linguist, and practitioners obtains scores of 90.13%; 82.22%; 98.08% and 87.50%, respectively, belonging to very good category. Total mean score of expert judgment is 89.48%. Riduwan (2010: 88) said that the score obtained belongs to very good category as it is on the range of 81%- 100%; thus it can be said that the craft and entrepreneurship module has been feasible to use in the learning. The product validated was then improved and revised based on the recommendation and input given by expert team. Recommendation and input given by expert team are as follows: a) there should be a compatibility of basic competency to objective and indicator, b) the writing should be conducted by referring to PUEBI (General Guidelines of Indonesian language spelling), c) module body should be improved in order to be more flexible to be brought, d) information on the author should be included into the back cover, and c) food processing process should be presented with detailed image.

3. Product Trial

Product trial was conducted in two stages: small- and large-scale trials. The trial on draft product will be explained as follows.

Small-scale Trial

Small-scale Trial was conducted on 10 11th Social Science 2 graders in SMAN 1 Bodeh to acquire information, recommendation, and input from students and teachers as the material of consideration to improve and to revise module. The data was collected using interview technique. Considering the result of interview conducted, it can be seen that teachers like the module developed because it can increase teachers' teaching references. Students also like using module because it has attractive display (appearance), good and colorful illustration, understandable language, and example that can help students understand the material better.

In this stage, students and teachers also give some recommendations and inputs concerning module revision: a sign should be put on the cover to confirm the title of module, some pages have monotonous color, some sentence are written less clearly and the error of putting the students activity

that should be put onto the end of material. The result of recommendation and input then becomes the foundation of module revision, in order to be tested using large- scale trial.

Large-Scale Trial

Large-Scale trial will be conducted in the 11th Social Science 1 grade in SMAN 1 Bodeh. The subject of research in this study consisted of 32 11th Social Science 1 and 11th Social Science 2 grades, taken using simple random sampling technique. Large-scale trial was conducted to find out the quality of module and to improve entrepreneurial intention having used module. Technique of collecting data used in this study was questionnaire. Questionnaire consists of students' response and entrepreneurial intention questionnaires.

Students' response is given after the learning has been completed to assess the use of module in the learning. Students' response questionnaire uses Likert scale in the form of checklist to assess the module use. Assessment aspect in students' response questionnaire includes display (appearance), material presentation, and benefit aspects. Total score of the three aspects is 259.47% and mean score of 86.39%. Riduwan (2010: 88) says that the score obtained from students' response questionnaire belongs to very good category, as it ranges between 81%-100%. It indicates that the craft and entrepreneurship module is feasible to use in the learning.

Entrepreneurship intention questionnaire is given before and after learning. Data of pretest and posttest result was analyzed using non-independent t-test. The summary of t-test result is presented in table 3.

Table 3. Summary of Non-Independent t-test result

Test conducted	Type of test	Sig.	Decision	Conclusion
Prerequisite Test				
a. Normality Test	*Kolmogrov-Smirnov*			
Pretest		0.127	H_0 is supported	Normal Data
Posttest		0.121	H_0 is supported	Normal Data
b. Homogeneity Test	*Levene's test*	0.175	H_0 is supported	Homogeneous data
Non-independent t-test	*Paired sample t-test*	0,000	H_0 is supported	No difference

Source: Data Processing in 2019

Table 3. shows that data of pretest and posttest values in large-scale trial are distributed normally and homogeneously. It can be seen from the result of normality and reliability tests as prerequisite test. Normality test is analyzed using kolmogrov- smirnov, pretest and posttest values result in

significance levels of 0.127 and 0.121 (sig. >0.05), respectively, so that H0 is not supported. It indicates that the result of pretest and posttest homogeneity test in this stage was analyzed using Levene's test, at significance level of 0.175 (sig. >0.05), so that H0 is supported, meaning that pretest and posttest values are homogeneous.

After prerequisite test, the next stage is non-independent t- test conducted using non parametric paired sample t-test. The result of non independent t- test on pretest and posttest values obtains significance level of 0.000 (sig. <0.05); so that it can be concluded that H0 is not supported, meaning that there is a difference students' entrepreneurial intention between before and after using local wisdom-based craft and entrepreneurship module. Therefore, it can be concluded that the learning using craft and entrepreneurship module can improve students' entrepreneurial intention as indicated with the increase of scores from pretest to posttest. It is confirmed by Padmapriya (2015: 46), stating that the learning using module can improve students' learning achievement in biology subject in school. Furthermore, the result of study conducted by Nugroho (2013: 136) shows that learning achievement   affects entrepreneurialintention positively and significantly. The result of research shows that craft and entrepreneurship learning model integrated into local wisdom can improve learning achievement, thereby leading to the improvement of students' entrepreneurial intention.

CONCLUSION

Considering the result of research conducted, it can be seen that the local wisdom-based craft and entrepreneurship developed is feasible to use in the learning. It is confirmed with the expert judgment on the material of module developed belonging to very good category. The result of small-scale trial shows teachers and students' positive response after using local wisdom- based craft and entrepreneurial module. In addition, considering the students' response questionnaire in the large-scale trial, it can be seen that students respond very well to the use of module. The result of hypothesis testing obtains significance level of 0.000 or < 0.05; therefore it can be said that there is an increase from pretest to posttest value. It can be concluded that the application of local wisdom-based module to the craft and entrepreneurship learning can improve students' active participation in the learning, thereby leading to the students' improved learning achievement and entrepreneurial intention.

REFERENCES

Anwari, Nahdi, M. K., & Sulistyowati, E. 2016. Biological science learning model based on Turgo's local wisdom on managing biodiversity. AIP Conference Proceedings. 1708(1). 1-6.

Azizahwati, Maaruf, Z., Yassin, R. M., & Yuliani. E. 2015. Pengembangan Modul Pembelajaran Fisika SMA Berbasis Kearifan Lokal untuk Meningkatkan Hasil Belajar Siswa. Yogyakarta: Prosiding Pertemuan Ilmiah XXIX HFI Jateng & DIY. 70-73.

Bangser, M. 2008. Preparing high school student for successful transitions to postsecondary education and employment. Amerika Serikat: National High School Center.

Borg and Gall (1983). Educational Research, An Introduction. New York and London. Longman Inc.

Depdiknas. 2008. Teknik Penyusunan Modul. Jakarta: Direktorat Jendral Manajemen Pendidikan Dasar dan Menengah.

Kurniawati, A. A., Wahyuni, S., & Putra, P. A. D. 2017. Utilizing of comic and jember's local wisdom as integrated science learning materials. International Journal of Social Science and Humanity. 7(1). 47-50.

Larawan, L. 2013. Acceptability of teacher made modules in production management. International Journal of Managerial Studies and Research. 1(2). 10-22.

Matanluk, O., Mohammad, B., Kiflee, D. N. A., & Imbug, M. 2013. The effectiveness of using teaching module based on radical constructivism toward students learning process. Procedia Social and Behavioral Sciences. 90. 607-615.

Mirkouei, A., Bhinge, R., McCoy, C., Haapala, K. R., & Dornfeld, D. A. 2016. A pedagogical module framework to improve scaffolded active learning in manufacturing engineering education. Procedia Manufacturing. 5. 1128- 1142.

Padmapriya, P. V. 2015. Effectiveness of self learning modules on achievement in biology among secondary school students. International Journal of Education and Psychological Research. 4(2). 44-46.

Prasetya, E. R., & Sukardi. 2016. Pengembangan modul prakarya dan kewirausahaan materi kerajinan berbasis proses di smk. Jurnal Pendidikan Vokasi. 6(2). 154-161.

Riduwan. 2010. Belajar Mudah Penelitian. Bandung: Alfabeta.

Rufii, R. 2015. Developing module on constructivist learning strategies to promote students' independence and performance. International Journal of Education. 7(1). 18-28.

Sudarwati, N., Susilowati, L., & Qomariyah. 2014. The developing of an integrated entrepreneurship module and electronic based for college students. Interdisciplinary Journal Of Contemporary Research In Business. 6(6). 162-180.

Sukmadinata, N.S. 2012. Metode Penelitian Pendidikan. Bandung: PT Remaja Rosdakarya.

Widiastuti, A., Rahmawati, F., & Rahmawaty, P. 2015. Pelatihan pembelajaran prakarya dan kewirausahaan bagi guru SMK dan SMA di Sleman. Prosiding Seminar Nasional. 1-10.

Wijaya, T. 2007. Hubungan adversity intelligence dengan intensi berwirausaha. Jurnal Manajemen dan Kewirausahaan. 9(2). 117-127.